



Cláudia Manuela da Silva Pinheiro

**The use of alternative methods of assessment
in higher education: a study of university
teachers and students**

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Universidade do Minho
Instituto de Educação

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**The use of alternative methods of assessment
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teachers and students**

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Trabalho efetuado sob a orientação da
Professora Doutora Maria Assunção Flores
e da
Professora Doutora Joanna Madalińska-Michalak

DIREITOS DE AUTOR E CONDIÇÕES DE UTILIZAÇÃO DO TRABALHO POR TERCEIROS

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STATEMENT OF INTEGRITY

I hereby declare having conducted this academic work with integrity. I confirm that I have not used plagiarism or any form of undue use of information or falsification of results along the process leading to its elaboration.

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ABSTRACT

Title: The use of alternative methods of assessment in higher education: a study of university teachers and students

Assessment in higher education is the motto of this research, focusing specifically on assessment methods and practices and their influence on the teaching and learning process. Assessment has gone through changes over time, due to different factors and influences, such as the Bologna process.

The current study aims to add to the growing body of research on assessment in higher education. It also relates to discourses at European level to generate new insights into the methods and practices of assessment in teacher education and nursing programmes. The study was carried out in five Portuguese public universities and four public Polish universities, the aim of which was to get to know the perceptions of students, teachers and programme coordinators about assessment methods and practices, as well as the challenges faced in higher education.

The research design was based on a mixed method approach, including both qualitative and quantitative methods. A diversity of techniques and data collection procedures was used. This research comprises five studies. In sub-study 1 the participants were 355 from Portugal and 434 from Poland focusing on student teachers' views of assessment. The main result show that the Portuguese sample associate assessment with a formative purpose much more than the Polish sample. Different assessment methods are used in the two countries in terms of cycle of study. In Portugal, emphasis is placed on the use of the portfolio in the master's programme. Sub-study 2 focused on the views of coordinators of teacher education programme (Portugal=6; Poland=8). It was possible to conclude that the Portuguese coordinators hold a more positive view of the students' learning, academic results and assessment methods used than the Polish ones. Sub-study 3 addresses university teachers' views of the profession and of assessment in higher education. Participants were 15 university teachers. Findings show that being a university teacher is more and more challenging due to increased workload and bureaucratic requirements as well as changes in assessment practices. Sub-study 4 focuses on student' views of teaching, learning and assessment in HE. The main findings point to teacher-centred practices of teaching in light of a paradigm of direct instruction. In total, 35 students participated in sub-study 4. Sub-study 5 addresses students' views and experiences of assessment during the COVID-19 pandemic. The main findings highlight the increase of feedback, but students point to the poor management of the teaching and learning process (due to the online reality of the students), difficulties with internet conection, increased workload, tiredness and the anxiety (due to being permanently isolated in their homes). In this sub-study, 74 students participated. The last three sub-studies took place in a Portuguese public university. Implications of the findings are discussed as well as issues that deserve further research in the field of assessment in higher education.

Keywords: Assessment; Higher Education; Initial Teacher Education; University Teachers, Students

RESUMO

Título: O uso dos métodos alternativos de avaliação no Ensino Superior: um estudo com professores e alunos universitários

A avaliação no ensino superior é o mote desta investigação centrando-se especificamente nos métodos e práticas de avaliação e a sua influência no processo de ensino e aprendizagem. A avaliação passou por mudanças ao longo do tempo, devido a diferentes fatores e influências, tal como o Processo de Bolonha.

O presente estudo visa contribuir para o crescente campo de pesquisa sobre avaliação no ensino superior. Relaciona-se também com discursos a nível europeu para gerar novos insights sobre os métodos e práticas de avaliação na formação de professores e curso de enfermagem. O estudo foi realizado em cinco universidades públicas portuguesas e quatro universidades públicas polacas, com o objetivo de conhecer as perceções de alunos, professores e coordenadores de curso sobre métodos e práticas de avaliação, bem como os desafios enfrentados no ensino superior.

A investigação baseia-se numa abordagem mista, incluindo métodos qualitativos e quantitativos. Foi utilizada uma diversidade de técnicas e procedimentos de recolha de dados. Esta pesquisa compreende cinco estudos. No sub-estudo 1, os participantes foram 355 de Portugal e 434 da Polónia, centrando-se nas visões de avaliação dos alunos futuros professores. O principal resultado mostra que a amostra portuguesa associa a avaliação a uma finalidade formativa muito mais do que a amostra polaca. Diferentes métodos de avaliação são usados nos dois países em termos de ciclo de estudos. Em Portugal, a ênfase é colocada na utilização do portefólio no curso de mestrado. O sub-estudo 2 incidiu sobre os pontos de vista dos coordenadores do programa de formação de professores (Portugal=6; Polónia=8). Foi possível concluir que os coordenadores portugueses têm uma visão mais positiva acerca da aprendizagem dos alunos, dos resultados académicos e dos métodos de avaliação utilizados do que os polacos. O sub-estudo 3 aborda a visão dos professores universitários sobre a profissão e a avaliação no ensino superior. Participaram 15 professores universitários. Os resultados mostram que ser professor universitário é cada vez mais desafiador devido ao aumento da carga de trabalho e exigências burocráticas, bem como às mudanças nas práticas de avaliação. O sub-estudo 4 concentra-se nas visões dos alunos sobre o ensino, a aprendizagem e a avaliação no ensino superior. Os principais resultados apontam para práticas de ensino centradas no professor à luz de um paradigma de instrução direta. No total, 35 alunos participaram do sub-estudo 4. O sub-estudo 5 aborda as opiniões e experiências de avaliação dos alunos durante a pandemia de COVID-19. Os principais resultados destacam o aumento do feedback, mas os alunos apontam para a má gestão do processo de ensino e aprendizagem (devido à realidade online dos alunos), dificuldades de acesso à internet, aumento da carga de trabalho, cansaço e ansiedade (por estarem permanentemente isolados em suas casas). Neste sub-estudo participaram 74 alunos. Os três últimos sub-estudos decorreram numa universidade pública portuguesa. As implicações dos resultados são discutidas, bem como questões que merecem mais pesquisas no campo da avaliação no ensino superior.

Palavras-chave: Avaliação; Ensino Superior; Formação Inicial de Professores; Professores, Estudantes

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ABBREVIATIONS AND ACRONYMS

A3ES – Agência de Avaliação e Acreditação do Ensino Superior (Agency for Assessment and Accreditation of Higher Education)
AaL – Assessment *as* Learning
AfL – Assessment *for* Learning
AoL – Assessment *of* Learning
CI – Confidence interval
CFA – Confirmatory factor analysis
CFI – Comparative fit index
CNE – Conselho Nacional de Educação (NCE – National Council of Education)
ECTS – European Credit Transfer and Accumulation System
EFA – Exploratory factor analysis
EHEA – European Higher Education Area
ENQA – European Association for Quality Assurance in Higher Education
EU – European Union
HE – Higher Education
ITE – Initial Teacher Education
MANOVA – Multivariate analysis of variance
MCTES – Ministério da Ciência, Tecnologia e Ensino Superior (Ministry of Science, Technology and Higher Education)
NS – Nursing Student
OECD - Organisation for Economic Co-operation and Development
PBL – Project-Based Learning
PC – Programme Coordinator
PCPL – Programme Coordinator Poland
RMSEA – Root mean square error of approximation
SRMR – Standardised root mean residual
SCoA Inventory – Students' Conceptions of Assessment inventory
S – Student
ST – Student Teacher
TCoA Inventory – Teachers' conceptions of assessment inventory
TEP – Teacher Education Programme
TES – Teacher Education Student
UNESCO – United Nations Educational, Scientific and Cultural Organisation
UT – University Teacher

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INTRODUCTION

Introduction

Over the past fifteen years, due to the challenges put forward by the massification of education, heterogeneity, globalisation, and the imperatives of the Bologna process, higher education has undergone significant transformations. The Bologna process has brought the emergence of a "new" educational paradigm based on pedagogical reorganisation, with a focus on greater curricular flexibility, changes in the teacher's organisation of work, student work involving the promotion of tutorial support strategies and the renewal of assessment methods (Lima, 2006; Pereira & Flores 2013; Pereira, Flores, Veiga Simão & Barros, 2016). Universities "face substantial changes in a rapidly evolving global context" (Boud, 2010, cited by Maxwell, 2012, p. 687) and thus it is imperative to look at what and how the changes are instigated and enacted, particularly as far as curriculum practices, including assessment, are concerned.

It is important to look at the way changes in teaching, learning and assessment in higher education take place, assuming that the principles of the Bologna process point to a reconfiguration of the teacher and students' role. The Bologna process and the creation of the European Higher Education Area (EHEA) challenged European countries, including Portugal and Poland. Issues such as teaching and learning practices, focusing on student-centred pedagogies, problem-solving initiatives, and innovative assessment practices have been advocated. Therefore, the student becomes an active subject of the learning process, and the teacher is seen as a facilitator, bringing together the conditions and opportunities that allow the student to problematise, research, reflect, propose, and discover. Consequently, the nature of the pedagogical relationship changes. Communication and interaction between teacher and student and between students are privileged. A set of technical and transversal competencies associated with professional practice are developed in line with a participatory and cooperative environment (Mesquita, 2015). However, for university teachers it is a challenge act within this framework because students tend to seek direct and closed instructions, in an attempt to meet the teacher's expectations. Such a view reinforces the assumption that the students adapt their behaviour according to the way and moments in which assessment is carried out.

In this sense, according to Light and Cox (2001, p. 45):

“Learning is not merely another set of concepts and/or principles which teachers in higher education should be aware of with respect to their students or, indeed, reflect upon in their own professional practice, but rather it is part of the whole of the academic's

enterprise. The challenge for academics is not simply to help students meet the challenges that they are facing in their formal studies and will be continuously facing throughout their lives, but to ensure the same level of engagement for themselves.”

This view led to more competitive learning environments, promotes shared responsibility for learning (Kealet, 2010), and changes in the conceptions of teaching (Reimann & Wilson, 2012), recognising the central role of the student within a logic of autonomy, teamwork, and active learning (Stefani, 1998; Segers & Dochy, 2001; Flores & Veiga Simão, 2007). It also highlights transdisciplinarity, pedagogical innovation (Esteves, 2008) and student-centred approaches including problem-based and cooperative learning (Gibbs, 1992; Dochy, Segers, & Sluismans 1999; van den Berg, Admiraal, & Pilot 2006; Lew, Alwis, & Schmidt 2010; Carvalho, 2013; Lynam & Cachia, 2018) as a key condition for pedagogical excellence with strong implications for assessment practices.

Teachers and students’ conceptions of learning, teaching and assessment influence how they behave in their classrooms. Conceptions are seen as the values people develop via their experiences and use to evaluate the other constructs such as actions of other people or an activity (Eggen & Kauchak, 2001). Thus, teachers’ conceptions of assessment are an important construct for teachers’ assessment practices. However, research has shown that even if teachers hold positive views of assessment and perceive the benefits of assessment for themselves and for their students, they mostly struggle to transfer their views into classroom practices (Heitink et. al., 2016). Even the tension between conception and practice of assessment is much more complex and difficult for prospective teachers (Siegel & Whisher, 2011; Otera, 2006; Volante & Fazio, 2007). Hence, preparing teachers to perceive benefits of assessment for learning and undertaking assessment in a way to support learning will be a meaningful strategy to support prospective teachers’ assessment literacy (Izci & Caliskan, 2017).

The nature of teachers' beliefs about assessment matters as to how and why assessment is implemented (Brown & Remesal, 2012). Yet, if teachers’ beliefs are set aside, some superficial changes might take place, but the likelihood of profound long-lasting changes in classroom practices remains rather small (Remesal, 2011). Many different purposes have been attached to assessment, but four major conceptions have been emphasised by different researchers (e.g., Remesal, 2007, Harris & Brown, 2009; Brown & Michaelides, 2011; Remesal, 2011; Barnes, Fives & Dacey, 2015; Flores et al., 2019; Fernandes, 2020) drawing on Brown's model (Brown, 2004, 2006, 2008, 2011) which will be explored as a framework for the present study. These conceptions will be explained in detail in Chapter I.

Nevertheless, it is important to realise that, as pointed out Biggs (2003), students' perceptions of assessment will affect their involvement in the learning process. The author asserts that whilst teachers first see the objectives, learning outcomes and learning activities and only then look at assessment, students see assessment first of all and only afterwards look at learning activities and the outcomes. This may explain why assessment influences how students learn (Pereira, Niklasson & Flores, 2017). The assessment practices may influence the ways in which students organise their time and mobilise their efforts (Fernandes, 2015; Myers & Myers, 2015; Flores et al., 2019), as well as their insights about learning (Brown & Knight, 1994). For these reasons, selecting the most appropriate assessment methods according to the teaching and learning objectives (Pereira & Flores, 2016) is an issue that deserves further consideration. Therefore, assessment in higher education has received increasing attention from policymakers, researchers, managers, teachers, and other stakeholders.

Assessment is a key component of learning and teaching activities required for the reflective construction of knowledge (Ion, Martí, & Morell, 2019). Assessment in higher education has been widely studied from a variety of perspectives. Many studies indicate that student learning is positively influenced by assessment (Black & Wiliam, 1998; Pellegrino, Chudowsky, & Glaser, 2001; Kennedy, Chan, Fok, & Yu, 2008). Assessment informs students about their strengths and weaknesses and indicates the next steps to take in the learning process (van Gennip, Segers & Tillema, 2010). Despite existing studies on teachers' and students' conceptions of assessment and their influence on teaching and learning practices (Brown & Hirschfeld, 2008; Fletcher, Meyer, Anderson & Johnston, 2012; Gibbs & Simpson, 2004), it is possible to identify a greater focus on the perceptions and experiences of students regarding assessment (e.g. Struyven, Dochy, & Janssens, 2005; Pereira, Flores, Veiga Simão & Barros, 2016; Nasser-Abu Alhija, 2017; Flores, Fernandes & Pereira, 2019; Santos, Pinheiro & Flores, 2019; Pereira, Cadime, Brown & Flores, 2022; Pereira, Cadime, Flores, Pinheiro & Santos, 2022) particularly assessment quality (Gerritsen-van Leeuwenkamp, Joosten-ten Brinke & Kester, 2017). Earlier work suggests the need to analyse the impact of different methods of assessment (van de Watering, Gijbels, Dochy, & van der Rijt, 2008), especially the so-called alternative methods (Sambell & McDowell, 1998) on student learning (Segers, Gijbels, & Thurlings, 2008), the ways in which assessment practices relate to feedback mechanisms (Flores, Veiga Simão, Barros, & Pereira, 2015), the comparison of assessment practices in different areas, institutions and countries (Gilles, Detroz & Blais, 2011), as well as the academic outcomes and teaching methods in the classroom since evidence of their effectiveness is still scarce (Pereira & Flores, 2016). This view reinforces the crucial role of feedback in the assessment and learning process (Black & Wiliam, 1998; Hattie & Timperley, 2007; Carless, Salter, Yang & Lam, 2011; Kyaruzi, Strijbos,

Ufer & Brown, 2018), in particular, the so-called learning-oriented assessment (Tang & Chow, 2007; Carless, 2009, 2015) seen as a pathway to the construction of professional knowledge and self-regulated learning with implications for teaching practices (Bergh, Ros & Beijaard, 2015). Learning-oriented assessment and peer assessment emerge as basic modes building blocks to promote “productive student learning” (Carless, 2009, p. 80).

Nevertheless, more empirical work is needed regarding students’ perceptions of feedback and their impact on teaching and learning (Poulos & Mahony, 2008). Also of relevance is the feedback used and their impact within the context of traditional and learner-centred methods of assessment (Flores et al., 2015) as well as its usefulness (Small & Attree, 2015).

Based on these assumptions, the motivation to carry out this research is due mainly to the intention to add and improve existing research carried out in other contexts by bringing some elements of innovation (Pereira, 2011; Pereira, 2016; Pereira & Flores, 2012; Pereira & Flores, 2013; Flores et al., 2015; Flores et al., 2019; Fernandes, 2020; Pereira, Cadime, Brown, & Flores, 2021) and to try to respond to the research gaps in the field of assessment. This study involves the voices of undergraduate students and university teachers, specifically in teacher education programmes in Portugal and Poland and nursing programme in Portugal, regarding their perceptions about the assessment process in higher education.

This thesis is titled “The use of alternative methods of assessment: a study of university teachers and students”, carried out in the context of the Doctoral Degree in Educational Sciences, Specialisation in Curriculum Development at the University of Minho. This study was funded by FCT (Fundação Portuguesa para a Ciência e a Tecnologia – reference SFRH/BD/122094/2016) and was part of a broader Research Project entitled “Assessment in higher education: the potential of alternative methods” (funded by FCT with reference PTDC/MHCCED/2703/2014).

The current study aimed to add to the growing body of research on assessment in teacher education programmes at universities and to generate new insights into the methods and practices of assessment in higher education.

The main purpose of this study is to answer to the following key research questions.

- What are the students’ views of assessment process in Higher Education of teacher education programmes in Portugal and Poland?

- What are the views of university teachers and students about methods and practices of assessment in teacher education and nursing programme?
- What are the students' views of assessment process in teacher education programmes in Portugal and Poland?
- How do university teachers and students look at the methods and practices of assessment in teacher education and nursing programmes?

Based on the research questions the following goals were defined:

- To get to know the assessment process in teacher education programmes in Portugal and Poland from the point of view of university students and programme coordinators;
- To identify the assessment practices from the perspective of both Portuguese and Polish university students and coordinators in teacher education programmes;
- To get to know the university teachers' views about the profession and of assessment in a Portuguese public university in teacher education and nursing programmes;
- To get to know the university students' views on teaching, learning and assessment in a Portuguese public university in teacher education and nursing programmes;
- To understand the role of alternative methods of assessment play in teacher education in Portugal and Poland;
- To understand the role of alternative methods of assessment play in nursing programmes in Portugal.

To achieve these goals, a research design was developed which included five sub-studies. The five sub-studies involved different research methodologies, combining both quantitative and qualitative methods, as well as the perspective of different stakeholders.

From the very beginning this work was designed and structured to be developed with an international dimension. The Polish context was chosen despite the geographic distance and cultural and linguistic differences. In Portugal and Poland, similar phenomena are observed, including a surplus of teachers (European Commission/EACEA/Eurydice 2018, p. 30), low salaries, frequent education system reforms, constant teacher evaluation and an employment structure featuring 6% and 1% of teachers under 30 (Madalińska-Michalak, Flores, Lofström, 2021; Madalińska-Michalak, 2019, 2017; Michalak-Dawidziuk,

2021). The feminisation of the profession occurs on a similar scale and has continued for many years. Secondly, this work could be enriched with the contribution of two leading specialists in the field of teacher education in Portugal, Professor Maria Assunção Flores, and in Poland, Professor Joanna Madalińska-Michalak. Thus, the research was carried out in both countries. During the research, the possibility of holding a European Doctorate was pursued which included a stay over three months in Warsaw University under the supervision of Professor Joanna Madalińska-Michalak. Thirdly, the literature does not feature a comparative empirical study on the assessment in Initial Teacher Education in Poland and Portugal, so the presented study fill this gap and serves as an inspiration for further exploration of this field.

The structure of this work consists of eight chapters. The first two chapters are intended to describe the conceptual framework of the research. The first chapter presents and describes a conceptual framework of the research focusing on Assessment in Higher Education conceptualising assessment in terms of conceptions, functions, approaches, and methods. Furthermore, the main perspectives of the stakeholders are highlighted in terms of conceptions of assessment and the different views of international and national literature are analysed and discussed. The discussion of traditional vs alternative methods of assessment is also included. Lastly, a research literature on assessment in higher education, particularly on the papers published in the journal *Assessment and Evaluation in Higher Education*, between 2017 and 2022, was performed.

The second chapter describes reforms, opportunities, and challenges in higher education, namely in Initial Teacher Education in Portugal and Poland during and after the implementation of Bologna process and also Nursing in Portugal. Furthermore, the key topics in international literature were described and explored, focusing on elements of being teacher.

In chapter three the research framework is presented. The research questions, research goals, research design, methods and procedures for the data collection and analysis are described. The detailed account of the five studies is also done including the participants as well as data collection and data analysis of each study. Ethical considerations, access to the context and challenges and limitations of the broad study are also addressed in this chapter.

Chapter four focuses on student teachers' views of assessment and presents data collected through questionnaires administered to student teachers in Portugal and Poland. First, data about the ideas that students in both countries most associate with assessment are presented. Second, data on the methods

most used by teachers to assess students are described. Differences and similarities between both countries are discussed.

Chapter five focuses on data collected through individual interviews with Teacher Education Programme (TEP) coordinators in Portugal and in Poland are presented. It addresses their perceptions about learning and assessment, the key challenges as well as improvements to be developed in assessment in TEP from the perspective of the coordinators.

Chapter six looks at university teachers' perceptions of what they view as the key characteristics of their profession, in general, and of the assessment process in particular. Data were collected through focus groups conducted with university teachers from the scientific area of social sciences, namely in Teacher Education Programme (TEP) and medical and health sciences, specifically from the nursing programme. Findings are presented according to the emerging themes arising from the data analysis: a) being a university teacher; b) conceptions of teaching; c) student participation; d) assessment and e) feedback.

Chapter seven looks at university students' perceptions about what it means to be a student in higher education, and their perceptions about the teaching and learning process, the assessment process, and the assessment/learning relationship. Findings are presented according to the emerging themes arising from the data analysis: a) perceived challenges; b) pedagogical practices; c) factors influencing learning and; d) assessment.

Chapter eight reports on data collected with students during the COVID-19 pandemic in semester two in 2020. This sub-study was developed only in Portugal in one nursing and one Teacher Education Programme (TEP) in two courses including students who were willing to participate, under special conditions such as those experienced in 2020. It was intended to get to know students' views on online learning as a result of the forced closure of the institutions. An intervention was conducted which included the monitoring of the assessment process during pandemic in one curricular unit of the Nursing Degree "Community Health II" and in one curricular unit of the Master in Teaching (Teacher Education Programme in History) "History Teaching Methodology II".

This work ends with the presentation of the conclusions and implications, seeking to respond to the initial research questions. In this final section suggestions for future research are also identified concerning different issues in the field of assessment in higher education.

CHAPTER I

ASSESSMENT IN HIGHER EDUCATION

Chapter I – Assessment in Higher Education

This chapter explores the concept of assessment in higher education considering its conceptual framework, conceptions and functions/modes of assessment, assessment approaches, assessment methods and feedback. In the second part of the chapter the review of research literature on assessment in higher education is presented. The review is based on the analysis of papers published in international journals in the five last years (between 2017 and 2022): *Assessment and Evaluation in Higher Education*. This journal has been taken as a basis for analysis, because its focus is of great relevance to the scope of the research presented in this thesis.

1.1. Conceptual framework

1.1.1. Conceptualising assessment and evaluation

Assessment looks for distinguishing elements in a person's performance and it relies on varying of contexts to assure the eliciting of as much complexity of a person's ability as possible (Loacker, Cromwell, & O'Brien, 1985). Assessment can be distinguished from evaluation, which looks for elements that can be combined and compared in order to draw conclusions about groups of students, with a view to making judgments about the general direction of a course, programme, or curriculum (Loacker, Cromwell, & O'Brien, 1985).

Traditionally, assessment and evaluation have been the means through which feedback is provided to both teachers and students (Harlan & James, 1997; Saroyan & Amundsen, 2001), although the two activities generally take place in isolation. While the literature does not clearly distinguish between the two terms, for the purpose of this analysis “assessment” will refer to measurement of student learning, and “evaluation” will refer to measurement of instructor teaching (Kealey, 2010). In turn, assessment and evaluation can each be considered as measurement of a process (formative) or as measurement of a product (summative) (Kealey, 2010).

Guba and Lincoln (1989) present four generations of evaluation, which result from different concepts and approaches identified by the authors regarding historic periods. The first generation, *evaluation as a measure*, dates back to the 20th century focusing on assessment as a technique that quantifies student results through standardised tests that objectively measure student learning. Based on objectivity, assessment is intended to quantify and compare student learning taking into account a certain scale and

it has subliminally the concepts of effectiveness and efficiency. The second generation, *evaluation as description*, arises from the need not only to measure student learning, but also to describe whether the objectives were achieved or not. This generation appears in the 30's and 50's last century, influenced by Ralph Tyler, an American evaluator who conceived the curriculum according to a set of pre-defined objectives. This process of achieving objectives was called educational evaluation. In this context, the evaluator's role is to describe patterns of strengths and weaknesses in relation to pre-defined educational objectives. However, the evaluator continues to rely on the technical dimension of the evaluation as a measure. The third generation, *evaluation as judgment*, beginning in the 70's, emerges from the need to overcome the gaps in the previous generation, towards the formulation of judgments about the evaluation objects. Though it still entails the technical and descriptive functions, in this generation, the evaluator's role also encompasses judging. The fourth generation, *evaluation as construction*, emerges from the base of constructivism towards a shared and interactive process of all involved in the evaluation process (cf. Figure 1). In this context, evaluation entails its integration into the process of teaching and learning. This generation implies an epistemological rupture with previous generations to overcome their limitations (Pereira, 2016).

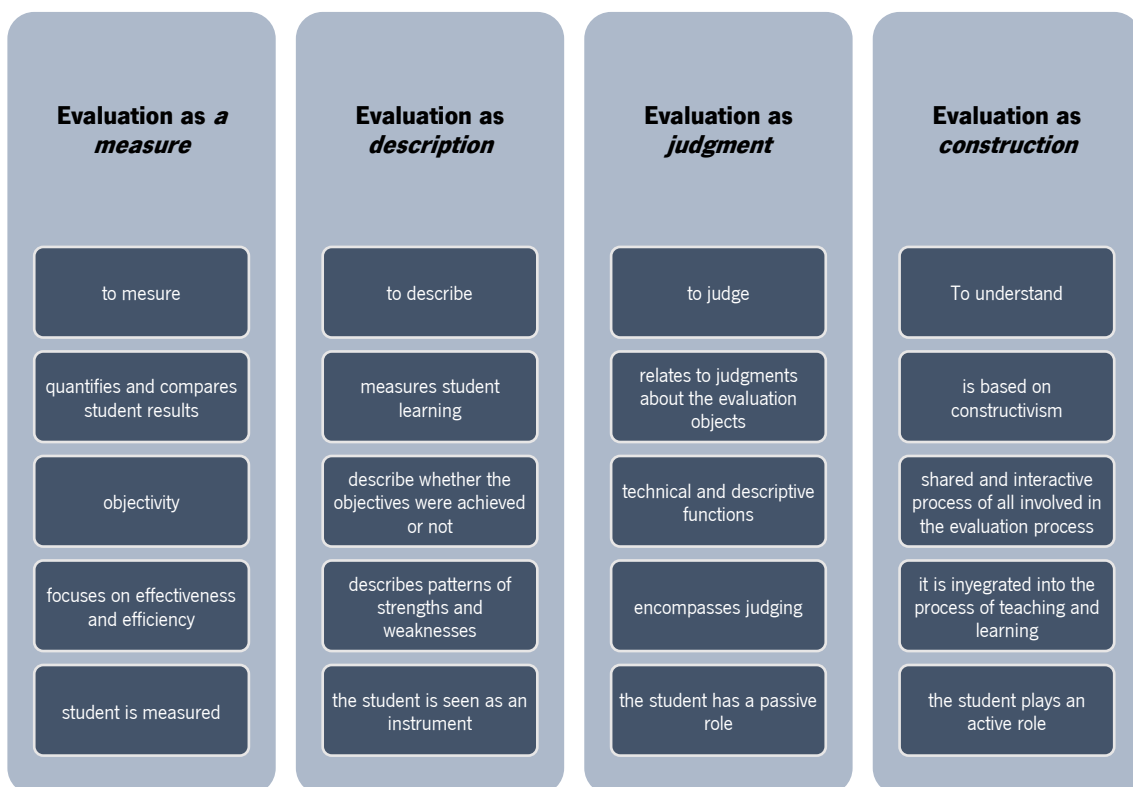


Figure 1: Four generations of evaluation by Guba and Lincoln (1989)

Through the four generations of evaluation presented by Guba and Lincoln (1989), an evolution process is increasingly "sophisticated" and "complex". The technical and limited characteristics based on the

measure were overcome (Pereira, 2016, pp. 19-20). Along with political, historical, and economic changes in society, other pedagogical issues such as sharing, interactivity and integration, of all those involved in the evaluation process, were also emphasised.

This dynamic feature of the evaluation as a science results in different conceptions, which are associated with the historical moments that characterise it and with different perceptions of experts in the field of evaluation influenced by different literary perspectives as the Francophone's, the Anglo-Saxon, the American, among others (Pereira, 2016).

From the American perspective, it is highlighted the position of Cronbach (1963) conceived evaluation as a process that comprises the obtainment and use of information in order to make decisions in regard to educational programmes. In same way, Stufflebeam (1980) conceived evaluation as a process through which data is gathered and used to formulate decisions. In Pacheco's perspective (2001, p. 129) the evaluation is "a process of obtaining information, formulating judgments and decision-making whatever perspective it may be adopted". Therefore, these conceptions of evaluation are based on the decision-making assumptions to adjust the educational programmes. According to Pacheco (2001, p. 128) the evaluation process "involves evaluating technical processes that are theoretically justified and concerns are rooted in policies that determine it".

From an Anglophone perspective, Michael Scriven (1967) identified a new conceptual understanding of evaluation, emphasising the process of evaluation and developing the concepts of formative and summative assessment. Lesne (1984) sees that evaluation as the confrontation of the real (what is present) with the expected (ideal) which is composed of standards, objectives, or criteria. Hadji (1994) looks at evaluation as verification (knowledge or skills); positioning (the individual or a production in relation to a target); and judgment (the value of). However, evaluation always requires a clarification, namely "the hidden decisions and criteria and modes of interpretation of information" (Figari, 1996, p. 34; Pereira, 2016).

The first use of the word assessment did not emerge from classroom or campus, but the meaning of the word began with an idea important to educators - that of sitting down beside or together from late Latin *ad+sedere*. An assessor was "one who sits beside" or "who shares another's position". Early uses of the word focused primarily on determining the worth or value of something in monetary terms, but it consistently underlies the element of skilled or expert judgment made on the basis of careful observation. Thus, it seems to be a word destined for tongues of educators - whether humanists or scientists (Loacker, Cromwell, & O'Brien, 1985).

Assessment, according to Loacker, Cromwell, and O'Brien (1985), is a multidimensional process of judging the individual in action. Embedded in this definition are assumptions about learning that emphasise active learner development (Lay & Papadopoulos, 2007). The first assumption is that learning involves making an action out of knowledge - using knowledge to think, judge, decide, discover, interact, and create. Essentially acquiring or storing knowledge is not enough. Unless one carries knowledge into acts of application, generalisation, and experimentation, one's learning is incomplete. The second assumption is that an educator's best means of judging how well a learner has developed expected abilities is to look at corresponding behaviour – thinking behaviour, writing behaviour, inquiry behaviour, or appreciating behaviour, for instance. It entails a link between behaviour and cognitive and affective processes. Because human behaviour is purposeful, educators can find out more about a learner's problem-solving ability by observing that person's solving process than by confirming correct solution that student has selected from a set of alternatives. A third assumption is that learning increases, even in its unexpected aspects, when learners know what they are setting out to learn and understand, what standards they must meet, and have a way of seeing what they have learned. Out of that success they develop assurance that enables them to recognise unsought-for insights when they come upon them.

Testing and assessment culture

The use of the term “assessment” to the educational context began in the 1970's; prior to this, terms such as “evaluation”, “testing” and “examining” were used (Heywood, 2000). Whilst there is general acceptance of the importance of assessment in directing teaching and learning, there is a great deal of debate surrounding the associated goals and impact on learning. As Scriven (1967) noted, the purpose or “goal” of assessment (or evaluation as he referred to it) will serve to focus attention on different aspects of that which is being assessed. The dominant discourse and underlying culture of assessment will serve to guide the “goal” and ultimate influence of assessment, and the key drivers can serve to initiate this process of change (Medland, 2016).

The dominant discourse of assessment in higher education, for a long time, was described as focusing on measuring learning rather than promoting this fact (Price, O'Donovan, Rust, & Carroll, 2008). It is characterised by terms such as certification, measurement, outcomes (Boud, 2007) and marking (Knight, 2002), and relates to “students demonstrating current knowledge, generating material for grading, and getting (often inadequate) feedback from teachers” (Boud & Falchikov, 2007, p. 1). It is also seen as something that has traditionally been separate from teaching, generally occurring at the end of a unit of

work (Dochy, Segers, Gijbels, & Struyven, 2007; Hounsell, 2007). This focus on assessment as measurement has detracted attention away from the potential of assessment to support the development of the learner and has been described as the “testing culture” (Gipps, 1994; Medland, 2016). Testing can tell us how much and what kind of knowledge someone has. Assessment gives us a basis/for inferring what that person can do with that knowledge. Testing carefully limits to a set of written or marked answers what we can know about a person. Assessment aims to elicit whatever a person can do to show the nature, extent, and quality of his or her ability (Loacker, Cromwell, & O'Brien, 1985).

Throughout an individual's academic career, the culture of testing focuses on the quantifiable aspects of education, and therefore is also part of the higher education career: from offering acceptance based primarily on student grade point averages or expected grades, to the assessment processes involved in obtaining a degree (Medland, 2016). This is placed in contrast to the “assessment culture” (Gipps, 1994), or “assessment for/as learning culture” (Black & William 1998), in which the focus is on the development of the learner as an individual rather than on the knowledge they possess. This culture is characterised, in contrast, by an integration of assessment and teaching. The student is an active participant in the assessment process. The student engages in multiple forms of innovative assessment methods that focus not purely on cognitive performances but also on metacognition, affective and social learning outcomes (Dochy et al., 2007; Medland, 2016).

The apparent dichotomy between a “testing culture” and “assessment culture” has been argued to highlight a paradox of assessment. Biggs (1998) adds that whilst the psychometricians are interested in quantifying individual differences in students, educators should be interested in initiating student development or change in performance. This, according to Gipps (1994, p. 58), would seem to support the view that a move from a “testing culture” to an “assessment culture” is required in higher education:

“It is not just that we wish to move beyond testing (...), but that the shift involves a much deeper set of transformations (...) our underlying conceptions of learning, of evaluation and of what counts as achievement are now radically different from those which underpin psychometrics.”

Despite the various guidelines for the development of good assessment practices and the likely impact they can have on the quality of student learning, there has not been a paradigm shift as evident as the desired one (Medland, 2016). The assessment processes have resulted in assessment tasks that promote an attitude to learning that is rather superficial and limited in nature (Boud & Associates, 2010). Students'

behaviour has, therefore, continued largely to reflect a concerning with learning to pass (the testing culture) rather than learning to learn (the assessment culture). Indeed, the dominant discourse of the testing culture of assessment has arguably resulted in students not being adequately prepared to learn in contexts where examinations and teachers are no longer the focus (Dochy et al., 2007). Hence, the importance of clarifying that throughout this study the concepts of assessment (as an assessment culture) and evaluation (as a test and/or measurement culture) are used differently.

Assessment is at the core of teaching and learning in higher education. Assessment is highly influential in shaping the learning experience of students (Ramsden, 2003; Thomas et al., 2019). The central role that assessment plays in learning and teaching is increasingly being recognised in higher education (Hughes, 2011) because the ways in which the students are assessed can really make a difference in the way they learn (Sally, 2005). Assessments are used to investigate what people *know* and *can do* and to make decisions regarding whether they have learned what was expected (Baird, Andrich, Hopfenbeck, & Stobart, 2017; Pinheiro, Flores & Madalińska-Michalak, 2020).

It is assumed that assessment in higher education faces a number of challenges (Carless, 2007). One of the core problems is that assessment is about several things at once (Ramsden, 2003) or what Boud (2000) refers to as “double duty”. It is about grading and about learning; it is about evaluating student achievements and teaching them better; it is about standards and invokes comparisons between individuals; it communicates explicit and hidden messages (Carless, 2007). Assessment, thus, engenders tensions and compromises (Carless, 2007). Many current assessment practices do not promote independent, reflective, critical learners and this focus is incompatible with current academic aims (Boud, 1990; Freeman, 1995). In other words, the external pressures on higher education may cause assessment to assume a primarily summative function. Because assessment is viewed by policy makers as an agent of educational reform (Linn, 2000), comparisons and generalisations on the basis of derived data are a logical consequence (Maclellan, 2004; Pinheiro, Flores & Madalińska-Michalak, 2020).

Assessment is an integral part of the education process and an important research topic. This notion is deemed specifically potent since it may simplify or impede the process of learning (Black & Wiliam, 1998; Pishghadam, Adamson, Sadafian, & Kan, 2014). While information gained from assessment is intended to fulfil a number of purposes, its primary purpose is the enhancement of learning (Gipps, 1994). Significant attention has been paid to conceptualising the integrated nature of teaching, learning and assessment (Sadler, 1989; Torrance & Pryor 1998; Bell & Cowie 2001; Dixon & Haigh, 2009).

Providing information on students' progress and needs to guide teachers on how they should plan and implement subsequent teaching, while providing students with insights into what they should do to improve their own learning is the key is the educational objective of the assessment (Brown, 2008; Remesal, 2011; Brown & Remesal, 2017). In contrast, the accountability orientation (Remesal, 2011), sometimes known as evaluation-orientation (Brown, 2008), uses assessment to either certify student attainment of expected standards or qualifications (i.e., public examinations for entry to further opportunities), or more generally to identify, so as to reward or punish, highly effective or ineffective, respectively, teachers and/or schools (Nichols & Harris, 2016). The argument simply is that teachers tend to endorse the purposes and functions deemed appropriate by both social norm and official policy. These two purposes or orientations, in accordance with Scriven's (1967) analysis, have been largely captured with the formative and summative assessment terms, respectively (Brown & Remesal, 2017)

Assessment is not an easy or linear process. It can generate anxiety and mixed feelings. Assessment can make the different actors in the evaluation process feel anxious and defensive, whether through examinations, assessments, reviews, observations, results of classification forms or even friendly criticism (Light & Cox, 2003; Fernandes, 2020).

Assessment consists, essentially, of taking a sample of what students do, making inferences and estimating the worth of their actions (Brown, Bull, & Pendlebury, 1997). This is basically how to assess but perhaps a more important question is why. There are a variety of purposes of assessment (Brown, Bull, & Pendlebury, 1997; Biggs, 1999; Trotter, 2006, Craddock & Mathias, 2009), such as:

- provide feedback to students to improve their learning;
- give the teacher feedback on how effective and successful they are at promoting learning;
- motivate students;
- enable students to correct errors and remedy deficiencies;
- consolidate student learning;
- convey to students what is intended for them to learn.

The process of assessment is the mechanics or steps required to make a judgement. A judgement cannot be made within a vacuum, therefore points of comparison, i.e., standards and goals, are necessary. The criteria narrow the choices of specific items which are considered important and relevant for any specific judgement within any given context. Therefore, within the process the parameters within which the judgement is made are identified. In other words, during the process of making a judgement, all these

elements are in constant interplay. All assessments require these parameters, and these can either be explicit or implicit (Black & Wiliam, 1998; Sadler, 1998; Taras, 2005).

Assessment is of central importance in education, and yet there is a lack of commonality in the definition of the terminology relating to it. Development of both theoretical and practical applications will suffer unless there is coherence and agreement in the definition of the terms. Assessment for learning or formative assessment is increasingly being emphasised. Yet its relationship to summative assessment has been little explored (Taras, 2005). Different types of evaluation or assessment tend to determine students' approaches to learning (Struyven, Dochy, & Janssens, 2005).

1.1.3. Conceptions of assessment

The term conception refers to the general, usually implicit, knowledge a person has about the nature of a phenomenon (Thompson, 1992; Brown, 2008). That is, conceptions refer to the ideas, values and attitudes people have toward what something is (i.e., what they think it is and how it is structured) and what it is for (i.e., its purpose) (Brown & Gao, 2015). Conceptions are formed gradually through experiences with a phenomenon during practitioners' life histories and careers, and, in the case of teachers, most likely from their experience as students (Pajares, 1992; Brown & Gao, 2015). Also become the mechanism by which a person's reactions or responses to the phenomenon are shaped (Pajares, 1992; Ajzen, 2005; Fives & Buehl, 2012) and which explains complex and difficult categories of experience (White, 1994) such as assessment (Brown & Hirschfeld, 2007). A conception is known as the values people develop through their experiences and use to evaluate the other constructs such as actions of other people or an activity (Eggen & Kauchak, 2001; Izci & Caliskan, 2017).

The term conception is inclusive of attitudes, perceptions, dispositions, and other terms that suggest belief about a phenomenon (Brown & Hirschfeld, 2008; Deneen & Brown, 2016). Beliefs represent a subcategory of conceptions that in the context of assessment, for example, describe teachers' overall perception and awareness of assessment (Li & Hui, 2007; Barnes, Fives & Dacey, 2015; Opre, 2015). It is also important to remember that beliefs do not exist within a vacuum (Rieskamp & Reimer, 2007). Beliefs about a phenomenon tend to differ according to the environmental constraints imposed on the phenomenon. For example, studies into teacher conceptions of assessment have found different patterns of association between assessment for improved learning and assessment for school accountability in differing regions of the world (Brown & Harris, 2012).

Some research reports on how teachers think about teaching, learning, knowledge, and curriculum (Bennett, 2011; Fives & Buehl, 2012). Research has begun to focus on teachers' thinking about the nature and purpose of assessment. People's purposes towards phenomena are expressed in their conceptions of the phenomena (Brown & Hirschfeld, 2007). Strong emerging evidence suggests that assessment outcomes and practices may be influenced by teachers' conceptions of assessment (Barnes, Fives, & Dacey 2015; Fulmer, Lee, & Tan, 2015; Deneen & Brown, 2016) and, for example, the concept that assessment ought to be "formative" rather than "summative" generally implies assessment should be used to improve teaching and learning and not give students final grades or scores (Brown & Hirschfeld, 2007).

Research has pointed out that different kinds of teaching cultures originate different conceptions and practices related to assessment (Segers & Tillema, 2011). Brown et al. (2011) similarly assert that the assessment culture, meaning the practices and policies implemented in the teaching environment, affects the way teachers compose their conceptions of teaching, as well as of assessment (Brown, 2004; Postareff, Virtanen, Katajavuori, & Lindblom-Ylänne, 2012). Assessment starts from the premise that these conceptions, like other types of teachers' beliefs, significantly influence their decisions and professional activity (Vandeyar & Killen, 2007; Brown, 2008; Opre, 2015). The conceptions of various aspects of the education process (e.g., teaching, learning, and curricula) strongly influence how teachers teach and what students learn or achieve (Thompson, 1992; Calderhead, 1996; Brown, Lake, & Matters, 2011). Specifically, teachers' beliefs about students, learning, teaching, and subjects influence assessment techniques and practices (Cizek, Fitzgerald, Shawn, & Rachor, 1995). It was established that teacher beliefs, attitudes and responses affect – to the extent teachers have control – the quality of what happens in school curriculum, teaching and assessment (Fives & Buehl, 2012).

A strong relationship between conceptions of assessment and classroom practice was found in literature (see Van den Berg, 2002; Remesal, 2007; Brown & Remesal, 2012). Classroom practice is influenced by how teachers understand the purpose and function of assessment. While using assessment for improving teaching and learning may be a *sine qua non* of being a teacher, the enactment of that belief depends on the sociocultural context and policy framework within which teachers operate (Brown, Gebril, & Michaelides, 2019). Other studies (see Sato & Kleinsasser, 2004; Brown & Hirschfeld, 2007) indicated that teachers' conception is an important variable when making classroom decisions. The results of the different studies stress the importance of understanding teacher beliefs if we would like to enhance, adapt, or completely change classroom practices (Gebriel, 2017).

The relationship between beliefs, or conceptions, and school practices is well known since long ago, as a matter of fact (Remesal, 2011). Conceptions are tightly linked to practice (Pajares, 1992); generate in the daily experience and return to it taking the form of decisions and behaviours (Remesal, 2011). Griffiths, Gore, and Ladwig (2006) reported that beliefs affect teaching practices to a greater degree than teaching experience and socioeconomic school context do. Yet, beliefs are not always necessarily coherent nor explicit (Clark & Peterson, 1986; Calderhead, 1996). In addition, they are often challenged, at times propelled, at times hindered, by legal and contextual requirements (Harris & Brown, 2009; Remesal, 2011).

Understandably, the more a phenomenon is similar in its structure and functions across time or place, the more people in different locations or across different cultural contexts, who experience those similarities, will have similar conceptions of the phenomenon. Thus, there is a legitimate expectation that teachers should have similar conceptions of assessment depending on whether the evaluative or improvement functions are prioritised within a policy context (Brown & Gao, 2015). Teacher beliefs about assessment are generally affected by the social and cultural factors in a certain context and consequently conceptions of assessment could be described as ecologically rational (Brown & Michaelides 2011; Gebril, 2017).

Research on assessment conceptions has addressed how teachers in different parts of the world conceive of assessment, with participants from different linguistic and cultural backgrounds. A number of studies have been conducted in many countries and/or regions – for example in New Zealand (Brown, 2002, 2004, 2008, 2011), Queensland (Brown, Lake, & Matters, 2011), Australia (Brown, Lake, & Matters, 2011), and the USA (Hamilton, Stecher, & Marsh, 2007; Calveric, 2010). Other studies have been carried out in the Asian context in China (Li & Hui, 2007) and Hong Kong (Brown et al., 2009). In Europe, research on conceptions of assessment has been done in Portugal (Flores et al., 2019; Flores et al., 2020), Spain (Brown & Remesal, 2012), the Netherlands (Segers & Tillema, 2011) and Cyprus (Brown & Michaelides, 2011) and recently extended to Middle Eastern societies in a range of Islamic societies including Israel (Levy-Vered & Alhija, 2018), Egypt (Gebril & Brown, 2014), Turkey (Vardar, 2010), Iran (Pishghadam & Shayesteh, 2012; Pishghadam et al., 2014), and Pakistan (Khan, 2011). A study was also carried out in Latin America, namely in Colombia (Muñoz, Palacio, & Escobar, 2012). Such widespread interest suggests that the inventory has some efficiency and feasibility as an exploratory method of discerning teacher beliefs about assessment (Gebril & Brown, 2014).

The conceptions of assessment among teachers in Australia are relatively similar to those in New Zealand (Brown et al., 2011), which is justified by the similarities between both countries. In the US context, attitudes toward standards-based assessment the between the states of California, Georgia and Pennsylvania proved to be similar, which can be explained by the educational systems/policies that follow the same guideline (Hamilton, Stecher & Marsh, 2007; Gebril, 2017).

Teachers' conceptions of assessment

Recent research on teacher conceptions of assessment (Barnes, Fives & Dacey, 2015; Fulmer, Lee, & Tan, 2015; Bonner, 2016; Brown & Remesal, 2017) points to the key importance of the nature of beliefs and conceptions teachers hold about assessment because assessment policy may fail due to the lack of teacher cooperation, knowledge, or belief in the proposed new usage of assessment (Brown, Lake, & Matters, 2011; Gebril, 2017). Teachers are considered to be at the heart of any educational system and are key factors in modifying assessment information to improved learning (Brown et al., 2009; Pishghadam et al., 2014).

Teachers' beliefs are complex, multifaceted, and varied whereby different belief systems may function in different ways as filters, frames, or guides (Fives & Buehl, 2012). Conceptions of assessment, then, refer to the teacher's understanding of the nature and purpose of how students' learning is examined, tested, evaluated, or assessed (Brown & Gao, 2015; Levy-Vered & Alhija, 2018).

Educational research has brought to light the difficulty of implementing new forms of assessment, and especially those aimed at assessment for learning (Stiggins, 2005; Black & Wiliam, 2009; Brown, Lake, & Matters, 2009; Remesal, 2011). Over the years, wide research has been carried out in the area of teacher assessment practices and, more specifically, around grading practices, rather than the beliefs that may underlie these practices (McMillan & Nash, 2000; McMillan, 2001; Vandeyar, & Killen, 2003; Duncan & Noonan, 2007; Brown et al., 2011; Brown, Lake, & Matters, 2011). Yet most of these studies conclude drawing attention on teachers' beliefs or conceptions. Results point to teachers' conceptions as one of the key factors that influence classroom decisions (Sato & Kleinsasser, 2004; Remesal, 2006; Griffiths, Gore, & Ladwig, 2006). This is especially critical during periods of systemic school reform since teachers are the last step in a sequence of changes (Remesal, 2011). Teachers' conceptions of educational processes are a product of their educational experiences as students, strongly suggesting that similar conceptions can be found in both teachers and students (Pajares, 1992; Brown & Hirschfeld, 2007).

In the assessment practice, the way in which teachers conceptualise assessment itself is extremely important. Teachers' conceptions about the purposes of assessment influence implementation of assessment practices at all educational levels (Brookhart, 2011; Deneen & Boud, 2014; Barnes, Fives, & Dacey, 2015; Fulmer, Lee, & Tan, 2015; Deneen & Brown, 2016). Positive conceptions of assessment (e.g., assessment should enhance students' learning) have been shown to precipitate beneficial assessment practices; negative conceptions of assessment (e.g., assessment is bad for students or irrelevant to learning) may play a significant role in teachers resisting or subverting assessment policies and intended practices (Brown, 2008; Deneen & Boud, 2014; Deneen & Brown, 2016). Generally, research into teacher conceptions of assessment has focused on the tensions between different functions and purposes, such as summary of achievement, improvement (learning and teaching), and school accountability (Black & William, 1998; Levy-Vered & Alhija, 2018).

A review of the literature reveals that the issue of teacher beliefs about teaching, learning, curriculum, and different disciplines has been investigated by researchers with predilection and it has existed for more than twenty years (Thompson, 1992; Fives, Lacatena & Gerard, 2015). For example, Delanshere and Jones (1999) proposed three dimensions to identify and describe teachers' beliefs on assessment. These dimensions are (i) purposes and functions of assessment, specified as the distribution of students according to achievement levels and external evaluation; (ii) teachers' perception of curriculum and their professional self-efficacy feeling; and (iii) their beliefs about the teaching and learning process and about students as learners (Remesal, 2011).

An earlier contribution on conceptions of assessment was made by Wolf, Bixby, Glenn, and Gardner (1991) in which the authors proposed to distinguish between two opposite poles in a *continuum*: the "assessment culture" and the "testing culture"; the ideas that teachers hold about intelligence, about the process of teaching and learning, the nature of assessment tasks, and about evaluation criteria, eventually shape their understanding and practices of assessment (Remesal, 2011). Teacher beliefs about assessment, teaching, learning and curriculum have shown strong similarities in societies that prioritise teacher judgement and professionalism as the basis of teacher activity in each of the four domains (Gebriel & Brown, 2014).

In contrast, the study of teachers' assessment conceptions is relatively recent (Brown, 2004, 2006, 2008, 2011; Harris & Brown, 2009; Brown & Michaelides, 2011; Remesal, 2011; Barnes, Fives & Dacey, 2015; Flores et al., 2019; Fernandes, 2020) and it occurs due to the paradigm shift in the approach and

understanding of teaching and learning. The studies on the conceptions of assessment bring important contributions to the way in which teachers understand assessment and how these beliefs influence their teaching behaviour (Opre, 2015).

For example, Remesal (2011), based on a study with 50 teachers, argues that assessment conceptions may, on the one hand, be related to the structure of the educational system and may tend towards more pedagogical conceptions or more of responsibility that concerns external issues about the school and, on the other hand, be constituted by different beliefs, sometimes conflicting, about the role of assessment in teaching and learning considered separately. This fact can help to understand the difficulties associated with the application of innovative learning assessment practices.

Divergent ideas about the purposes of assessment stem from debates on best assessment practices. There appear to be four major conceptions about the purpose of assessment discussed in the research literature (Torrance & Pryor, 1998; Shohamy, 2001; Brown, 2008). Three of them may loosely be categorised as “purposes” and one as an “antipurpose” (Brown, 2008; Brown, Lake, & Matters, 2011) (see Figure 2): i) Assessment as improvement of teaching and learning – Improvement, according to this concept, assessment is a tool for diagnosing students' learning problems (Levy-Vered & Alhija, 2018). Sometimes known as assessment for learning or formative assessment, has been shown to have a positive impact on educational outcomes (Black & Wiliam, 1998; Popham, 2000). Formative assessment, using a wide range of assessment techniques and strategies are carried out by teachers and schools during the process of instruction for the purpose of improving student learning outcomes and teacher instructional practices (Scriven, 1991). Likewise, teachers can use the assessment results for evaluating and improving their own practice (Black, Harrison, & Lee, 2003); ii) Assessment as making schools and teachers accountable for their effectiveness – School and Teachers Accountable, this conception uses assessment results to publicly demonstrate that teachers or schools are doing a good job (Butterfield, Williams, & Marr, 1999; Smith, Heinecke, & Noble, 1999) and imposes consequences for schools or teachers for reaching or not reaching required standards (Firestone, Mayrowetz, & Fairman, 1998).

Two rationales exist: publicly demonstrating that schools and teachers deliver quality instruction – this viewpoint insists that schools and teachers have to be able to demonstrate that they are delivering the quality product that society is entitled to by virtue of funding the educational process (Gipps et al., 1995; Smith & Fey, 2000) and improving the quality of instruction – this viewpoint emphasises the role testing can play in improving teacher and student work (Noble & Smith, 1994; Linn, 2000; Porter & Chester,

2002); iii) Assessment as making students accountable for their learning – Students’ Accountability (Brown, Lake & Matters, 2011) this concept implies that students are held individually accountable for their own learning through assessment (Brown, 2004; Harris & Brown, 2009; Brown, Lake & Matters, 2011). Grading and scoring, criterion reference tests and awarding certificates are examples of this assessment in practice (Harris & Brown, 2008). Grading according to this conception does not consider what students have achieved and how much they have progressed on a learning continuum but is only concerned with the students' position in relation to other students of the same age (Musial, Nieminen, Thomas, & Burke, 2009). This conception looks into whether students meet academic standards (Gebril, 2017); and iv) The term an anti-purpose is a belief that assessment is fundamentally irrelevant to the life and work of teachers and students – Irrelevant (Shohamy, 2001), this conception is based on the view that external evaluation processes are inadequate, inaccurate, and/or irrelevant to the teachers’ ability to improve student learning (Black & Wiliam, 2004; Harris & Brown, 2009; Brown, Lake, & Matters, 2011; Opre, 2015; Brown & Gao, 2015; Levy-Vered & Alhija, 2018).

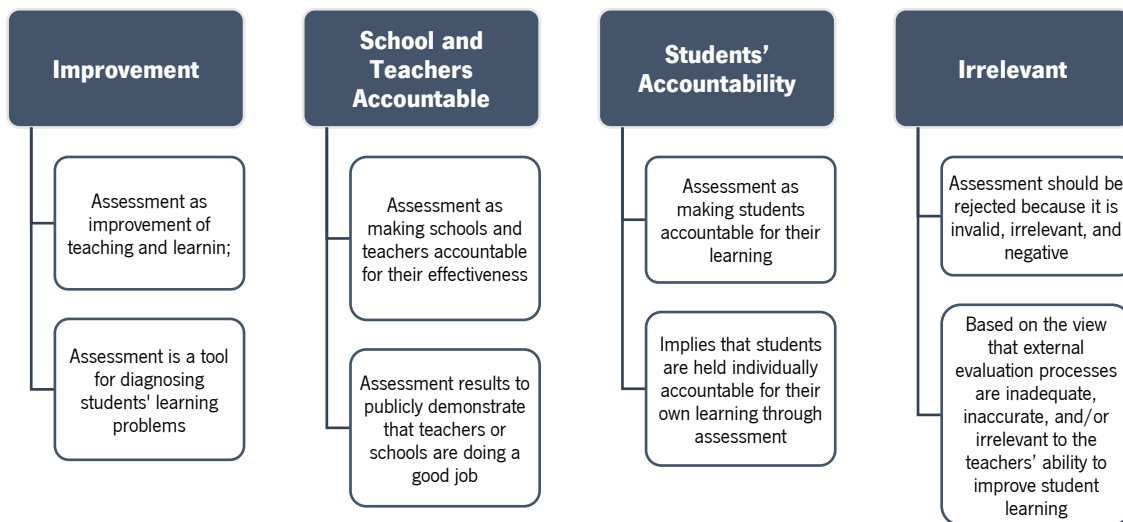


Figure 2: Brown’s model of teachers’ conceptions of assessment (Brown, 2008)

Students’ conceptions of assessment

Students’ thinking about educational processes is important because there is evidence that how they understand those processes impacts on their educational experiences. Students' conceptions and beliefs about assessment can influence their motivation, the process of self-regulation of learning (Zimmerman, 2008; Pereira, 2016) and have been shown to be significantly related to academic performance, in part, due to the overlap between such ideas and self-regulation of learning (Brown, 2011; Flores et. al., 2020). Therefore, students who take responsibility for their learning generally achieve more (Reeve, Bolt, & Cai,

1999); whereas those who locate control or apportion responsibility elsewhere or who lack confidence to achieve (Pajares, 1996) tend to achieve less. In higher education, students' learning is more influenced by their perceptions of the educational environment than by the actual educational practices (Entwistle, 1991; Brown & Hirschfeld, 2007). Furthermore, students' conceptions of assessment are of particular importance because assessment has a significant impact on the quality of learning (Entwistle & Entwistle, 1991; Marton & Säljö, 1997; Brown & Hirschfeld, 2007, 2008).

Students who perceived assessment as more authentic studied harder and developed more professional competences (Gulikers et al., 2008; Flores et al., 2020) conceiving the assessment as a tool for improvement appears to be a constructive self-regulating belief leading to higher academic performance because self-regulation requires reflection upon achieved performance to identify learning priorities and successes also found that. In contrast, the assumption that assessment is irrelevant and ignorable leads to maladaptive responses (e.g., attribution to external locus of control) and rejection of the legitimacy of either the evaluative process, results, or feedback (Flores et al., 2020). The study of conceptions of assessment is "of utmost relevance at a time when innovation of assessment practices is on the educational agenda" (Segers & Tillema, 2011, p. 53). Those conceptions lead to different reactions and feelings before, during, and after assessment (Boud, 1995; Race, 1995; McMillan, 2016).

Emotions are directly linked to cognition and there is a strong correlation between affect and learning (Novak & Johnson, 2012). Research shows that students experience both positive and negative emotions in higher education contexts (Novak & Johnson, 2012). Recent studies on assessment feedback reveal that emotional reactions can determine how students perform in relation to feedback received (Pitt & Norton, 2017; Ryan & Henderson, 2018). In contrast, a longitudinal study of students' emotional responses through summative assessment found that only when scores were known (i.e., feedback was received) did students' emotions have systematic relationships with performance (Peterson et al., 2015; Flores et al., 2020).

University students have more complicated emotions than just anxiety regarding academic achievement (Pekrun, Elliot, & Maier, 2006). It seems that as students become increasingly aware of the consequences assessments have for their lives, they become less enthusiastic and more negative towards assessment (Wang & Brown, 2014). This negative affective response to the increasing pressure of accountability (Lerner & Tetlock, 1999) implemented through the assessment system may be an ecologically rational response (Rieskamp & Reimer, 2007). Since the risks of doing poorly on examinations are powerful, it

seems rational, and possibly even self-regulating, to have less enjoyment in the process and to view the highly selective consequences as fundamentally unfair (Wang & Brown, 2014).

Awareness of student beliefs especially matters when institutional policies and practices are reformed, partly because students tend to resist innovations in the mechanisms used to judge, evaluate, or certify their achievements (Struyven & Devesa 2016; Flores et al., 2020). As universities seek to innovate in their assessment regimes, it is important that students believe such assessments contribute to improved outcomes. Rejection of evaluative practices as irrelevant, inaccurate, or invalid would probably undermine the constructive objective of using assessment for learning (Flores et al., 2020).

Students' conceptions of assessment are believed to vary with age as well as gender (Black et al., 2002). The biggest changes are at transitions from primary to secondary school (Moni, van Kraayenoord, & Baker, 2002) and secondary to tertiary (Thomas, Bol, & Warkentin, 1991) due to students encountering different assessment purposes, routines, and procedures (Peterson, & Irving, 2006).

A decade ago, it was remarked, in an early volume of studies on student conceptions and experiences of assessment, that student voice is "remarkably absent" in the literature on assessment (Brown et al., 2009, p. 5; Pereira et al., 2021). Much of the empirical work on conceptions of assessment has focused on compulsory education students and how these conceptions affect students' study behaviours and outcomes (Brown & Hirschfeld, 2008; Peterson & Irving 2008; Brown, 2009, 2011, 2013; Brown & Harris, 2012; Solomonidou & Michaelides 2017; Chen & Brown, 2018; Flores et al., 2020).

Although there is research evidence on students' conceptions regarding school improvement and evaluation of teaching, students' conceptions of their own assessment continue to be an under-researched area (Solomonidou & Michaelides, 2017). While some research with higher education students does exist (Matos et al., 2009, 2013; Fletcher et al., 2012; Brown, 2013; Brown & Wang, 2013, 2016; Brown & Harris, 2014; Wang & Brown 2014), much less has been conducted in Portugal (Flores et al., 2020, Pereira, Cadime, Brown, & Flores, 2021). To date most of the research in tertiary education related to conceptions of assessment has focused on how these conceptions affect study behaviours (e.g., Sambell & McDowell, 1998; Gijbels & Dochy, 2006), perceptions of assessment criteria, techniques, or requirements (e.g., Sambell, McDowell, & Brown, 1997; Brookhart & Bronowicz, 2003), perceptions of the value and importance of assessment, or preferred mode of assessment (e.g., Birenbaum, 1994; Brookhart & Bronowicz, 2003; Peterson & Irving, 2006).

Higher education may engender different conceptions or perceptions because: (a) evaluation practices are largely summative (Panadero et al., 2019), and (b) students are legally adults and able to exercise considerable autonomy around assessment to achieve their own life goals.

In terms of how students conceive the nature and purpose of assessment, four major conceptions appear in the literature from the SCoA (Students Conceptions of Assessment) inventory (Brown & Hirschfeld, 2008; Brown, Irving, Peterson, & Hirschfeld, 2009; Brown, 2011; Wang & Brown, 2014). These are: (1) assessment leads to improved teaching and learning; (2) assessment evaluates schools and students; (3) assessment has a positive emotional impact on students personally and corporately; and (4) assessment is irrelevant, and students respond negatively to it (see Figure 3) (Wang & Brown, 2014). First and foremost, students are aware that assessment exists in order to improve learning and teaching (Pajares & Graham, 1998; Peterson & Irving, 2008) and that this may be achieved through evaluating their performance (Zeidner, 1992; Brookhart & Bronowicz, 2003; Harlen, 2007). Second, students are aware that assessment is used to evaluate external factors outside their own control such as the quality of their schools, their intelligence, and their future (Peterson & Irving, 2008). Thirdly, students are aware that assessment can be an unfair, negative, or irrelevant process in their lives (Moni, van Kraayenoord, & Baker, 2002; Peterson & Irving, 2008). Finally, the literature clearly indicates that students are aware that assessment has an affective impact on their emotional well-being and the quality of relationships they have with other students (Moni, van Kraayenoord, & Baker, 2002; Weeden, Winter, & Broadfoot, 2002; Brown, 2011). There is evidence that university students are aware of these competing purposes and effects and that their conceptions of assessment contribute to self-regulation (Wang & Brown, 2014).

These conceptions presented by the students, assessment is conceived as (a) improving students' achievement and learning, (b) a means of making them accountable, (c) being enjoyable and (d) being irrelevant. The evident fact is that some of these purposes are approached by the teachers' conceptions (Brown & Hirschfeld, 2008).

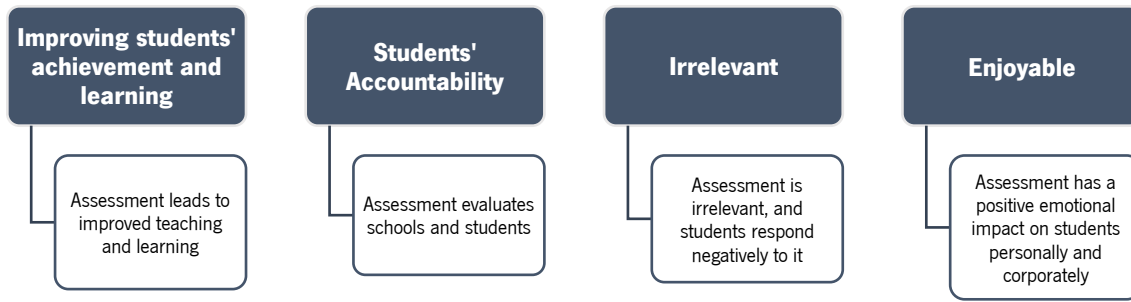


Figure 3: Brown and Hirschfeld's model of teachers' conceptions of assessment (Brown & Hirschfeld, 2008)

From SCoA in the research of Wise and Cotten (2009) it was showed, among American university students, that endorsement of the improvement conception predicted greater effort in, and attendance at, a low-stake, computer-based test of generic skills. In Hirschfeld & von Brachel (2008) research, the conception that assessment grades students (i.e., holds them accountable) was found to predict increased self-reported use of individualistic learning strategies among German psychology students. Matos (2010) showed that, among Brazilian university students, endorsement of two conceptions of assessment (i.e., assessment was enjoyable, and assessment was ignored) negatively predicted defining assessment with formal practices such as tests or examinations. In the Portuguese context (Flores, Fernandes & Pereira, 2019; Flores et al., 2020, Pereira, Cadime, Brown, & Flores, 2021), the study carried out with 5525 students demonstrated that the positive endorsement of student improvement was entirely consistent with notions that student responses, attitudes, and conceptions of assessment that support self-regulation of learning are appropriate and adaptive for successful learning outcomes (Brown, 2011). Combined with the rejection of the concept that assessment should be ignored, the results suggest that these students have a view that assessment is primarily about paying attention to what they got wrong so that they can improve. These results indicate Portuguese university students are already trying to use whatever information they get to improve their performance, which is what successful, self-regulating students do (Flores, Fernandes & Pereira, 2019; Flores et al., 2020; Pereira, Cadime, Brown, & Flores, 2021) it would appear the Portuguese university students have an overall conception of assessment that expresses personal responsibility to use insights from assessment to improve their learning, performance, and achievement (Flores, Fernandes & Pereira, 2019; Flores et al., 2020; Pereira, Cadime, Brown, & Flores, 2021).

Conceptions of assessment in teacher education

Teachers' conceptions of learning, teaching and assessment influence how they behave in their classrooms. Thus, teachers' conceptions of assessment are an important construct for teachers'

assessment practices (Izci & Caliskan, 2017). Classroom assessment is affected by many factors, among which teachers' beliefs about assessment is one of the most important (Moiinvaziri, 2015). Teachers' beliefs about assessment affect how they implement, interpret, and respond to evaluative practices (Brown & Gao, 2015; Izci & Caliskan, 2017). Despite the importance of studying teachers' beliefs in classroom practices, there is still no consensus even on the designation to develop teachers' competence for assessment. Then, some call it assessment capacity (McMunn, McColskey, & Butler, 2004; Towndrow, Tan, Yung, & Cohen, 2010), some others assessment competence (Edelenbos & Kubanek-German, 2004); some prefer assessment literacy (Volante, & Fazio, 2007; Wang, Wang, & Huang, 2008; Leighton, Gokiert, Cor, & Hefferman, 2010), while some others talk about assessment knowledge (Xu & Liu, 2009; Remesal, 2011). Although, addressing conceptions of assessment has significant implications for teacher education (Deneen & Brown, 2016).

Despite this, the idea is conceived that the utility of teacher education programmes is based on the presumption of enhancing practice; thus, it is essential to understand the relationship between student future teachers' conceptions of assessment and the approach of teacher education programmes in order to improve the assessment process (Deneen & Brown, 2016).

A fundamental premise of teacher education programmes is to prepare student future teachers for the current changes and challenges. Teacher education programmes are expected to prepare them for a classroom. Therefore, future teachers should be prepared for innovative teaching and assessment approaches (Kim, Choi, Han, & So, 2012; Kayange & Msiska, 2016; UNESCO, 2016). Changing assessment paradigms, in particular recognition of the importance of formative assessment for learning practices, have generated great interest in assessment knowledge and perceptions in the teacher education phase (Brown, 2011). Teachers' conceptions of teaching, learning, and curricula strongly influence how teachers teach and what student learn or achieve (Brown, 2009; Savasci-Acikalin, 2009; Muis & Foy, 2010; Opre, 2015). There have been studies emphasising the underlying relationship between teachers' conceptions of assessment and improvement of learning and teaching (Black & Wiliam, 1998; Popham, 2008). Other studies focused on investigating teachers' conceptions and beliefs toward assessment and their relationship to practice (McMillan, 2001; Stiggins, 2004; Fives & Buehl, 2012; Levy-Vered & Alhija, 2018) which shows the relevance and pertinence of this topic to the educational landscape.

Previous international studies indicate that, while students begin school feeling positive about assessment, negativity increases as they continue their education, demonstrating that assessment can inspire strong affective responses in students (Brown & Harris, 2012). Perhaps a close link can be established with studies that have shown that when preservice teachers begin training, many have negative emotions regarding assessment (Crossman, 2007; Smith, Hill, Cowie, & Gilmore, 2014). While they might value the ideals of formative assessment, they do not know how to implement it (Winterbottom et al., 2008; Levy-Vered & Alhija, 2018).

Research has shown that even if teachers hold positive views of assessment and perceive the benefits of assessment for themselves and for their students, they mostly struggle to transfer their views into classroom practices (Heitink et. al., 2016). Even the tension between conception and practice of assessment is much more complex and difficult for prospective teachers (Otero, 2006; Volante & Fazio, 2007; Siegel & Whisher, 2011). Hence, preparing teachers to perceive benefits of assessment for learning and then practice assessment in a way to support learning will be a meaningful way to support prospective teachers' assessment literacy (Izci & Caliskan, 2017).

Teachers spend more than one third of their time assessing student learning (Stiggins & Conklin, 1992) and enter their teacher education programmes with preconceptions about assessment. It is highly possible that these early conceptualisations of assessment can influence actual assessment behaviours because behaviour is strongly predicted by intention, which is largely influenced by beliefs or attitudes (Ajzen, 1991). For example, preservice teachers who view assessment as useful for supporting learning may be more likely to use assessments to enhance their students' learning. Alternatively, preservice teachers who believe that assessments ensure that students complete work may limit their assessment practices assignments involving formal grades. The extent to which preservice teachers reflect these two examples largely depends on the educational context they have experienced (Deneen & Brown, 2011).

The importance of making preservice teachers aware of their personal beliefs and the inherent contribution of these beliefs to the teaching process is aligned with constructivist idiosyncratic knowledge-building approaches (Chong, Wong, & Lang, 2004). According to the constructivist approach, conceptions have a critical influence on learning during training (e.g., Borko & Putnam, 1996). Research on teacher education has shown that student teachers' conceptions of instruction, learning, and assessment shape how they learned, how they will teach, and how they will evaluate their students learning in the future (Pajares, 1992; Levy-Vered & Alhija, 2018). Yet the fact is that, as long as teachers' beliefs are left aside,

some superficial changes might take place, but the likelihood of profound long-lasting changes in classroom practices is rather small (Remesal, 2011).

Research in higher education shares a consensus that assessment is integral to the learning process (Biggs & Tang, 2007), and that the way in which students' work is assessed directs their learning and defines the actual curriculum (Ramsden 2003; Struyven, Dochy, & Janssens, 2005; Bryan & Clegg, 2006; Hodgson & Pang, 2012; Halinen, Ruohoniemi, Katajavuori & Virtanen, 2014). And the study of teachers' conceptions of assessment, specifically among preservice teachers, is even more important at times of educational reform (Vandeyar & Killen, 2003), and in an era of a rising awareness on the need for competent and aware teachers of the assessment process (Levy-Vered & Alhija, 2018).

Bullough and Gitlin (1995) suggested a reciprocal relationship between conceptions and actions during training, whereby conceptions might influence what and how students learn, while training programmes have a major influence on shaping and consolidating students' conceptions. In a study focused on preservice teachers' understanding of assessment in England, Taber et al. (2011) showed that they acquired a wide range of ideas about assessment from their own early experiences which, in turn, shaped their personal beliefs (Levy-Vered & Alhija, 2018).

It was also found that students who had acquired more knowledge about assessment tended to perceive it more positively (Alkharusi, 2009; Smith et al., 2014). For example, Smith et al. (2014) found that during a teacher education programme, the New Zealand preservice teachers' views shifted from assessment as primarily summative to the view assessment as supporting student learning and informing teaching. Additionally, in a recent study among Israeli teachers, a significant positive correlation was detected between training and conception of assessment (Levy-Vered & Alhija, 2015, 2018). However, recent research from various countries has shown that many teachers are inadequately trained to develop, administer, and interpret the results of various types of assessments (DeLuca & Bellara, 2013; Ogan-Bekiroglu & Suzuk, 2014; Beziat & Coleman, 2015).

Different authors have investigated the conceptions of preservice teachers about the assessment, since they are related to the way in which these address assessment as well as learning and student performance (Brown & Remesal, 2012; Levy-Vered & Alhija, 2018; Lutovac & Flores, 2021).

Brown and Remesal (2012) carried out a study with 996 prospective teachers in New Zealand and Spain (New Zealand, $n = 324$; and Spain, $n = 672$) using to the Teachers' Conceptions of Assessment (TCoA-

III) inventory (Brown, 2006) and the results of confirmatory factor analysis indicated that the original model was inadmissible and that the best-fitting revised model was only configural invariant between the two samples. It would appear that lack of teaching experience results in different responses for prospective teachers to those of practicing teachers. Moreover, differences in societal and cultural priorities for assessment use most likely explain the lack of invariance between samples.

Levy-Vered and Alhija (2018) conducted a study in Israel with 297 preservice using to the Teachers' Conceptions of Assessment (TCoA-III) inventory (Brown, 2006) and results lead to three major conclusions. First, the most dominant conception of assessment among Israeli preservice teachers is the improvement concept, but the level of endorsement of this concept before the programme is not very high, while the level of endorsement of the inaccuracy conception is too high. Second, the main conceptions of assessment are inter-correlated, which adds to the complexity of the conceptions' structure. Positive high correlations were detected between the improvement concept and both school and student accountability concepts. Finally, and more importantly, participating in a basic assessment programme resulted in a clear increase in the preservice teachers' conceptions about the role of assessment for improving learning and teaching. This finding reflects the importance of teacher preparation programmes for generating a significant conceptual change and exhibits the power of the programmes to do so.

Lutovac & Flores (2021), in a study conducted with 79 future teachers, identified four conceptions of assessment: (1) assessment has to do with feedback and reflection, (2) assessment must be personalised and demonstrate student learning, (3) the assessment must take into account the effort of the students and, finally, (4) the assessment does not allow to measure the success or failure of the students. These authors concluded that the teacher plays a determining role in the failure of the students, from whom he/she must learn to reformulate his/her teaching and/or assessment practices, highlighting the preponderance of formative assessment, as well as the need to talk with the students and provide them with feedback. In general, the first conception is based on the idea that assessment serves to improve and, therefore, can help students and teachers to learn. The following two conceptions reflect the general idea that assessment should be a continuous process and take into account the background and trajectory of the students. Finally, the fourth conception of assessment identified is related to the fact that grades and exams do not allow measuring the moral and social purposes of learning and to the subjectivity in the interpretation of failure in the context of assessment.

Relatively little prior research has attended explicitly to the variety of possible factors that impact teachers' knowledge about assessment and their views or practices (Fulmer, Lee, & Tan, 2015; Levy-Vered & Alhija, 2018). The emphasis in classroom assessment shifted toward formative assessment, due to the focus on constructivism and social learning approaches that emphasise the learning process and the socio-cultural context (Shepard, 2000). Accordingly, teacher education programmes have started to prepare teacher candidates to use assessment for multiple purposes. They have also been trained to engage with the complex nature of classroom assessment and be capable to analyse such practices in light of assessment principles, purposes, and philosophies (Eyers, 2014; Smith et al., 2014; Levy-Vered & Alhija, 2018).

1.1.3. Functions and modes of assessment

Assessment in higher education performs multiple functions for varying purposes (Boud, 1995; Carless, Joughin, & Mok, 2007; Fletcher et al., 2012). Hence, the need to consider it taking into account a pluralistic approach (Segers 1996; Dochy, Segers, & Sluijsmans, 1999). Assessments inform programme selection decisions, determine student progression towards qualifications, and measure student learning towards attaining graduate profiles (Brown, Bull, & Pendlebur, 1997). Assessments also provide information to faculty about teaching effectiveness (Biggs, 2003; Ramsden, 2003; Yorke, 2003) and to students about how well they are doing and how they can improve their learning (Scouller, 1998; Black & Wiliam, 1998; McDowell & Sambell, 1999; Biggs, 2003; Ramsden, 2003; Gibbs, 2006; Carless, Joughin, & Mok, 2007; Rust, 2007; Hernández, 2012; Fletcher et al., 2012). In the past, assessments were rarely seen as a process of bringing out the potential that exists within students and creating an opportunity for them to demonstrate what they were able to do. Most of the time, assessments were only used to certify students' learning (Boud, 2000; Fletcher et al., 2012). Many learning institutions have forgotten that the ultimate purpose of the assessment actually is not only to prove but also to improve students' learning (Boud & Falchikov, 2005). Nowadays, assessments are part of institutional quality assurance and accountability processes to validate the award of qualifications as well as the quality of disciplinary offerings, professional training, and the student experience (Knight, 2002; Ramsden, 2003; Fletcher et al., 2012).

Furthermore, new ideas have been developed concerning the main function of assessment. Assessment procedures are seen not only as serving as tools for crediting students with recognised certificates but also as valuable for the monitoring of students' progress and to direct them, if needed, to remedial

learning activities. Moreover, there is a strong support for representing assessment as a tool for learning (Arter, 1997; Dochy & McDowell, 1997). Therefore, as Dochy, Segers, & Sluijsmans (1999, pp. 331-332) point out “the view that the assessment of students' achievements is solely something which happens at the end of a process of learning is no longer tenable.”

Assessment has two main purposes: certification (summative assessment) and supporting learning (formative assessment). These are inextricably woven together and, given the resource constraints of most educational institutions, it is probably impossible to separate them in practice (Boud, 2000). Both purposes of assessment need to be judged in terms of their effects on learning and learners, as there is no point in having a reliable summative assessment system if it inhibits the very learning which it seeks to certify (Boud 2000). Assessment must be judged in terms of its consequences (Boud, 2000; Liu & Carless, 2006; Hernández, 2012).

According to Hornby (2003), assessment has four main roles: (a) summative, to provide information about attainment at the end of the programme, (b) formative, to provide support for future learning, (c) certificating, to enable selection based on a qualification, and (d) evaluative, to provide a way for stakeholders (e.g., parents, teachers, schools) to judge the success of the system overall. However, assessment plays other important and sometimes unintentional roles as well. For example, assessment affects what and how students learn (Dochy & McDowell, 1997), student motivation (Brookhart & Bronowicz, 2003), and sense of self and well-being (Black et al., 2002; Black & Wiliam, 1998, Peterson & Irving, 2008)

Much has been written about the purposes served by assessment in higher education. One commonly described purpose of assessment is to provide students with certification of achievement; signifying “a publicly acceptable code for quality” (Broadfoot & Black, 2004, p. 9). This view of assessment of learning has long been associated with more summative means of assessment practice (Boud & Falchikov, 2006). A second purpose of assessment in higher education is to facilitate and direct student learning. From this perspective, assessments allow lecturers to evaluate and refine teaching and assist students to manage personal learning processes (Wiliam, 2007; Villarroel et al., 2018; Thomas et al., 2019).

Assessment can promote students' self-awareness of learning, help them to plan the next stages in their degrees, and facilitate student collaborations (Broadfoot & Black, 2004). This purpose of assessment for learning has been associated with more formative means of assessment (Boud & Falchikov, 2006; Thomas et al., 2019). In student-involved approaches to assessment, students are considered active

agents who share responsibilities, reflect, collaborate, and conduct a continuous dialogue with the teacher or their peers (Kim, 2009; Ion, Sánchez-Martí, & Morell 2019).

Students' approaches to learning and studying are significantly influenced by their perceptions of assessment (Struyven, Dochy, & Janssens, 2005). They construct their own versions of the hidden curriculum (Sambell & McDowell, 1998), investing assessment tasks with their own meanings based on experience and belief. In many cases learners may be unable to understand the purposes of assessment, even when these are stated explicitly (Rea-Dickins, 2006), or they may even consciously work against the stated goals of the task in order to achieve their own purposes (Spence-Brown, 2001; Wicking, 2019). The current assessment culture favours an integration of learning, teaching and assessment (Rust, 2007), the involvement of students as active and informed participants and a focus on the processes as well as the products of learning (Struyven, Dochy, & Janssens, 2002; Boud & Falchikov, 2006; Craddock & Mathias, 2009).

Assessment attitudes and experiences by students will affect their approach to learning, whether they utilise assessment feedback in their future study, and the extent to which they develop the skills and understandings to become self-assessing lifelong learners (McDowell, 1995; Tiwari & Tang, 2003; Boud & Falchikov, 2006; Carless et al., 2006; Hattie, 2009; Fletcher, 2012). Assessment strategies can therefore be used positively to encourage students to adopt a deep approach to learning (Boyd & Cowan, 1985; Biggs, 2003; Craddock & Mathias, 2009).

The purposes and functions of assessment determine the moments of evaluation, which can be distinguished before, during and after the learning process (Ferreira, 2007). These involve collecting different types of information (what to assess), different assessment procedures (how to assess) and making different decisions (why to assess). Therefore, it is possible to identify three main functions of assessment: diagnostic assessment, summative assessment, and formative assessment, which are not distinguished by technical and temporal dimensions, but by the purposes for which they are carried out (Ferreira, 2007).

Hadji (1994) also distinguishes three main functions of assessment: to certify; to regulate and to guide that correspond to three different modes of evaluating: summative assessment; formative assessment and diagnostic assessment (Pereira, 2016). To certify consists of taking stock of the knowledge acquired and, eventually, granting a diploma or certificate. To regulate consists of constantly guiding the learning process. Lastly, to guide consists of choosing the most appropriate ways and modality of study (Hadji,

1994). As a way of designating the practices that are organised around the three functions presented respectively, aspects such as diagnostic, predictive, or prognostic assessment, formative assessment and summative assessment are convened (Ferreira, 2007) (see Figure 4).

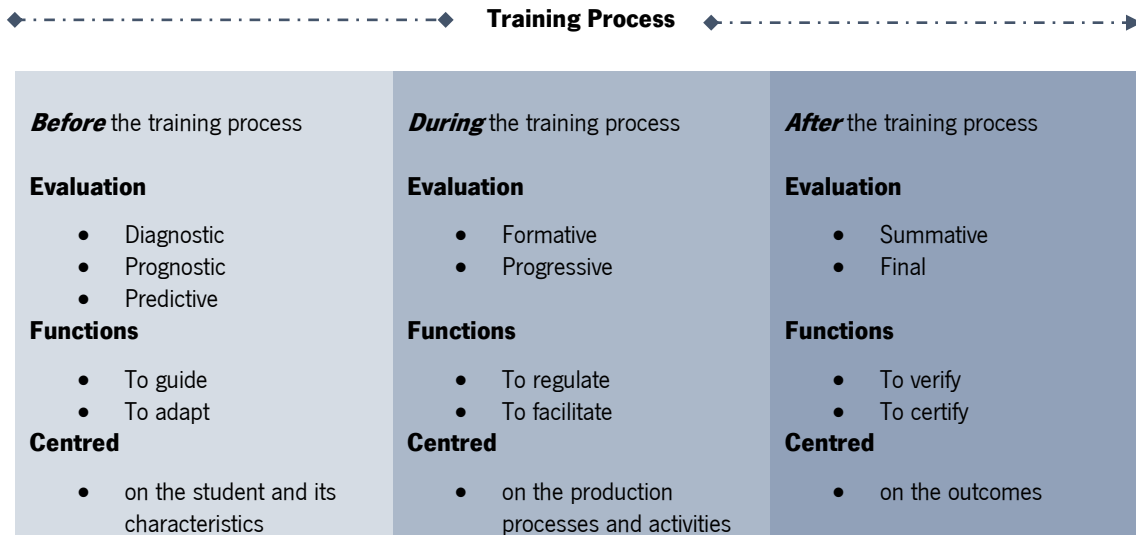


Figure 4: Modes and functions of assessment at the training process (Adapted from Hadji, 1994, p. 63)

Diagnostic assessment

Diagnostic assessment in education is intended to determine a learner's strengths and areas of improvement in the skills and processes being targeted in instruction, and to use that information to subsequently improve the student's learning and guide further instruction (Jang & Sinclair 2018). The diagnostic assessment focuses on the identification of the characteristics of the individual such as representations and previously acquired knowledge in order to adjust and support the training process (Hadji, 1994). Hence, the main purpose of the diagnostic assessment is to determine the student's degree of preparation before starting a learning process, since it determines his/her previous level and makes it possible to investigate possible difficulties that they may have during the teaching-learning process. However, the term "diagnosis" has been used less and less in detriment to the designation of "prognosis". Such a view allows a reciprocal adjustment of the apprentice/study programme (either by modifying the programme, which will be adapted to the apprentices, or by orienting the apprentices towards training subsystems more adapted to their current knowledge and competences) (Hadji, 2001).

This type of assessment does not count towards the grade, students often devalue it, making the results obtained often not correspond to reality. However, there is interest in counteracting this trend, as this assessment provides useful information for the preparation of plans and aims to identify possible difficulties that may arise in the teaching-learning process, allowing for preventive action.

Summative assessment

The assessment is summative when it is proposed to take stock after one or more sequences or, in general, after a training cycle. It is therefore called punctual, i.e., carried out at a specific time (although it can also be carried out in a cumulative process, when the final balance takes into account a series of partial balances) and public. The characteristic of being a normative assessment stands out - students are classified in relation to each other and the results are communicated to the public (administration and parents) (Hadji, 1994).

The fundamental characteristic of this mode of assessment, in the perspective of Bloom, Hastings & Madaus (1983, p. 129), is that “the judgment of the student, the teacher or the programme is made in relation to the efficiency of learning or teaching, once concluded”. It is this assessment that causes so much anxiety in students and teachers.

This mode of assessment is carried out at the end of the teaching-learning process (Ferreira, 2007) and based on the realisation of a sum or balance at the end of the training process (Sadler, 1989; Light & Cox, 2003, Pereira, 2016), normally through tests and/or exams (Popham, 2011; Fernandes, 2020). It aims to measure and classify the learning results obtained by students (essentially in the domain of contents), expressing itself quantitatively through the attribution of a grade (Shepard, 2005). Summative assessments are generally high-stake assessments and used to get a final assessment of how much learning has taken place – that is, how much does a student know (Gardner, 2010). In this way, the grades also facilitate the decisions of promotion, or not, of the student throughout schooling, as they allow the comparison of results according to the established norm (Ferreira, 2007). Thus, the main function of summative assessment is the certification, the determination to which extent a student achieves the curricular objectives (Yorke, 2003) through products and the results (Yorke, 2003; Pereira, 2016; Flores & Pereira, 2019). Hence, it is also called criterial, because establish the comparison between the predefined goals and the results (Figari, 1996). Summative assessment is the same as the cumulative assessment, because intend to capture what a student has learned, or the quality of the learning, and judge performance against some standards (Dixson & Worrell, 2016).

According to Stufflebeam and Shinkfield (2011, p. 345), summative assessment can serve the system “to help administrators decide whether the curriculum was finalised, polished by using the evaluative process in its first form (training), is an improvement over other available alternatives sufficiently significant as to justify the costs of its adoption by a school system.”

Harlen (2007, p. 123) identifies the six characteristics of summative assessment: (1) it may be based on teachers' judgments or external tests or a combination of these; (2) it occurs in a specific moment and time; (3) it relates to the accomplishment of broader goals; (4) it provides results expressed in terms of grades or levels; (5) it judges all students by the same criteria; (6) it requires special measures to assure reliability; but, (7) it may, in some circumstances, offer opportunities for student self-assessment. The impact of summative assessment depends on how assessment is carried out.

Existing assessment practices are perhaps the greatest influence inhibiting moves towards a learning society. Currently, summative assessment acts as a device to inhibit many features of a learning society. It provides a mechanism of control exercised by those who are guardians of particular kinds of knowledge – teachers, educational institutions, professional bodies, and occupational standards organisations – over those who are controlled by assessment – students, novices, and junior employees (Boud, 2000).

In summary, Harlen and James (1997, p. 10) presented the aspects that best characterise the formative assessment:

- it takes place at certain intervals when achievement has to be reported;
- it relates to progression in learning against public criteria;
- the results for different pupils may be combined for various purposes because they are based on the same criteria;
- it requires methods which are as reliable as possible without endangering validity;
- it involves some quality assurance procedures;
- it should be based on evidence from the full range of performance relevant to the criteria being used.

Formative assessment

Formative assessment has, above all, a pedagogical purpose intrinsic to the teaching process (Brown & Knight, 1994). It is different from summative assessment, whose purpose is probative or certifying. Its essential characteristic is to be integrated in the training action, to be incorporated in the teaching act. It aims to contribute to improving ongoing learning, informing the teacher about the conditions in which that learning is taking place, instructing the student about his path, his/her successes, and his/her difficulties (Hadji, 1994).

According to Hadji (1994, p. 64), the learning function underlying formative assessment covers a number of important functions: (1) security – consolidate the student's confidence in himself; (2) assistance – marking the steps, giving support points to progress; (3) feedback – to give, as soon as possible, useful information about the steps taken and the difficulties encountered; (4) dialogue – to foster a true dialogue between teacher and student that is based on accurate data.

Scriven's (1967) states that the formative assessment allows the collection of evidence during the phase of construction and testing of a new programme for the reviews to be conducted having as its base the collected evidence requires its integration into the teaching learning process based on active students' participation. Bates (1984) conceived the formative method of assessment based on a criterial diagnosis and the evaluation framework, establishing a differentiated pedagogy that requires the adoption of a more equitable view of the school. Sadler (1989, p. 120) argued that formative assessment as concerns "how judgments about the quality of student responses (performances, pieces, or works) can be used to shape and improve the student's competence by short-circuiting the randomness and inefficiency of trial-and-error learning." For Bonniol and Amigures (1975) cited by Hadji (1994), in order to be formative, assessment must fulfil three functions: the regulatory function that allows the student to adapt his strategies and the teacher to adjust his pedagogy; the reinforcing function that uses positive reinforcement; and the corrective function in which the student himself must recognise and correct his own mistakes.

Formative assessment involves using information about student learning gathered from observing, listening to them discussing informally with their peers as well as when talking to the teacher, reviewing written work and other products, and using their self-assessments, has always been part of teachers' work. However, it has often been carried out less systematically than is required to serve its purpose effectively and not always used in helping to identify the next steps in learning. (Harlen & James, 1997). Black and Wiliam (1998, p.7) view formative assessment "as encompassing all those activities undertaken by teachers, and/or by their students, which provide information to be used as feedback to modify the teaching and learning activities in which they are engaged".

Wiggins (1998, p. 7) asserted that "The aim of [formative] assessment is primarily to educate and improve student performance, not merely to audit it". Black & Wiliam (2010, p. 82) defined formative assessment as "activities undertaken by teachers – and by their students in assessing themselves – that provide information to be used as feedback to modify teaching and learning activities". Thus, formative assessment encompasses a whole host of tools that provide feedback to teachers or students to help

students learn more effectively. In addition, it provides an ongoing source of information to teachers about current student understanding so that teachers can adjust instruction to maximize student learning (Dixson & Worrell, 2016). Formative assessments are also used to develop interventions to improve student learning (Shepard, 2005; Stiggins, 1994).

In turn, Shepard et al. (2005, p. 277) highlighted that a formative assessment “effectively implemented, can do as much or more to improve student achievement than any of the most powerful instructional interventions, intensive reading instruction, one on-one tutoring, and the like”. Moss & Brookhart (2009, p. 6) underlined that formative assessment is an active and intentional learning process that partners between teacher and the students to gather evidence of learning continuously and systematically with the express goal of improving student achievement.

Formative assessments also inform students and those supporting the teacher and the students (e.g., tutors, parents) about what the learning goal is, where the students are in relation to that learning goal, and what can be done to improve subsequent performance (Black & Wiliam, 2010; Sadler, 1989). Although formative assessments can be graded (e.g., quizzes), evaluations of these assessments usually are not factored into final grades (i.e., summative assessments) because the focus is on assessing student understanding and teaching effectiveness (Dixson & Worrell, 2016).

However, Hadji (2001) also identifies obstacles to the emergence of formative assessment, such as the existence of selection/certification requirements and the laziness or fear of teachers, who do not dare to remedy or effectively intervene in their pedagogical practice. A formative assessment implies a daily struggle for teachers, who have to show the courage to question, speak and decide on a more formative pathway (Fernandes, 2020).

In formative assessment, in order to try to promote the success of learning, differentiated teaching arises not as individual teaching, but teaching that focuses more on the student, respecting their learning pace. This type of teaching assumes that the teacher uses different assessment instruments to collect information, because a class is made up of different students, and each one reacts differently to an assessment instrument.

In short, formative assessment provides important information that can be used to improve the teaching and learning process, for example, through feedback to modify or improve the activities in which students are involved (Black & Wiliam, 1998; Flores & Pereira, 2019). Thus, its fundamental characteristic is

related to the feedback produced, helping students to improve their performance and the learning process itself (Sadler, 1989; Brown, Bull, & Pendlebury, 1997; Flores & Pereira, 2019).

In summary, Harlen and James (1997, p. 9) presented the aspects that best characterise the formative assessment:

- it is essentially positive in intent; in that it is directed towards promoting learning; it is therefore part of teaching;
- it takes into account the progress of each individual, the effort put in and other aspects of learning which may be unspecified in the curriculum; in other words, it is not purely criterion-referenced;
- it has to take into account several instances in which certain skills and ideas are used and there will be inconsistencies as well as patterns in behaviour; such inconsistencies would be “error” in summative evaluation, but in formative evaluation they provide diagnostic information;
- validity and usefulness are paramount in formative assessment and should take precedence over concerns for reliability;
- even more than assessment for other purposes, formative assessment requires that pupils have a central part in it; pupils have to be active in their own learning (teachers cannot learn for them) and unless they come to understand their strengths and weaknesses, and how they might deal with them, they will not make progress.

According to Andrade (2010), the essence of formative assessment is informed action. That is, teachers must know how to respond to the information obtained through assessment and adjust their instruction according to students' needs; students must be equipped with strategies and have the motivation needed to improve their work and deepen their understanding after receiving feedback. In other words, formative assessment does not simply result in better learning, but rather, drawing upon the theory of action, formative assessment is assumed to initiate particular actions which, in turn, lead to better learning outcomes (Bennett, 2011; Rakoczy et al., 2019).

The framework of Wiliam and Thompson (2008) suggests that formative assessment can be conceptualised as consisting of five key strategies: (1) to clarify and share learning intentions and criteria for success in order to determine the direction in which learners are heading; (2) to elicit evidence of students' understanding (assessment) in order to determine the areas in which they are reaching their learning goals; (3) to provide feedback that pushes learners forward; (4) to encourage students to be instructional resources for one another; and (5) to motivate students to take responsibility for their

learning. The first three key formative assessment strategies focus on learning objective, learning progress, and learning strategies, reflecting Hattie and Timperley's (2007) feedback questions: *Where am I going?*, *How am I doing?* and *Where am I going now?* The remaining two key strategies illustrate the same issues that can be addressed not only by teachers but also by peers – peer-assessment (van Zundert, Sluijsmans, & van Merriënboer, 2010), or by students themselves – self-assessment (Panadero & Jonsson, 2013; Panadero, Jonsson, & Botella, 2017) that have been found to have considerable positive effects on outcome variables (Nicol & Macfarlane-Dick, 2006; Clark, 2012; Rakoczy et al., 2019).

A number of theoretical frameworks of formative assessment, based mainly on research in Anglophone contexts, have been put forward (Wicking, 2019). These have been termed authentic assessment (Frey et al., 2012), dynamic assessment (Poehner, 2007; James, 2012), assessment for learning (Gardner, 2012; Sambell, McDowell & Montgomery, 2013), teacher-based assessment (Davison & Leung, 2009) and learning-oriented assessment (Carless, 2011; Jones & Saville, 2016; Turner & Purpura, 2016). Despite their differences, all these frameworks share three principles that are believed to support student learning through assessment (Wicking, 2019). Firstly, assessment tasks are learning-oriented and often performed in social interaction, either with peers or with the teacher. There are also a variety of tasks used in order to evaluate achievement with a multiplicity of methods. Secondly, students are encouraged to engage with feedback, which is rich in detail and comes from both formal and informal sources. Thirdly, students' expertise in evaluating their own (and others) performance is developed, through such means as peer-assessment and self-assessment, and the use of tools such as rubrics and student made scoring criteria. However, it is possible that the implementation of formative assessment practices would be problematic with students raised in a culture where such practices are uncommon (Wicking, 2019).

1.1.3.1. Operationalising summative and formative assessment

The distinction between formative and summative assessment is not easy to make (Brown et al., 1997; Knight & Yorke, 2003). The key difference between these two types of assessment is not when they are used but their purpose and the effect that these practices have on students' learning. Some assessments in higher education are designed to be both formative and summative (Knight & Yorke, 2003; Taras, 2005; Yorke, 2007). Such assessment tasks are considered formative because they provide feedback so that the students learn from it. Furthermore, the same assessment task fulfils a summative function because a grade is awarded, and it contributes to the overall results of the course (Heywood, 2000;

Knight & Yorke, 2003). The different purposes of assessment overlap or, at times, are in conflict with each other (Brown et al., 1997; Bloxham & Boyd, 2007; Hernández, 2012).

Sadler (1989) questions the practice of giving an assessment task both a formative and a summative function, as he believes that grades tend to shift attention away from what the students need to improve. Providing both grades and feedback comments may be counterproductive for formative purposes as students may simply note the grade and ignore the formative feedback (Yorke, 2007). Thus, the feedback serves mainly to justify the students' marks (Brown & Glover, 2006). In contrast, Taras (2005) argues that formative assessment is nothing more than summative assessment plus feedback, which is given to the students to improve their learning. The same author concludes, therefore, that all assessment is summative first and if the assessment also provides feedback, then it can be regarded as formative (Hernández, 2012).

Teachers are aware that they must prepare a variety of assessment tasks for students, the two most common types being formative (designed primarily to improve learning) and summative (designed primarily to judge learning). There has been a consistency in the evidence presented in the higher education learning and teaching literature over the past decade to indicate that student learning outcomes may be significantly improved through the provision of formative assessments that are coupled with timely feedback (Gibbs, 2006; Nicol & Macfarlane-Dick, 2006). Although summative assessments may still dominate the attention of many students because of their often-high stakes consequences, higher education institutions are incorporating the requirement for formative assessment opportunities in their assessment policies (Chalmers, 2007; Crisp, 2012).

Assessment in higher education faces a number of challenges (Carless, 2007). Knight (2002) asserts that summative assessment is in "disarray", for example, in terms of reliability or in judging the kind of complex learning to which higher education aspires. Formative assessment is also said to be in decline (Gibbs & Simpson, 2004) or failing to fulfil its potential (Knight & Yorke, 2003; Carless, 2007). A limitation of formative assessment in practice, if not in principle, is that, like summative assessment, it tends to focus on immediate outcomes – for example, the improvement of a specific assignment or achievement within a particular course. It is time-limited and focused on immediate learning concerns (Boud, & Falchikov, 2005). All assessments lead to some kind of student learning (Boud, 1995), but a fundamental challenge is to stimulate the right kind of learning. Assessment tasks often distribute effort unevenly across a course (Gibbs & Simpson, 2004) and examinations are frequently critiqued for encouraging memorisation or surface approaches to learning (Ramsden, 2003). Assessment may also fail to support

students in developing dispositions for lifelong learning, such as the ability to self-evaluate (Boud, 2000). Feedback is often ineffective, principally because it comes too late for students to use it productively (Carless, 2006) and it generally fails to include iterative cycles of feedback and revision that normally characterise academic writing (Taras, 2006; Carless, 2007).

Although the formative function is often eclipsed on a day-to-day basis by the dominance of summative assessments, there has been a renewal of interest in formative assessment in recent years. Important reviews of research such as that by Black and Wiliam (1998) identified elements of good practice in formative assessment (Boud, & Falchikov, 2005).

Instead of focusing on the distinction between formative and summative assessment, the concept of learning-oriented assessment provides a more satisfactory perspective when considering the links between assessment and learning. Learning-oriented assessment has been described as an approach to assessment that seeks to encourage and support students' learning (Joughin, 2004; Carless 2007). Carless (2007) argues that students' learning is supported by setting appropriate tasks to assess students' learning, by focusing on the process of learning and on providing feedback that is effective, and by developing students' autonomy and responsibility for monitoring and managing their own learning. Feedback is arguably the most critical element in facilitating students' learning (Black & Wiliam, 1998; Gibbs & Simpson, 2004; Hernández, 2012).

The greatest systemic barrier is the dominance of summative assessment and associated concerns. External influences on educational institutions such as those from government agencies or professional bodies have caused both teachers and students to react defensively and pay more attention to summative than to formative assessment (Boud, & Falchikov, 2005).

According to Sadler (1989) formative assessment is concerned with how judgments about the quality of student responses (performances, pieces, or works) can be used to shape and improve the student's competence by short-circuiting the randomness and inefficiency of trial-and-error learning. Methods of formative assessment include structured class discussions or group work, quizzes, portfolio feedback, and review of drafts (Kealey, 2010). Summative contrasts with formative assessment in that it is concerned with summing up or summarising the achievement status of a student and is geared towards reporting at the end of a course of study especially for purposes of certification. It is essentially passive and does not normally have immediate impact on learning, although it often influences decisions which may have profound educational and personal consequences for the student. The primary distinction

between formative and summative assessment relates to purpose and effect, not to timing (Sadler, 1989) (See Table 1).

Table 1: Characteristics of formative and summative assessments

Characteristic	Formative Assessment	Summative Assessment
Purpose	<ul style="list-style-type: none"> To improve teaching and learning To diagnose student difficulties 	<ul style="list-style-type: none"> Assessment of learning outcomes Placement, promotion decisions
Formality	<ul style="list-style-type: none"> Usually informal 	<ul style="list-style-type: none"> Usually formal
Timing of administration	<ul style="list-style-type: none"> Ongoing, before and during instruction 	<ul style="list-style-type: none"> Cumulative, after instruction
Level of stakes	<ul style="list-style-type: none"> Low-stakes 	<ul style="list-style-type: none"> High-stakes
Psychometric rigor	<ul style="list-style-type: none"> Low to high 	<ul style="list-style-type: none"> Moderate to High
Types of questions asked	<ul style="list-style-type: none"> What is working What needs to be improved 	<ul style="list-style-type: none"> Does student understand the material? Is the student prepared for next level of activity?
Examples	<ul style="list-style-type: none"> How can it be improved? Observations Homework Question and answer sessions Self-evaluations Reflections on performance Curriculum-based measures 	<ul style="list-style-type: none"> Projects Performance assessments Portfolios Papers In-class examinations State and national tests

(Adapted from Dixon & Worrel, 2016)

Formative assessment guides us in how to learn what we wish to learn, and it tells us how well we are doing in progress to get there. Ironically, summative assessment drives out learning at the same time it seeks to measure it. It does this by taking responsibility for judgements about learning away from the only person who can learn (the student) and placing it unilaterally in the hands of others. It gives the message that assessment is not an act of the learner, but an act performed on the learner (Boud, 2000).

From a formative assessment is expected that student to learn from whatever feedback is provided, and summative because the grade awarded contributes to the overall grade at the end of the study unit. Summative assessments in relation to a curricular component (the student passes or fails a module, for example) can act formatively if the student learns from them (Yorke, 2003).

Although positive support for student learning is the specific aim of formative assessment, the links that teachers establish between their formative and summative assessment practices also contribute to the regulation of student learning (Allal, 2019). Classroom research has shown, for example, that some teachers make formative use of data collected for a summative purpose (Black, Harrison, Lee, Marshall, & Wiliam, 2003) and that some students use summative indicators (grades) to regulate their own learning (Brookhart, 2001; Allal, 2019). Figure 5 illustrates the assessment relationships established and the way in which it takes place, whether more formative or more summative.

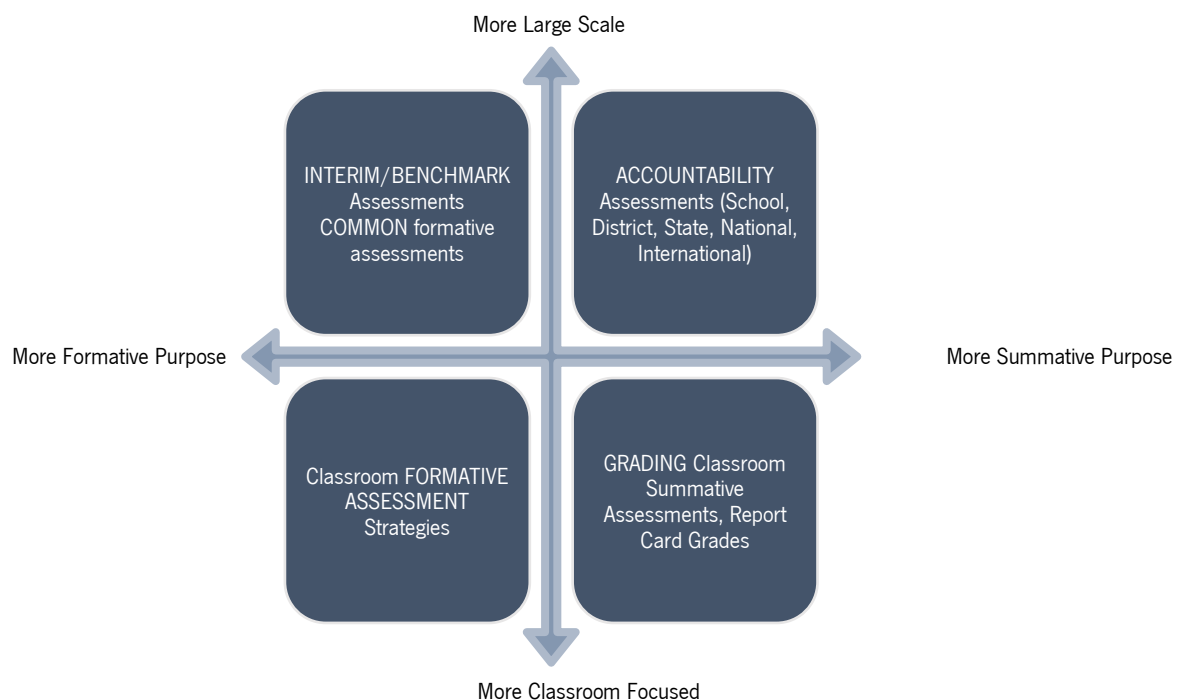


Figure 5: Illustrative scheme about the assessment relationships (Brookhart, 2014)

Since the process of assessment is, as Scriven (1991) notes, a single process, i.e., making a judgement according to standards, goals and criteria, formative assessment is the same process as summative assessment. In addition, for an assessment to be formative, it requires feedback which indicates the existence of a “gap” between the actual level of the work being assessed and the required standard. It also requires an indication of how the work can be improved to reach the required standard. Therefore, both summative and formative assessment are processes. It is possible for assessment to be uniquely summative where the assessment stops at the judgement. However, it is not possible for assessment to be uniquely formative without the summative judgement having preceded it (Taras, 2005).

1.1.4. Assessment approaches

For classroom assessment there are three different but interrelated purposes that require different roles for teachers, different planning, and different use of assessment information (Earl & Katz, 2006), namely: Assessment *for* Learning (A \mathcal{L}), Assessment *as* Learning (A \mathcal{a} L) and Assessment *of* Learning (A \mathcal{o} L).

Summative assessment is also termed Assessment *of* Learning (A \mathcal{o} L) to emphasise its nature as assessment of an activity that has occurred (i.e., after a period of learning). However, the term also highlights a numeral aspect, and it is often associated with a number or letter grade. Where this grade gets high weighting, or has significant consequences for progression, it can be termed “high stakes assessment”. In this one, there is feedback only reflected in a grade at the end of the teaching and learning process.

Formative assessment encompasses, among other concepts, that of Assessment *for* Learning (A \mathcal{L}), as a set of evidence-informed classroom practices with potential to improve learning and raise standards of achievement. Furthermore, formative assessment is also related to the concept of feedback on learning (Black & Wiliam, 1998; Flores & Pereira, 2019). The practice of giving formative feedback is a key aspect to A \mathcal{L} , rather than assessment as solely a measurement *of* learning (Ramsden, 2003; Stobart, 2008; Hughes, 2011). The importance of learning as a result of feedback to students has led to the use in some contexts of the term Assessment *for* Learning (A \mathcal{L}), which emphasised the learning aspect. Many authors stress that it is only “feedback” if it has an impact on student learning (Evans, 2013). A \mathcal{L} also includes the idea of feedback to teachers on their teaching. It reinforces the importance of a dialogue between teachers and students (Nicol, 2010). Feedback, in this context, needs to be timely, actionable, and understandable. A \mathcal{L} has often been extended to include the idea of the empowerment of students to self-regulate and critically evaluate their own learning and performance (Sadler, 2010; Carless et al., 2011).

Authors like Earl & Katz (2006) separate the concept A \mathcal{L} to highlight this important skill and title its Assessment *as* Learning (A \mathcal{a} L). Students needs support to develop this competence (Evans, 2013). In summative assessment the teacher is the most responsible, the key decision-maker, whereas in formative assessment, in particular in A \mathcal{a} L, it is the student who becomes more empowered, is more responsible and can become the key decision-maker. As the teacher usually holds the power, there is a more extrinsic locus of control for students in summative assessment and this shifts to an intrinsic locus of control in formative assessment.

From the mid 90's, *AfL* has been extensively promulgated for enhancing teaching and learning within various school and university contexts, as opposed to *AdL* which aims to judge learning for the purpose of certification. As parts of the *AfL* movement, *AaL* has emerged as a key concept which facilitates learner independence and reflexivity by emphasising students using assessment to improve learning via self-assessment, self-efficacy, and other self-regulatory behaviours, and by incorporating it as a learning-supportive feature into the teaching and assessment process (Torrance, 2007; Earl, 2013; Dann, 2014). Notwithstanding their similarities, *AaL* concerns development of cognitive and metacognitive capacity in self-evaluating one's own learning, whereas *AfL* points to how learning is formatively supported in the ongoing assessment process (Lam, 2016).

A more transparent distinction, in the context of student evaluation or assessment, is between *AdL*, for grading and reporting, and *AfL*, where the explicit purpose is to use assessment as part of teaching to promote learning (Assessment Reform Group, 1999). *AfL* becomes "formative" when evaluation is actually used for the regulation of learning processes (Perrenoud, 1998; James & Pedder, 2006)

In recent years it has been argued that assessment should move from *AdL* to *AfL*, where assessment procedures and practices are developed to support learning and sustain, rather than undermine, trust, student performance and progress (Black & William, 1998; Torrance & Pryor, 1998; Gipps, 1999; Shepard, 2000). In fact, these claims have become so common that research and development attention has shifted to the dissemination and implementation of formative approaches to large-scale evaluation (Torrance, 2007).

Assessment of Learning (AoL)

Assessment *of* Learning (*AdL*) has long been associated with more summative means of assessment practice (Boud & Falchikov, 2006; Thomas et. al., 2019). It is used to "confirm what students know and can do, to demonstrate whether they have achieved the curriculum outcomes, and, occasionally, to show how they are placed" concerning others (Earl & Katz, 2006, p. 14). It refers to a set of strategies designed and used to confirm what students know and the accomplishment of the programme or course goals. One of the main goals of assessment of learning is to provide evidence of student results, i.e., to quantify student results through grades or classifications (Lam, 2016; Flores & Pereira, 2019, Fernandes, 2020). By certifying the students' outcomes, assessment of learning becomes public as well as the results and what students have learned (Earl & Katz, 2006; Fernandes, 2020) (see Figure 7).

According to Earl & Katz (2006) the primary purpose is the demonstration of the achievement of student learning:

- a) It is graded and is usually high stakes for students, staff, and institutions;
- b) It usually occurs after a period of learning;
- c) It is associated with concepts such as measurement, competencies, standards, regulations, and explicit criteria;
- d) Its role in decision-making is to communicate students' performance to key stakeholders, often comparing them to other students (norm-referenced assessment) or to competencies (criterion-referenced assessment). Institutions and staff then make decisions on student progress. Based on these results, students also make decisions on their own learning tasks and/or progression routes;
- e) It is often a key driver for student learning (*"if it's not assessed it doesn't matter"*). It can be associated with student and/or staff anxiety and workload but also can build student/ staff confidence when the outcome is to their satisfaction;
- f) Common examples are the end-of-semester exam, essay, project, degree classifications.

The purpose of AoL is to provide verifiable evidence of achievement to a variety of stakeholders: students, parents, and educational institutions. Regardless of your thoughts on AoL and the objectivity placed upon these types of assessments, they play a huge part in our education system: they impact the design and implementation of schemes of learning, they leave an indelible impression on the structure of education delivery and are fundamental in benchmarking the educational performance of schools (through PISA) and Higher Education institutions (for example Eurydice network) (Hall, 2020).

Assessment for Learning (AFL)

Assessment *for* Learning (AFL) has been a policy focus since 1996 thanks largely to the efforts of the Assessment Reform Group (ARG) (James & Pedder 2006) and has been traced by Black and Wiliam (2006) from the writings of Scriven (1967), who first distinguished between formative and summative evaluation purposes, and Sadler (1989), who highlighted the importance of establishing shared understandings of formative criteria to inform students about their learning (Willis, 2011). This expression widely used in Anglo-Saxon literature encompasses a sophisticated conception of assessment (Pereira & Flores, 2019).

Formative assessment was the term used by Black and Wiliam (1998) in their meta-analysis and in some of their later work (Black & Wiliam, 2006). This term is also used by Popham (2008) in the USA, by Perrenoud (1998) writing about the French context, and in Hong Kong by Carless (2007, 2011). In contrast, in Scotland government policy was deliberately labelled AiFL (Assessment is For Learning) to reinforce the learning purpose of all assessment (Hutchinson & Hayward, 2005; Willis, 2011).

AfL was conceptualised as more than a series of techniques or strategies that would lead to increases in student achievement grades. AfL was understood to be a dialectical and cultural set of practices through which learners increasingly understood and negotiated their participation in the learning experiences. The goal was enhanced learner autonomy; that is, developing the learner's capacity to monitor and plan his or her own learning progress and participation in the classroom culture (Willis, 2011).

Assessment *for* Learning (AfL) has been identified as the basis for pedagogical innovation and with the importance of assessment for student learning (Gibbs & Simpson, 2004; Nicol & Macfarlane-Dick 2006; Carless, 2007; McDowell et al., 2011; Crisp, 2012; Trede, Mischo-Kelling, Gasser & Pulcini, 2015; Mumm, Karm & Remmik, 2016; Santos, Flores & Flores, 2017; Hawe & Dixon, 2017; Mimirinis, 2019) in Higher Education. It is an assessment in which the first priority, in terms of design and practice, focuses on promoting student learning (Black et al., 2002). One important condition for assessment to support student learning is the active involvement in the assessment process on the part of students themselves (Black & Wiliam, 1998). As a result, students can make an active contribution to their own knowledge construction, which is beneficial to learning outcomes (Sluijsmans, 2002). This view has become known as the AfL position (Black & Wiliam, 1998; van Gennip, Segers, & Tillema, 2010).

Hargreaves (2005) argued that this is a significant approach because: it monitors and tracks student performance, to the detriment of objectives and targets to be met; uses assessment to understand the next steps to take in the teaching and learning process; directs the assessment towards continuous improvement; gives students some control over their learning; and, finally, because it transforms assessment into a learning situation.

According to Carless (2005), the development and assessment of AfL approaches may involve creating opportunities to carry out the assessment collaboratively with students; by sharing learning objectives with students so that they recognise the standards by which they are working; and by the use of assessments that facilitate thinking skills, creativity and understanding, to the detriment of the logic of memorization. (Santos, Flores, & Flores, 2017). The same author (Carless 2007, 2015) presented a

framework for learning-oriented assessment that reflects the spirit and essence of A \mathcal{L} in its three core elements (see Figure 6), developed in the context of higher education to address ways in which assessment can focus more effectively on improving knowledge student learning:

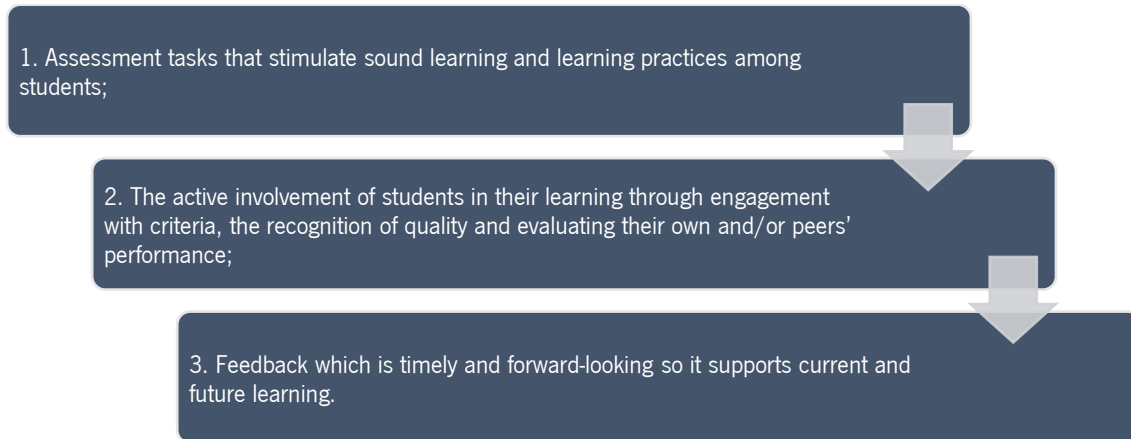


Figure 6: Core elements for learning-oriented assessment (adapted from Carless, 2007, 2015)

McDowell, Wakelin, Montgomery, and King (2011) define A \mathcal{L} as an evaluative environment that: is rich in feedback, both formal and informal; provides opportunities to experiment and practice knowledge, competences and understanding; includes authentic assessment tasks; helps students develop independence and autonomy; and it is characterised by an appropriate balance between formative and summative assessment (Santos, Flores, & Flores, 2017).

Some studies focused on students' perceptions show that the A \mathcal{L} approach involves them in learning (Klenowski, 2009; McDowell et al., 2011; Sambell, McDowell, & Montgomery, 2013; Mumm, Karm, & Remmik, 2016), providing them with more positive, meaningful, and formative experiences such as: greater teacher support, flexible curriculum design, opportunities for dialogue through formal and informal feedback, peer learning, research opportunities, competency testing, questioning, among others (Black et al., 2002, 2005; McDowell et al., 2011). Recent literature points to the need to develop and evaluate A \mathcal{L} practices in higher education (McDowell et al., 2011), as key elements to improve the quality of teaching and learning in universities (Santos, Flores, & Flores, 2017).

Sambell, McDowell, and Montgomery (2013) defined the term A \mathcal{L} following six practices:

1. Authentic assessment – assignments that require deep and meaningful approaches to learning and are linked to the real world, i.e., those requiring the skills and knowledge that are expected in the professional field;

2. Balancing summative and formative assessment – summative assessment is not the dominant method for assessing students;
3. Creating opportunities for practice and rehearsal – students should have the opportunity to practise and develop their competence before they are summatively assessed;
4. Designing formal feedback to improve learning – feedback (written, as well as oral, comments from different sources) is received during the learning process in order to feedforward the student;
5. Designing opportunities for informal feedback – students' study in collaboration with peers as well as teachers, so the received feedback is part of the teaching and learning process;
6. Developing students as self-assessors and effective lifelong learners – students need to assess their own progress and develop their metacognitive skills.

A learning environment that is followed by A \mathcal{L} helps students to become self-directed learners (McDowell et al., 2011). According to Sambell, McDowell, and Montgomery (2013), in order for assessment to be successful, both the teacher educators and students have to be engaged in the process, which means that students should also see assessment as a means of learning. Furthermore, students should approach assessment in various ways, including being the assessor, as doing so helps them to take responsibility for their own learning (Sambell, McDowell, & Montgomery, 2013; Mumm, Karm, & Remmik, 2016).

Assessment *for* Learning (A \mathcal{L}) is part of an international education policy discourse reflecting a significant shift in the purpose of assessment, from a measurement to a learning focus, yet it is enacted differently in various cultural contexts (Broadfoot, 1996; Black & Wiliam, 2005). By sharing learning goals and criteria with students, giving them experience in self-assessment and guiding them with feedback (Orsmond, Merry, & Reiling, 2005; Weaver 2006; Wingate 2010; Blair & McGinty, 2013; Mumm, Karm, & Remmik, 2016), it is suggested that students are able to become more self-regulating and autonomous lifelong learners (Gipps, 2002; Willis, 2011). It's concluded that A \mathcal{L} practices can help learners negotiate an identity as an autonomous learner, or someone becoming more expert, when they also experience a sense of affiliation with, or a sense of belonging within, the classroom community of practice (Willis, 2011).

The practices that involve students as active partners in the assessment process give them the opportunity to develop their capacity to self-regulate their learning (Panadero, Jonsson, & Strijbos 2016). Therefore, A \mathcal{L} practices such as self and peer assessment provide an important way that learners can reflect on and evaluate their developing expertise and understanding of the practices that are valued in the

classroom community of practice, as they participate in the practices. Well-defined learning goals and criteria have also been valued as A \mathcal{L} practices that share expectations for expertise with learners (Willis, 2011). Strategies that entail peer assessment are commonly used in higher education and have greatly impacted assessment procedures (Gielen & De Wever, 2015). Peer assessment is a central principle of formative assessment and is linked to the notion that assessment is critical for learning (Blair & McGinty, 2013; Panadero & Brown, 2017; Ion, Martí, & Morell, 2019). Cartney (2010), however, highlights several problems that students face when assessing their peers: concern that they are being too critical; concerns about later being on the receiving end of peer assessment; concerns about both the criteria and its intelligibility; anxiety about students who did not give feedback. Despite there being contradictory findings about peer assessment, its role in the context of A \mathcal{L} is still important (Sambell, McDowell, & Montgomery 2013; Mumm, Karm, & Remmik, 2016).

In A \mathcal{L} , the assessment methods must incorporate a variety of possibilities for students to demonstrate their learning (Earl & Katz, 2006). They may include “focused observations, questioning, conversations, quizzes, computer-based assessments, learning logs, or whatever other methods are likely to give them information that will be useful for their planning and their teaching” (Earl & Katz, 2006, p. 31). At its core, A \mathcal{L} involves the gaining of understandings from learners through a range of tasks and activities, and the formative use of this information with a view to supporting and furthering student learning (Carless, 2007; Hawe & Dixon, 2017). There is general agreement among members of the academy that formative assessment encompasses the following five strategies.

In short, although the concepts of formative assessment and assessment for learning are often used as synonyms (Hawe & Dixon, 2017), these are distinct concepts. A \mathcal{L} is a process based on the centrality of student’s role (Klenowski, 2009; Swaffield, 2011; Hawe & Dixon, 2017) promoting the interdependence of teaching, learning and assessment (Black, 2015; Black & Wiliam, 2018). Recent literature about assessment points to a need for balance between formative and summative assessment (Black & Wiliam, 2018), even though, in the assessment for learning approach, summative assessment and classifications are secondary (Deeley, 2018); and, above all, an integrated approach to assessment covering all their aspects (Black & Wiliam, 2018, Fernandes, 2020).

At its core, A \mathcal{L} involves the gaining of understandings from learners through a range of tasks and activities, and the formative use of this information with a view to supporting and furthering student learning (Carless, 2007; Hawe & Dixon, 2017). According to several authors (James & Pedder, 2006; Klenowski,

2009; Wiliam, 2011, Hawe & Dixon, 2017) there is a consensus regarding the existence of five strategies that make up the formative assessment (see Figure 7).

Assessment *for* learning (A \mathcal{L}) is an ongoing concern in the development of teaching and teachers (Alabaş & Yılmaz, 2018). A \mathcal{L} is promoted as a means to developing subject achievement as well as sustainable competencies (Bennett, 2011; Leong & Tan, 2014; Deneen & Boud, 2014). Teachers' fluency in connecting A \mathcal{L} to A \mathcal{O} L is therefore fundamental to modern definitions of assessment literacy (Deneen & Brown, 2016). Making this connection between assessment *for* and *of* learning can be challenging in the face of large-scale testing. There are significant tensions between A \mathcal{L} and conventional models of large-scale testing designed to certify student attainment, such as public qualification examinations. Preparation for formalised examination competes with other priorities for time, attention and focus within curricula; the narrowing effect this can have on curricula is an issue of growing concern (Taras, 2010; Berry, 2011; Bonner, 2016; Alabaş & Yılmaz, 2018).

Assessment as Learning (A \mathcal{L})

The term "A \mathcal{L} " are being reinterpreted to explain dominant discourses (Torrance, 2012) in which the performativity and accountability agendas triumph (Dann, 2014). It is not overtly clear in current literature where A \mathcal{L} sits in the understandings of either assessment or learning. Dann (2002, p. 153) promotes the concept of "A \mathcal{L} ", stating that "assessment is not merely an adjunct to teaching and learning but offers a process through which pupil involvement in assessment can feature as part of learning – that is assessment as learning". This author argues that to developing students' engagement in and response to student self-assessment with a focus on exploring processes such as self-regulation, self-efficacy, metacognition, and feedback as dimensions of both assessment and learning (Dann, 2014).

Torrance (2007) states that assessment for learning has become so technical in some institutions that, in a very real sense it has moved from *assessment of learning* through *assessment for learning* to *assessment as learning*, for both learners and tutors alike, with assessment procedures and process completely dominating the teaching and learning experience.

Earl (2003) suggests a re-configuration of our understanding of assessment practices and locates A \mathcal{L} as an essential foundation for both assessment for learning (traditionally and formative assessment) and assessment of learning (traditionally and summative assessment). The essence of A \mathcal{L} is the complex interplay of assessment, teaching and learning which holds at its core the notion that pupils must

understand their own learning progress and goals through a range of processes which are in themselves cognitive events. Implicit, is the need for students to be active in both learning and assessment. This has particular connotations for how students are involved in assessment (Dann, 2014). The same author suggests a distinct approach to assessment: assessment as learning, which derives from a subset of assessment for learning that emphasises the student's role as a critical link between assessment and learning (Hume & Coll, 2009; Earl, 2013; Dann, 2014). Within this perspective assessment is as a tool for learning (Dochy & MacDowell, 1997).

According to several authors (Sadler, 2010; Evans, 2013; Lysaght & O'Leary, 2013); The primary purpose is to empower students to self-regulate and critically evaluate their learning and performance:

- a) It is ungraded assessment, with the rare exceptions of graded self-assessment;
- b) It occurs during the learning process and emphasises the preparation of students for their future learning;
- c) It is associated with concepts such as self-monitoring, self-regulation, meta-cognition, learning and feedback;
- d) Its role in decision-making is also to help students understand their own strengths and gaps in order to plan their future learning. It informs students' actions for improvement to their learning. It also supports the development of students' self-regulation skills;
- e) It attempts to empower students, to give them confidence in their judgements and develop a sense of responsibility for their learning;
- f) Common examples include students self- and peer reviewing their work against holistic or analytical criteria (Sadler, 2009), students using exemplars to judge their and other students' work (Carless et al., 2011), and students collaborating to develop their own shared assessment criteria (Evans, 2013).

Assessment *as* Learning (AaL) creates reflective students who have the agency to decide on their next learning step. As with any strategy that seeks to empower learners, AaL is often supported by the teacher at first. A successful approach to AaL will have the learners asking the question, "What are the criteria for improving my work?" Strategies include but are not limited to regular peer and self-assessment, regular and challenging practice, allowing students to question their own learning, and creating an environment where taking chances and risking being wrong are promoted (Hall, 2020).

In summary, each of these terms therefore has a key role to play in learning, with different emphases required at different times for different purposes. Having a greater understanding of these terms should allow for a more effective and efficient design of learning experiences. The concept that binds these three terms (AoL, AfL and AaL) together, their shared overlap, is that they are all facilitating students in their learning (see Figure 7).

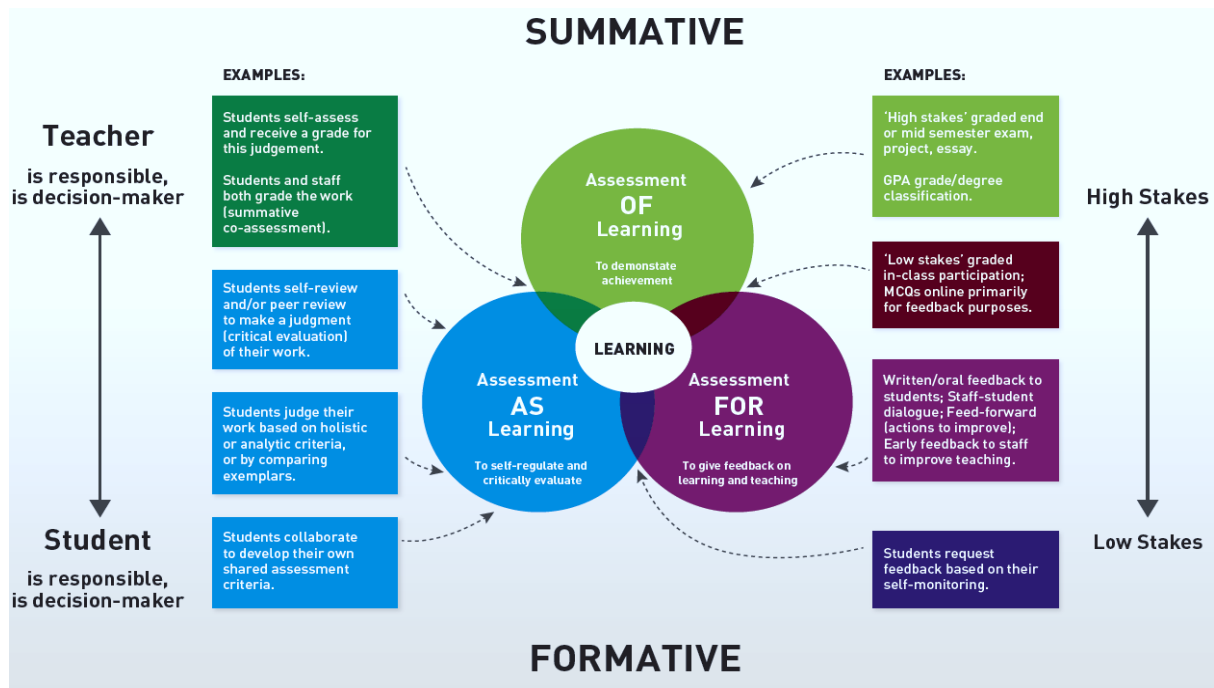


Figure 7: Assessment and feedback terminology and examples (National Forum for the Enhancement of Teaching and Learning in Higher Education, 2017)

1.1.5. Assessment methods

Assessment is at the heart of teaching and learning in higher education; it is highly influential in shaping the learning experience of students (Ramsden, 2003), defining the content to be learnt and the processes used to learn it (Biggs & Tang, 2011; Thomas et al., 2019). All assessments lead to some kind of student learning (Boud, 1995), but a fundamental challenge is to stimulate the right kind of learning. Assessment tasks often distribute effort unevenly across a programme (Gibbs & Simpson, 2004) and examinations are frequently critiqued for encouraging memorization or surface approaches to learning (Ramsden, 2003; Carless, 2007).

The act of assessing (formally and informally; formatively and summatively) has an effect on assessors as well as on students. Assessors learn about the extent to which students have developed expertise and

can tailor their teaching accordingly. Sometimes the assessee will respond to an assessment with a challenge to the assessor (Yorke, 2003). It is possible to achieve this type of competent behaviour, although it depends to a great extent on the relevant knowledge, skills, and competences. Researchers in educational contexts are increasingly calling attention to the role of students' self-efficacy and perception during learning (Schunk, 2003; Dochy et al., 2005; Baartman & Ruijs, 2011; Van Dinther et al., 2014).

The main discourse in educational research makes the case that students must take an active role in their education – to do so is to move towards deep learning (Carnell, 2016). Several characteristics considered indicative of this culture of assessment that promote the student's active role include: active participation in genuine real-life activities that require the application of existing knowledge and skills; participation in conversations between students (including tutors); commitment to the development of criteria and self-regulation of the work itself; using a diverse range of assessment methods and methods adapted from different disciplines; option to build and apply characteristics such as reflection, resolution, resourcefulness and judgment and professional behaviour in relation to problems; and acceptance of a limitation of judgment and the value of having conversations to facilitate the development of new ways of working (Schwartz & Webb, 2002; Bryan & Clegg, 2006; Rust, 2007; Craddock & Mathias, 2009).

Assessment can therefore be strategically used to change the way in which students learn (Gibbs, 1992; Craddock & Mathias, 2009). Offering a variety of assessment methods is often recommended as good practice in response to numerous critiques of the over-reliance on traditional examinations and their shortcomings. The arguments include the need to use methods which more appropriately assess different kinds of learning processes, the need to cater for differences in students' learning preferences and styles and the need to enhance learners' psychological approaches to learning (Kell & van Deursen, 2002; Craddock & Mathias, 2009).

In considering models for assessment of student learning, teachers should consider alignment of assessment with the learning objectives of the programme; the quality and quantity of feedback to be provided (Kealey, 2010); the signals sent by assessment methods to students on the type of learning desired, e.g., surface learning versus deep learning (Harlen & James, 1997); and the interplay between formal and informal modes of assessment (Kealey, 2010).

The modes of assessment can have a powerful influence on the learning behaviour of students (Hamdorf & Hall, 2001; Biggs, 2003) and assessing the performance of students is one of the most important

activities educators undertake (Trotter, 2006). The development of appropriate assessment strategies is therefore a key part of effective curriculum development (Craddock & Mathias, 2009).

If students perceive a need to understand the material in order to successfully negotiate the assessment task, they will engage in deep learning (MacLellan, 2001). While a powerful determinant of learning outcome, students' experiences of assessment do not occur in a vacuum but are contextualised in their overall perceptions of the goals they have to achieve, the workload they carry, the teaching they experience and the autonomy they have to direct their own learning (MacLellan, 2001).

Student-centred vs teacher-centred methods

The emergence of different methods of assessment in higher education (Sambell, McDowell, & Brown, 1997; Struyven, Dochy & Janssens, 2005; Pereira & Flores, 2012) leaves behind a culture of testing (Birenbaum & Dochy, 1996). Being characterised by the integration of assessment, learning and teaching processes (Dochy, 2001; Rust, 2007; Pereira, Flores, & Barros, 2017). The use of learner-centred methods provides a more *effective* and motivating learning environment (Birenbaum & Feldman, 1998; Tang et al., 1999) than traditional assessment methods (Flores et al., 2014; Flores & Pereira, 2019).

Learner-centred methods (Webber, 2012) and practices such as project work or portfolio (Huba & Freed, 2000; Webber, 2012) that enable knowledge construction and skills' development foster the development of autonomy, sense of responsibility, reflection and collaborative work (Sambell & McDowell, 1997, 1998; Myers & Myers, 2014), increasing feedback and students' motivation (Huba & Freed, 2000; Gasiewski et al., 2012; Pereira, Flores, & Barros, 2017) and influence the ways in which students look at their own learning (Sluijsmans, Dochy, & Moerkerke, 1999; Pereira, Flores, & Niklasson, 2016). Self and peer assessment are also good examples which meet the purposes of learner-centred assessment (Pereira, Flores, & Barros, 2017). Otherwise, nontraditional methods do not always change the perceptions of students and do not always lead to deep learning (Segers, Gijbels, & Thurlings, 2008; Pereira, Flores, & Niklasson, 2016). In this teacher-centred perspective, students are seen as passive learners (Altay, 2014; Pereira, Flores, & Barros, 2017) which focuses on transferring knowledge (Webber, 2012; Pereira, Niklasson, & Flores, 2017).

In student-centred learning environments learners are confronted with an authentic task in order to induce relevant learning experiences (Birenbaum & Dochy, 1996). Gow and Kember (1993) reported that a student-centred learning environment is less likely to induce surface approaches. Responsibilities and

tasks previously assumed by the teacher are transmitted to the learner (Elen, Clarebout, Léonard, & Lowyck, 2007). In contrast, a teacher-centred learning environment, which is similar to traditional instruction, is said to discourage students from adopting a deep approach to study (Entwistle, 2003; Elen et al., 2007).

A student-centred approach with its emphasis on core generic skills and transversal competencies such as critical thinking, problem-solving and independent learning (Light & Cox 2005; OECD 2012) mean that they tend to be considered pedagogically superior to the surface delivery commonly associated with a teacher-centred approach (Akerlind, 2003; Blackie, Case, & Jawitz, 2010). That way, student-centred approach encompasses four fundamental features: (1) active responsibility for learning, (2) proactive management of learning experience, (3) independent knowledge construction and (4) teachers as facilitators (Maclellan, 2008; Attard et al., 2010; McCabe & Una O'Connor, 2014).

Considering the teacher-centred approach, the students do their work alone where they do exercises related to the teacher's presentation during or after the lesson while on the other hand, in the student-centred approach, the students work together in groups or pairs as per the demand and purpose of the activity (Al-Zu'be, 2013). The teacher-centred approach portrays students as basically passive while the teachers are active since teachers are the main focus in this approach which is considered sensible. In this case, the students are less engaged during the learning process (Al-Zu'be, 2013).

Research on the connection between a student-centred approach and deep learning suggests an interface characterised by a range of variables, including teacher orientation (Garrison & Cleveland-Innes, 2005; Baeten et al., 2010), teaching behaviour (Valk & Marandi, 2005; Diseth, 2007), clarity of purpose (Richardson et al., 2007; Diseth et al., 2010), assessment (Segers, Nijhuis, & Gijsselaers 2006; Gulikers et al., 2008) and feedback (Lawless & Richardson, 2002; Valk & Marandi 2005; McCabe & Una O'Connor, 2014).

Feedback being one of the key features of a learner-centred approach is an essential component of the assessment process (Nicol & Macfarlane-Dick, 2006; Price et al., 2010; Pereira, Flores, & Barros, 2017). Besides that, feedback is an opportunity for students to learn enabling the regulation of the learning process (De Weert, 1990; Taras, 2002; Poulos & Mahony, 2008; Pereira et al., 2016; Pereira, Flores, & Barros, 2017) and may support students' learning (Weurlander et al., 2012; Mumm, Karm, & Remmik, 2016), especially when the comments are given personally and are timely (see Ferguson, 2011; Mumm, Karm, & Remmik, 2016). Formative feedback is crucial. It needs to be detailed, comprehensive,

meaningful to the individual, fair, challenging, and supportive considering strategies for giving feedback efficiently such as assignment return sheets, assignment reports, in class collective feedback and other means (Brown, 2005).

A wide variety of teaching methods is described by the labels “Student Centred”, “Non-directive”, “Group Centred” or “Democratic Discussion”. These various methods have in common the desire to break away from the traditional lecturer dominated classroom and to encourage greater student participation and responsibility. With the teacher playing a less direct a role and giving students opportunity to determine their own conditions of learning, to suffer the consequences of bad choices, and to learn from these consequences is an important way of teaching them to become responsible (Boyapali, 1999). The choice of teacher-centred versus student-centred learning depends on the goals of the teacher. The more highly one values outcomes going beyond knowledge acquisition, the more likely it is that student-centred learning will be preferred.

In the teaching, learning and assessment process it is crucial a collaborative learning environment, teachers and students need to acknowledge individual efforts of group members (Johnston & Miles, 2004; Le, Janssen, & Wubbels, 2017). Lack of individual efforts may lead to social loafing and free riding (Sluijsmans & Strijbos, 2010; Le, Janssen, & Wubbels, 2017). This approach highlights the students’ active involvement in assessment for learning and includes a variety of forms such as the involvement of students in understanding and designing criteria, collaboration with teachers and involvement in peer feedback. These practices involving students as active partners in the assessment process give them the opportunity to develop their capacity to self-regulate their learning (Panadero, Jonsson, & Strijbos, 2016; Ion, Marti, & Morell 2019). However, it remains crucial to assess accurately the individual contributions in a collaborative learning process (Johnston & Miles, 2004). Teachers often have difficulties monitoring collaborative processes and individual contributions in a collaborative learning environment (Sluijsmans & Strijbos, 2010; Le, Janssen, & Wubbels, 2017).

Traditional vs alternative assessment methods

As pedagogical and administrative demands have become increasingly diverse, an alternative approach to traditional teaching practices has acquired growing recognition (Struyven, Dochy, & Janssens 2010).

Literature distinguishes the traditional assessment methods (mostly the written test or exam) from the alternative assessment methods (Duncan & Buskirk-Cohen, 2011; Pereira & Flores, 2016). It highlights

the teacher-centred and the student-centred practices (Burkšaitienė & Teresevičienė, 2008; Fernandes, 2015; Myers & Myers, 2015). Traditional methods, commonly used in the context of higher education (Duncan & Buskirk-Cohen, 2011;) in the context of large classes (Flores et al., 2019), along with teachers' work overload (Myers & Myers, 2015; Fernandes, 2020).

Struyven, Dochy, and Janssens (2005) describe traditional assessment methods as being largely inappropriate in view of their focus on the measurement of memory or the student's ability to assemble a collection of information (i.e., unseen essays). In traditional assessment methods, all students have "the same tasks and time allocation" (Brown et al., 1997, p. 14). Its major function is to certificate the learning outcomes (Black & Wiliam, 1998; Dwyer, 1998). Traditional assessment is commonly used, and looks to be suitable, in several higher education contexts (MacLellan, 2001; Struyven, Dochy, & Janssens, 2005; Barreira et al., 2015; Pereira, 2016; Fernandes et al., 2019) but may also encourage reproduction and memorisation (Perrenoud, 1999; Biggs, 2003; Fernandes, 2020) and low levels of understanding (Dochy, et.al, 2007).

The use of non-traditional methods of assessment in higher education has gained impetus as students perceive them to be fairer, appearing to encourage concerted effort to learn as opposed to last minute memorization (Struyven, Dochy, & Janssens, 2005, p. 333). In essence, these non-traditional methods:

"Measure qualities, skills and competences which would be valuable in contexts other than the immediate context of assessment ... [and enable] students to show the extent of their learning and allowed them to articulate more effectively precisely what they had internalized throughout the learning programme."

However, Gibbs and Dunbar-Goddet (2009) have found that this increase in the use of a variety of assessment methods, as called for by many institutional teaching, learning and assessment strategies, is often not met with adequate opportunities for students to become familiar with them. The result could be that students are forced into focusing upon developing the skills to pass the unfamiliar assessment task, rather than upon mastering the subject or developing as learners. This is not to advocate a return to the traditional methods of assessment. The more diverse methods of assessment are accompanied by a wealth of research advocating the multiple benefits to the learner if implemented effectively (e.g., Bloxham & West, 2004; McLaughlin & Simpson, 2004; Van den Berg, Admiraal, & Pilot, 2006; Andrade & Valtcheva, 2008; van Zundert, Sluijsmans, & Van Merriënboer 2010; Nulty 2011). But simply replacing the traditional methods of assessment will not serve to challenge the dominant discourse of the testing

culture that underpins the assessment system. In addition, the more diverse assessment methods being reported on are largely reflective of individual staff initiatives.

Whilst changes to assessment tasks can serve to initiate development with regard to student approaches to studying, Haggis (2003, p. 100) warns that in this mass system of higher education with its increasingly diverse student body, it will not “necessarily make the details of academic practice any clearer to people who often come into university without any idea about what *critique*, *argument* or *structure* may mean”. Therefore, the drive towards student engagement has also been highlighted as key to developing assessment that promotes learning and supports the student “to hold a concept of quality roughly similar to that held by the teacher” (Sadler 1989, p. 121).

Tests and exams are classic examples of traditional assessment methods. These methods have both positive and negative effects. On one hand, they may induce innovative practices and contribute to assessing the education system and improving decision-making as well as to provide important clues about what is important to teach and learn. But, on the other hand, they focus mainly on academic knowledge; they may influence the involvement of students or induce fraudulent practices; and they can discriminate rather than integrate (Fernandes, 2004). In fact, the traditional methods used alone may limit the scope of assessment and learning process (Pereira, Flores & Barros, 2017). For instance, the summative test as a terminal assessment do not allow that students receive feedback in order to improve a future performance, hindering the feed forward stage to occur (Blair et al., 2014; Pereira, Flores & Barros, 2017; Flores & Pereira, 2019).

Boud (2007) has recently proposed reframing assessment as if learning was its primary purpose; this reframing would include a requirement that students are able to make judgements about their own learning and to use those judgements to influence their approaches to future learning (Crisp, 2012). In other words, the external pressures on higher education may cause assessment to assume a primarily summative function. Because assessment is viewed by policy makers as an agent of educational reform (Linn, 2000), comparisons and generalizations on the basis of derived data are a logical consequence. If alternative assessment is providing the data that inform educational policy, the extent to which alternative assessment is valid has to be of central concern (Hernández, 2012).

A growing body of literature points to the view of students as co-creators of learning (e.g., Bovill, Cook-Sather, & Felten, 2011). Literature highlights how this experience can enrich learning processes, outcomes, and metacognition around learning, which has been indicated to result in the adoption of

deeper approaches to learning. Methods for increasing student participation in assessment include self and peer assessment (van Zundert, Sluijsmans, & Van Merriënboer, 2010; Nulty 2011), the development of learning communities (Price et al., 2008), dialogic feedback (Nicol, 2010; Carless et al., 2011), developing shared understanding of the often-tacit knowledge underpinning assessment (Rust, Price, & O'Donovan, 2003; Bloxham & West, 2004) and, more recently, co-creation of the assessment process (Meer & Chapman, 2014).

Literature on assessment, similar denominations related to the concept of “learner-centred assessment” are used such as “alternative assessment” (Light & Cox, 2003; Struyven, Dochy, & Janssens, 2005). Furthermore, it is possible to find in extant literature other ways of distinguishing the nature of assessment methods, such as “mixed methods” (Flores et al., 2015) which combine aspects of traditional assessment and learner-centred assessment, instead of just placing the assessment at the poles of this dichotomy (Pereira, Flores & Barros, 2017). Mixed methods use of a variety of assessment modes and a variety of modes of delivery; providing a set of assessment options; give a more fruitful response to students' learning styles; and increase student's satisfaction – by involving students in the assessment (Kell & van Deursen, 2002; Craddock & Mathias, 2009; Flores, Veiga Simão, Barros & Pereira, 2015).

Alternative assessment methods or learner-centred methods (Webber, 2012), such as portfolios, projects (Brown et al., 1997; Light & Cox, 2003), self- assessment (Crisp & Lister 2002; Taras 2002, 2010; Sambell, McDowell, & Montgomery, 2013; Panadero & Jonsson, 2013; Mumm, Karm, & Remmik, 2016) and peer assessment (Van Zundert, Sluijsmans, & van Merriënboer, 2010; van Zundert, Sluijsmans, & Van Merriënboer 2010; Nulty 2011), simulations, open-book exams, prior notice exams (Light & Cox, 2003), problem based learning (Light & Cox, 2003), patchwork test (Winter et al., 1999) collaborative assessment, among others (Struyven et al., 2005; Flores et al., 2015; Pereira et al., 2015; Pereira & Flores, 2016) promote collaborative learning (Johnston & Miles, 2004; Le, Janssen, & Wubbels, 2017), and together with self and peer assessment seem to be more effective regarding deep learning and the development of new skills and professional attitudes. The so-called alternative methods also enable a more effective learning (Birenbaum & Feldman, 1998; Sambell & McDowell, 1998; Tang, Lai, Arthur, & Leung, 1999; Struyven, Dochy, & Janssens, 2005), fostering the development of autonomy, sense of responsibility, and reflection (Sambell & McDoweel, 1998) and influencing the ways in which students see their own learning in a more positive way (Sluijsmans, Dochy, & Moerkerke, 1998).

Portfolio is a pedagogical tool that combines formative and summative purposes (Habib & Wittek, 2007), typically designed to support student learning through the active use of feedback (Smith & Tillema, 2003;

Steen-Utheim & Hopfenbeck, 2019). Portfolios are found in all phases of education and professional development for learning, assessment, promotion, and appraisal (Klenowski, Askew, & Carnell, 2006). Definitions of portfolios emphasise the collection of work which includes a reflective commentary (Klenowski, Askew, & Carnell, 2006). They are used particularly for the purposes of developing teaching skills and reflective practice from preservice teaching through to teaching at postgraduate level (Klenowski, Askew, & Carnell, 2006). Burner (2014) in a review of portfolio assessment also identified benefits of this method to students' learning such as the development of writing skills, autonomy, and the increase of motivation. This assessment method has received increasing attention in the literature as it is considered to be fair, useful, and relevant (Brinke, Sluijsmans & Jochems, 2010; Fernandes, 2020), since it promotes, among other aspects, interaction, and collaborative work (Lam, 2016). Light and Cox (2003), regarding the use of project, state that the use of this method fosters independence, enhances skills' management, promotes deep learning, and provides problem solving (Pereira, 2016).

The open-book exam is an examination where textbooks or other kinds of written supports are allowed (Light & Cox, 2003). This method "reduces the reliance of students on rote learning" (Brown, 1999, p. 9) and may encourage students' independence and autonomy, allowing them to find the information they need in a quicker way. Yet, this assessment method does not allow to assess the use of information more creatively and independently. It may only help to identify who finds the information more quickly instead of who uses the information in a more independent, creative, and critical way.

The type of exam so-called prior-notice exam (Light & Cox, 2003) presupposes the use of questions or topics to be addressed in the exam are previously presented to students, allowing them to realise previous research about the topic/theme, relieving the constraint on memory and encouraging students' autonomy. However, this kind of method may be harder and provoke anxiety feelings in more dependent students. Brown (1999, pp. 9-10) complements this role of alternative exams with take-away papers; case studies questions; objective structured clinical examinations; simulations (computer or online); in-tray exercises; and assorted questions exams' (e.g., multiple-choice, short and essay questions in the same exam) (Fernandes, 2020).

Problem-based learning, as an example of a learner-centred assessment, allows the development of these skills in real-life contexts (Dochy et al., 1999; Boud, 2000, Pereira, 2016). Biggs (1999) suggests that the Problem-Based Learning (PBL) is probably the purest example of an aligned system. On one hand the student constructs meaning through relevant learning activities and, on the other hand teacher aligns the teaching and assessment methods to learning activities. In PBL, students engage in problems related

to their learning focus and try to find solutions, recognising the need for teamwork and collaboration of all the parts involved. It allows the integration between theory and practice, a dynamic teaching approach, the development of transversal curriculum skills and a deeper knowledge of the subjects under study (Vilaça & Mabote, 2016; Fernandes, 2020).

Melovitz, Defouw, Hooland, and Vasan (2018) carried out a research comparing different methods of assessment showed that students present better results when they are assessed by open-ended questions rather than by multiple choice questions and that open-ended questions promoted conceptual understanding and deeper learning.

Pereira, Cadime, Brown & Flores (2021) published a research on assessment methods in Portuguese context suggesting that involving students in alternative methods of assessment in higher education will lead to a greater perception of it as being engaging and fair. This is a positive basis for moving towards greater diversity in educational assessment methods in that such diversity will be seen as having greater validity and potential for learning. In addition to contributing to knowledge about assessment in higher education, the small or trivial differences found regarding gender, year and study cycle suggest that institutions do not need to greatly concern themselves with these factors in terms of their assessment policies and practices. What matters most to these students is moving beyond traditional forms of assessment across all levels and types of study towards learner-centred assessment.

Classroom assessment

Teachers are a core component of classroom activity systems and play a crucial role in reducing the opportunity gap for students from non-dominant communities. For instance, teachers can increase the affordances for marginalised students' participation by designing or selecting classroom assessment tasks that students can relate to, can also reconfigure the components of activity systems, such as tools, resources, and participation structures, to increase access and opportunity for marginalised students and teachers can increase the affordances of marginalised students' participation by attending to their historical relationships with the disciplines, people, and spaces (Kang, 2018; Kang & Furtak, 2021).

Classroom assessment is a process through which teachers and students gather, interpret, and use evidence of student learning “for a variety of purposes, including diagnosing student strengths and weaknesses, monitoring student progress toward meeting desired levels of proficiency, assigning grades, and providing feedback to parents” (McMillan, 2013, p. 4). Some of these purposes are formative, for

example, monitoring progress to support student learning. Others are summative, such as certifying achievement at the end of a report period (Andrade & Brookhart, 2020).

Classroom assessment is “quite diversified and not well documented” (Gilles, Detroz & Blais, 2011, p. 721). It reflects teachers' values, perceptions and experiences which are influenced by the environmental variables, with an emphasis in the institutional context, tradition, and assessment culture (Gilles, Detroz, & Blais, 2011, Fernandes, 2020).

All practices of classroom assessment reflect, at least implicitly, a theory of learning that orients the way assessment is carried out and the meaning attributed to assessment by both teachers and students. Moreover, all theories of learning propose a mechanism of regulation of the learner's behaviour and thought processes as he or she progresses, or fails to progress, towards a learning goal (Allal, 2019). The use of classroom assessment to promote student learning is strongly supported by current educational research (Tierney, 2006).

Classroom assessment is a critical component of the inquiry teaching and learning process (Black & Wiliam, 1998; National Research Council [NRC], 1999). Dynamic, ongoing classroom assessment is a complex task that inherently requires a different approach to teaching and learning than is taken by many science educators. Unfortunately, teacher preparation programmes are not adequately preparing teachers to successfully utilise assessment to improve teaching and learning (Stiggins, 1988; Winger & Norman, 2005); thus, teachers are entering the classrooms without an understanding of the pedagogical implications of such practices (Tunstall & Gipps, 1996; Shepard, 2000; Buck, Trauth-Nare, & Kaftan, 2010). Classroom assessment environment is thus believed to have some effects on student behaviour and learning, yet is understudied in higher education (Gan, Hoi & Schumacker, 2019). Classroom assessment can be defined as the activities, both formal and informal, that are orchestrated by teachers in order to assess the learning of the students under their pedagogical responsibility and to promote students' involvement in assessment of their own learning (via self-assessment and peer assessment) (Allal, 2019).

According to Earl and Katz (2006) there are three different but interrelated purposes for classroom assessment: Assessment *for* Learning (AfL), Assessment *as* Learning (AaL), and Assessment *of* Learning (AoL). Each purpose requires different roles for teachers, different planning, and different use of assessment information. Classroom assessment methods are more closely linked with students' experience of instruction than many other educational assessment methods because the student is the

learner as well as the examinee (Kane, 2012). Therefore, have arisen the current perspectives that classroom assessment can best be understood in the context of how students learn (Bransford, Brown, & Cocking, 2000; Andrade & Brookhart, 2020).

Traditionally, classroom assessment has focused on its summative function: on assessing of learning, on measuring learning, using the assessment information to make judgements about learners' performance, and reporting these judgements. On the other hand, the formative function has also been used: teachers have been using assessment for learning through diagnostic processes, formative assessment, and feedback practices. Yet, assessment as learning, where students become critical analysts of their own learning is most uncommon to happen (Earl & Katz, 2006, Fernandes, 2020).

In a classroom environment based on a formative assessment all learning tasks are likely to be assessment opportunities that enhance students' learning (Ruiz-Primo, 2011, Pereira et al., 2016). The classroom assessment process employs a variety of kinds of evidence, including evidence from classroom tests and quizzes, short and long-term student performance assessment, informal observations, dialogue with students (classroom talk), student self and peer assessment, and results from computer-based learning programmes.

The accurate use and interpretation of classroom assessment ensures the assessment validity. The validity of classroom assessment depends on several elements: (1) an accurate analysis of all assessment elements; (2) a good match between the assessment elements; (3) ensuring that assessment is adequate to the goals of the learning outcomes (content, thinking processes, skills, and attitudes); and (4) providing several opportunities for students to show their achievements (i.e., using a range of assessment approaches) (Earl & Katz, 2006). Lastly, a first-class record-keeping is essential for guaranteeing quality in classroom assessment: "The records should include detailed and descriptive information about the nature of the expected learning as well as evidence of students' learning and should be collected from a range of assessments." (Earl & Katz, 2006, p. 11).

Even in regular classroom assessments, teachers need to establish a measure of distance to assure that a new judgment is made on the basis of criteria applied to a specific situation, rather than one limited to past perceptions of the student. Otherwise, they have no guarantee that their observation and judgment make a fresh addition to the accumulated understanding they have of a student's ability (Loacker, Cromwell, & O'Brien, 1985).

Self-assessment

Self-assessment (Crisp & Lister, 2002; Taras, 2002, 2010; Sambell, McDowell, & Montgomery 2013; Mumm, Karm, & Remmik, 2016) involves the student on the learning process (Orsmond & Merry, 2013) and develops critical thinking skills (Fitzpatrick, 2006). Peer assessment (Crisp & Lister, 2002) enables students' interaction (van den Berg, Admiraal, & Pilot, 2006; Vickerman, 2009) and produces formative feedback (Crisp & Lister, 2002; Hughes, 2011; Hernández, 2012; Mumm, Karm, & Remmik, 2016; Rakoczy et al., 2019; Ion, Martí, & Morell 2019). These methods are considered as new or alternative methods for assessing students in higher education. More needs to be known about the effectiveness and relevance of these methods in different contexts and programmes (Pereira, Niklasson, & Flores, 2017).

Self-assessment is a key element in formative assessment because it involves students in thinking about the quality of their own work, refers to the involvement of learners in making judgements about their own learning, particularly about their achievements and the outcomes of their learning (Boud & Falchikov, 1989; Andrade & Valtcheva, 2009). Self-assessment is not a new technique (Dochy, Segers, & Sluijsmans, 1999). Self-assessment is formative in that it contributes to the learning process and assists learners to direct their energies to areas for improvement, and it may also be summative, either in the sense of learners deciding that they have learned as much as they wished to in a given area, or, in formal institutional settings, it may contribute to the grades awarded to students (Boud & Falchikov, 1989). The emphasis here is on the word formative: Self-assessment is done on drafts of works in progress in order to inform revision and improvement: It is not a matter of having students determining their own grades. Self-evaluation, in contrast, refers to approaches that involve students in grading their work, perhaps as part of their final grade for an assignment or a class (Andrade & Valtcheva, 2009).

The primary purposes of engaging students in careful self-assessment are to boost learning and achievement, and to promote academic self-regulation, or the tendency to monitor and manage one's own learning (Zimmerman & Schunk, 2004). Research suggests that self-regulation and achievement are closely related: Students who set goals, make flexible plans to meet them, and monitor their progress tend to learn more and do better in school than students who do not. Self-assessment is a core element of self-regulation because it involves awareness of the goals of a task and checking one's progress toward them. As a result of self-assessment, both self-regulation and achievement can increase (Schunk, 2003; Andrade & Valtcheva, 2009).

Self-assessment has been increasingly used as a necessary learning and assessment strategy in higher education to develop students as independent and lifelong learners (Boud, 1995; Andrade & Du, 2007; Yan & Brown, 2017; Bourke, 2018). It is widely reported that self-assessment is positively related to academic achievement in review studies (Topping, 2003; Brown & Harris, 2013) and recent empirical studies (Kissling & O'Donnell, 2015; Jay & Owen, 2016). There is also a strong claim in the literature about the strong connection between self-assessment and self-regulated learning (Andrade, 2010; Panadero, Andrade, & Brookhart, 2018). The contribution of self-assessment to students' academic achievement was suggested to be achieved through the use of self-regulation strategies, such as clarifying the learning goals, monitoring the learning process, and inspiring self-reflection (Brown & Harris 2013).

Self-assessment may cover a wide range of activities, from simple self-grading/self-rating without further reflection to having students undertake comprehensive reflection on their own performance (Brown & Harris, 2013). In practice, self-assessment can be used as a learning strategy to support student learning or an alternative assessment method for summative purposes (Panadero, Brown, & Strijbos, 2016; Yan, 2018).

In self-assessment learners have to think through what they have achieved in terms of some evaluative criteria, student self-assessment is an effective strategy for engaging learners in self-monitoring, as "self-assessment is integral to a mastery goal orientation, for it is a skill that enables students to know how well they are progressing in their knowledge and skills" (McMillan & Hearn, 2008, p. 43). Self-assessment not only motivates students' active participation in their learning, but it also provides professors with opportunities to gain instructional feedback from students (Walser, 2009). However, although self-assessment can be an effective pedagogical method for motivating students' engagement in learning, it does not necessarily produce a valid measurement of students' cognitive learning due to the potential for students to report their learning inaccurately (Sitzmann, Ely, Brown, & Bauer, 2010; Wei, Lundy, & Wilson, 2019).

There appears to be at least two main motives in the move towards teachers promoting student self-assessment; one primarily educational, the second often expedient. Firstly, there has been a principled desire on the part of teachers for learners to take greater responsibility for their own learning through involvement in a crucial act of learning: assessing one's own competence. Secondly, there is a practical need to develop assessment procedures which are a more effective use of resources through using students more and teachers less in assessment activities, or, at least, redirecting teacher effort from

marking to planning and moderating assessment activities. This latter motive is often combined with elements of the first (see, for example, Boud & Holmes, 1981; Boud & Falchikov, 1989).

The success of any assessment procedure depends on the marking criteria used (Orsmond et al., 1996; Orsmond, Merry, & Reiling, 1997). Self-assessment helps students regulate their own learning by monitoring learning processes and outcomes against goals and standards (Panadero, Brown, & Strijbos, 2016). The formative use of self-assessment, as a learning strategy, may have great educational merit for student learning (Boud, 1999; Yan & Brown, 2017). It has been increasingly agreed that self-assessment is a process that can be analysed and learned, rather than a one-off terminal action (Boud, 1995; Andrade, Du, & Wang 2008; Yan, 2018; Yan & Brown, 2017). In self-assessment, the achieving of some distance is even more of a challenge. The struggle to stand outside of one's own performance to get a different view of it is essentially what makes learning to assess oneself so long and complex a process. Practice – in looking at records of one's own performance and in general refining of one's ability to observe and judge according to criteria– make self-assessment more attainable (Loacker, Cromwell, & O'Brien, 1985).

Peer assessment

Peer assessment contrasts self-assessment in that it offers the chance to learn from a larger number of voices (Nortcliffe, 2012). There are close links between peer assessment and self-assessment; i.e., the learning of assessment skills is transferred to producing and regulating one's own work (Dochy, Segers, & Sluijsmans, 1999; Hinett & Thomas, 1999; Gibbs, 2006; Nicol & Macfarlane-Dick, 2006; Nicol, 2013). However, as Karandinou (2012, p. 57) remarks, “peer assessment is generally more successful than self-assessment”. Generosity with assessment and the inability to learn criticality skills are evident with self-assessment (Boud, 1986; Topping 1998; Miller, 2011; Carnell, 2016).

Peer assessment can be understood as a type of collaborative learning (Falchikov, 2001), but is more limited. It simply means that students assess each other's work using relevant criteria, and give feedback, not only for the benefits of the receiver but also for the purpose of their own development (van den Berg, Admiraal, & Pilot, 2006). However, peer assessment is an important component in the design of learning environments implementing a more participatory culture of learning (Kollar & Fischer, 2010).

There is substantial evidence that peer assessment can result in improvements in the effectiveness and quality of learning (Topping, 2009), which is at least as good as gains from teacher assessment, especially

in relation to writing. Importantly, there are gains from functioning as either assessor or assessee (Topping & Ehly, 1998; Topping, 2005, 2009). These gains can include increased levels of time on task and practice, coupled with a greater sense of accountability. Formative peer assessment is likely to involve intelligent questioning, coupled with increased self-disclosure and, thereby, assessment of understanding. In addition, peer assessment can enable earlier error and misconception identification and analysis, which can lead to the identification of knowledge gaps and engineering their closure. This method of assessment can also increase reflection and generalisation to new situations, promoting self-assessment and greater metacognitive self-awareness. Cognitive and metacognitive benefits can accrue before, during, or after the peer assessment (Topping, 2009).

The studies by Dochy et al. (1999), Falchikov (1995), and Sluijsmans, Brand- Gruwel, and Van Merriënboer (2002) refer to various problems that might arise given the social context of peer assessment. They mention students' hostility towards peer assessment when they first experience it, a lack of trust in the self and the other as assessors, and friendship marking, where peers give their friends higher marks than others regardless of performance. Despite the various indications that interpersonal variables might play a significant role within peer assessment, these have to date hardly been studied in a systematic way (as shown by van Gennip et al., 2009; Könings, van Zundert, & van Merriënboer, 2019).

Williams (1992) reports that students found peer assessment interesting but felt uncomfortable doing it since they saw it as criticising their friends. Other ways of reducing discomfort include involving staff or conducting the assessments by groups of student peers. The latter would help the process by increasing the anonymity, particularly important amongst students from some cultures (Freeman, 1995).

Somervell (1993) indicates that at one end of the spectrum peer assessment may involve feedback of a qualitative nature or, at the other, may involve students in marking. The assessment may be formative or summative and could form part of a larger scheme through which peer feedback is given prior to self-assessment by the recipient of the feedback. The same author stresses that peer assessment is not only a grading procedure, but also part of a learning process through which skills are developed. Peer assessment can be seen as a part of the self-assessment process and as informing self-assessment. The students have an opportunity to observe their peers throughout the learning process and often have a more detailed knowledge of the work of others than do their teachers (Dochy, Segers, & Sluijsmans, 1999). Keaten et al. (1993) report that peer assessment is a practice that can foster high levels of responsibility among students, requiring that the students be fair and accurate with the judgments they make regarding their peers.

Falchikov (1995) defines peer assessment as the process through which groups of individuals rate their peers. This exercise may or may not entail previous discussion or agreement over criteria. It may involve the use of rating instruments or checklists which have been designed by others before the peer assessment exercise or designed by the user group to meet its particular needs (Dochy, Segers, & Sluijsmans, 1999).

Topping (1998, p. 250) defines peer assessment as “peer assessment is an arrangement in which individuals consider the amount, level, value, worth, quality or success of the products or outcomes of learning of peers of similar status”. However, several studies have shown that the effects of peer assessment are diverse: for example, peer assessment is said to be beneficial to the learning process (Davies, 2002). More specifically, it has been found that peer assessment (together with self and co-assessment) does help students to develop certain skills in the areas of, for example, communication, self-evaluation, observation, and self-criticism (Dochy & McDowell, 1997; van Gennip, Segers, & Tillema, 2010).

Peer assessment encompasses processes whereby students evaluate or are evaluated by their peers (Topping, 2009; Könings, van Zundert, & van Merriënboer, 2019) and students learn from each other by means of receiving and giving feedback. Extensive research has been published on the reliability and validity of peer assessment results (Cho, Schunn, & Wilson 2006; Li & Grion, 2019). However, less attention has been paid to the learning outcomes of peer assessment. In some studies, positive effects were found (Perera, Mohamadou, & Kaur, 2010), whereas in others, no effects were reported (Sadler & Good, 2006). There are a few research syntheses on the effects of peer assessment, but most of these focus on a specific setting, which makes them less generalisable to other settings (Li & Grion, 2019).

Although the growing popularity of peer assessment in education has already triggered a vast body of research (van Zundert, Sluijsmans, & van Merriënboer, 2010; Ashenafi, 2017), studies on peer-assessment skills typically choose the *assessee*, that is, the receiver of the peer feedback, as their object of study. As such, these studies examine how feedback from the assessor (the feedback giver) influences the assessee's use of feedback and learning (e.g., van Gennip, Segers & Tillema, 2009; Gielen et al., 2010; Patchan et al., 2013; Çevik, Haşlamam, & Çelik, 2015; Panadero, 2016; Könings, van Zundert, & van Merriënboer, 2019; Panadero & Alqassab, 2019).

Recent studies show that participation in peer assessment contributes to the improvement of learning outcomes (Li et al., 2020), i.e., the quality of work students submit after peer assessment and revisions.

In this respect, some studies show that both providing and receiving peer feedback are beneficial (Zhou, Zheng, & Tai, 2020); while others suggest that students perceive that providing feedback to others contributes more to their learning than the feedback they receive from their peers (Ion, Marti, & Morell, 2019; Mercader, Ion, & Diaz-Vicario, 2020). These findings speak in favour of peer assessment as a driver of learning about tasks and a powerful self-evaluation aid (Stančić, 2021).

Peer assessment has featured increasingly in higher education accompanying the growth in active learning and student-centred approaches, including group assignments (King & Behnke, 2005), problem-based and cooperative learning (Dochy, Segers, & Sluijsmans, 1999; van den Berg, Admiraal, & Pilot, 2006; van den Berg et al. 2006; Topping, 2009). Peer assessment is especially pertinent in problem-based learning (Segers & Dochy, 2001).

Peer assessment activities can vary in a number of ways, operating in different curriculum areas or subjects. A wide variety of products or outputs can be peer assessed, including writing, portfolios, oral presentations, test performance, and other skilled behaviours. The participant constellation can vary: the assessors and the assessed may be pairs or groups (Topping, 2009).

Despite the advantages of peer assessment, it also presents implementation problems (Vickerman 2009; Lew et al. 2010). Moreover, students' perceptions of their learning environment, including assessment modes, influence their learning strategies and outcomes, thus also affecting the effectiveness of peer assessment (Segers & Dochy, 2001; Struyven, Dochy, & Janssens, 2005; Carvalho, 2013).

There are however certain pitfalls with these types of assessment; limitations of peer evaluation include students' distrust (Topping, 2010), inaccurate evaluation and inconsistent evaluation in comparison to expert evaluation (Walvoord et al., 2008). Research has shown that some students performing peer-assessment gave irrelevant or unclear remarks that did not allow assessed students to learn or improve their presentation. Other students intentionally gave low assessments, so that their own assignment would receive a relatively higher grade (Chen, 2010). Researchers suggest that before performing peer-assessment, lecturers should openly and thoroughly discuss criteria for assessment with the students. Moreover, they suggest that the lecturers should regularly supervise the assessment process, to avoid students' unfair assessments (Planas-Llado et al., 2014; Seifert & Feliks 2019).

On the other hand, research also shows that students perceive peer assessment as stressful and uncomfortable (Wanner & Palmer, 2018). The factors that were found to limit students' perceptions of

peer assessment as useful are related to the attitudes of peer reviewers, e.g., disrespectful behaviour (Zhou, Zheng, & Tai, 2020), the quality of peer relationships (Panadero, Romero, & Strijbos, 2013), distrust in one's own abilities or those of fellow students to assess (Liu & Carless, 2006; Peterson & Irving, 2008; To & Panadero, 2019), and competition and a lack of readiness for peer learning (To & Panadero, 2019). These are particularly intensified if peer assessment is used for summative purposes or is limited to just assigning marks (Liu & Carless, 2006; Ashenafi, 2017; Zhou, Zheng, & Tai, 2020; Stančić, 2021).

In general, formative peer assessment is recognised as an important complement to self-assessment (Black et al., 2004; Reinholz, 2016) and a form of collaborative learning (van Gennip, Segers, & Tillema, 2010). Many authors acknowledge the high potential of peer assessment in supporting self-assessment, self-regulation and learning in general (Boud, 1995; Dochy, Segers, & Sluijsmans, 1999; Panadero, Jonsson, & Strijbos, 2016; Reinholz, 2016; To & Panadero, 2019). Namely, by applying their understanding of standards of good work to provide peer feedback, students enhance their awareness and understanding of the grading criteria and are challenged to review their own work more reflectively, i.e., to practice self-evaluation skills (Reinholz, 2016; Stančić, 2021).

According to some studies, anonymous peer assessment provides certain advantages in terms of student learning. Namely, in such a context, students provide their peers with more critical feedback, but also report greater learning gains (Panadero & Alqassab, 2019; Li et al., 2020). It is also argued that anonymity allows students to overcome their initial anxiety related to the assessment of their peers' work (Vanderhoven et al., 2015; Seifert & Feliks, 2019). This accounts for the increasing number of studies related to computer assisted and online peer assessment (e.g., Seifert & Feliks, 2019; Li et al., 2020), given that such conditions facilitate anonymous reviews (Staničić, 2021).

In the use of any of the assessment methods, whether self-assessment, peer assessment, and group assessment, none of which should be regarded as a "quick fix", because they take considerable briefing, training, and rehearsal if they are to be effective, but can, when properly managed, save some staff time and they are extremely valuable in helping students interpret criteria. As these methods also encourage students' metacognition (that is, a means of learning about their own learning), they are also very effective in encouraging deep rather than surface learning (Brown, 2005).

Group assessment

Group-based peer assessment is generally used for formative rather than summative evaluation; however, it is hypothesized that group collaboration after individual assessment would increase grade validity (i.e., improve the accuracy of student given marks compared to instructor-given marks). Group assessment may also ameliorate negative student perspectives about summative peer assessment (Topping, 1998). In addition to potentially increasing grade reliability and student satisfaction with peer assessment, group work has many well-documented potential benefits for student learning (ArchMiller, Fieberg, Walker, & Holm, 2017).

Online assessment

Online and blended learning have become common place in 21st century higher education. Larreamendy-Joerns and Leinhardt (2006, p. 572) in review of the literature “observed two complementary movements in the educational landscape: the merging of online teaching and learning into the stream of everyday practices at universities, and the increasingly salient role of distance programs in institutions of higher education” (Gikandi, Morrow, & Davis, 2011).

Several researchers (Vonderwell et al., 2007; Wolsey, 2008) have revealed the pedagogical prospective of online formative assessment. Nevertheless, it is also of utmost importance further make sure that the learning setting offers the learners enough chances to not only learn actively but prospects to take part in learning which replicates their real-world professional settings (Baleni, 2015).

The merging of formative assessment with technological perceptions conveys the idea of online formative assessment in unfolding this merging. Pachler, Daly, Mor, & Mellar (2010, p. 716) used the term formative e-assessment which they defined as “the use of ICT to support the iterative process of gathering and analysing information about student learning by teachers as well as learners and of evaluating it in relation to prior achievement and attainment of intended, as well as unintended learning outcomes”.

In online higher education, however, emphasis continues to be placed on summative assessment with formative assessment receiving little attention despite its crucial role in promoting learning (Wang, Wang, & Huang, 2008; Pachler, Daly, Mor, & Mellar, 2010). For this reason, Pachler et al. (2010) and Wang, Wang, and Huang (2008) recommended a refocused emphasis on online formative assessment in order to create learner and assessment centred learning environments. However, a search of the literature did not reveal any review of online formative assessment (Gikandi, Morrow, & Davis, 2011).

E-assessment has attracted increased interest in the research community as a result of both the changing nature of higher education and expectations for e-assessment practice (Nicol, 2007). Whitelock (2009) points out other important factors in the interest in research of e-assessment related to its potential and to the challenges facing higher education today. For example, she highlights the importance of the tests being fair and of not disadvantaging students with e-assessment procedure. In addition, she stresses the need for research related to pedagogical principles, designs, and frameworks to utilise the full potential of e-assessment for students' learning and teachers' work (Stöberg, 2012).

The global lockdown of the COVID-19 pandemic has spread worldwide, affecting almost all countries and territories. With online classes mandatory during the lockdown due to COVID-19, online teaching, learning, and assessment gained another prominence. Lockdown and social distancing measures due to the COVID-19 pandemic have led to closures of schools, training institutes and higher education facilities in most countries. There was a paradigm through various online platforms. Transitioning from traditional face-to-face learning to online learning can be an entirely different experience for the learners and the educators, which they adapted to with little or no other alternatives available. E-learning tools have played a crucial role during this pandemic, helping universities facilitate student learning during the lockdown of universities (Subedi et al., 2020; Pokhrel & Chhetri, 2021).

Despite the enormous growth of e-learning and its perceived advantages in education, however a considerable number of barriers that affect online assessment exist. Multiple challenges have been emerging (Abduh, 2021). The shift from a physical classroom to a virtual class has changed traditional techniques and assessment methods. Some research discussed certain variables affecting e-learning assessment such as little or absence of contact with instructors, difficulties to navigate within the system, limited tech-experience, lack of effective interaction and appropriate feedback (Holmes & Gardner, 2006). E-assessment has been a challenging process in the sense that it required using a framework that should be valid and reliable. Multiple challenges have been encountered by instructors questioning the consequences of the shift from face-to-face learning to full-time e learning (Yadov, Gupta, & Khetrapal, 2018; Abduh, 2021).

1.1.6. Feedback

Feedback is seen as a key element in quality teaching in so far as students learn quicker and in a more effective way when they are aware of what they have to learn and to do to improve their learning (Ramsden, 1996; Carless, 2006; Pereira, 2016).

Feedback being one of the key features of a learner-centred approach is an essential component of the assessment process (Nicol & Macfarlane-Dick, 2006; Price et al., 2010; Pereira, Flores, & Barros, 2017). Numerous studies have analysed diverse aspects of student feedback but, curiously, they generally do not define the term “feedback” as it applies to assessment. Yet, there is some evidence that there are different conceptions of what constitutes feedback (see, for example, Black & William, 1998; Watty, 2013). Besides that, feedback is an opportunity for students to learn enabling the regulation of the learning process (De Weert 1990; Taras, 2002; Poulos & Mahony, 2008; Pereira et al., 2016; Pereira, Flores, & Barros, 2017) and may support students’ learning (Weurlander et al., 2012; Mumm, Karm, & Remmik, 2016), especially when the comments are given personally and are timely (see Mumm, Karm, & Remmik, 2016). Formative feedback is crucial but needs to be detailed, comprehensive, meaningful to the individual, fair, challenging, and supportive considering strategies for giving feedback efficiently such as assignment return sheets, assignment reports, in class collective feedback and other means (Brown et al., 1994; Brown, 2005).

Formative feedback is also a key feature of the assessment methods that imply students’ involvement and collaboration and a greater contact between students and faculty (Flores et al., 2015). Feedback highlights the centrality of the student role and the use of comments to improve subsequent work (Carless & Boud, 2018). Feedback is thus understood as a key element of student learning process and student self-regulation (Carless, 2006; Nicol & Macfarlane-Dick, 2006; Carless et al., 2011).

A formative conception of assessment honours the crucial role of feedback in learning. Research has clearly shown that feedback promotes learning and achievement (Butler & Winne, 1995), yet most students get little informative feedback on their work (Black & William, 1998).

Feedback, as described by Brown (1999), should have three components. Firstly, it is essential to state what is going to be assessed and the standard required in a transparent way for students and teachers. Secondly, a judgement of the students’ work needs to be provided. Thirdly, the feedback given to students should help them to address the gap between what they know and what is expected of them. Traditional assessment practices are usually good at evaluation, but they are often lacking in description and fail to provide students with advice and support to improve their own learning (Brown, 1999). Furthermore, feedback needs to be understood as a process of communication between teachers and students (Higgins et al., 2001) and should take the form of assessment dialogues in an attempt to clarify the assessment process (Carless, 2006; Hernández, 2012). For instance, if assessment is to be integral to learning, feedback must be at the heart of the process (Brown, 2005).

Hattie and Timperley (2007) emphasise that the main purpose of feedback is to highlight the discrepancy between current understanding and performance on one hand and the learning goal on the other, and to encourage and enable students to reduce the discrepancy. Similarly, Shute (2008, p. 154) defines formative feedback as “information communicated to the learner that is intended to modify his or her thinking or behaviour for the purpose of improving learning.” (Rakoczy, 2019).

Feedback is information that provides the performer with direct usable insights into his/her current performance, based on tangible differences between current performance and the learner's hoped for performance. It is still the case that too many academics believe that a grade, and a short series of comments, usually of a simple praise or blame nature constitute feedback, when what students actually want, is user friendly information, relating to how they are doing and how specifically they might be able to improve upon what they are doing (Stefani, 1998).

Some indicators were highlighted by Wiggins (1993) of what it might mean to provide good feedback on learning. It is important to acknowledge that these indicators are equally important to all assessors in assessment partnerships:

- Define the requirements of each learning task;
- Describe clearly how performance will be measured/graded/assessed, preferably involving students in this process;
- Provide well-articulated descriptors or exemplars of different levels of attainment;
- Provide feedback about individual performance expressing this in accordance with agreed criteria;
- Relate various aspects of poor performance to specific remedial actions.

When feedback is seen as an opportunity to learn rather than the indicator of rank in class or percentage of items correct, then it points to uniqueness's and illuminates the reasons for weaker aspects of the learner's performance. It reveals to the learner the sources of strengths. It suggests where to aim to develop an ability more fully.

Feedback can be provided at the task level (information on task performance), process level (information on processes required to master the task), self-regulatory level (information on the regulation of action), and self-level (information on the learner as a person, not related to task performance (Hattie & Timperley, 2007). While feedback at the first three levels is associated with positive learning outcomes, feedback at

the self-level, usually contains too little task-related information to show positive effects on learning processes (Hattie & Timperley, 2007; Rakoczy, 2019).

Zimmerman (2000) defined self-regulated learning as the degree to which learners meta-cognitively, motivationally, and behaviourally manage their own learning process. Particularly, learners are meta-cognitively aware and motivationally connected to how they regulate their learning by actively adapting strategies to develop specific learning tasks. In addition, Zimmerman (2002) presented the process of regulating one's own learning in three cyclical self-regulatory phases: (i) the forethought phase, during which learners set objectives and plan before a task; (ii) the performance phase, in which learners monitor and control their performance while they develop the task, and (iii) the self-reflection phase, in which learners react to their own outcomes once the learning process is completed. These phases may help clarify learners' repeated efforts to learn in terms of quantitative and qualitative differences (i.e., proactive vs. reactive self-regulators) (Pereira et al., 2016).

Feedback is internal or externally generated and helps modelling and changing the attitudes of the students in regard to their learning (Butler & Winne, 1995; Pereira et al., 2016). To provide feedback to students' performance (external feedback) may help them to reflect about their competences, learning and strategies in order to solve given tasks. The internal feedback provides the students with the information about the quality of the cognitive process as well as the nature of the outcomes. This kind of reflection – internal feedback – may be useful for students to adjust to the present task. Thus, feedback is part of the self-regulated learning process, and it is seen as a mechanism which monitors the entire process without which it would be impossible to look at the progress in terms of learning (Butler & Winne, 1995; Pereira et al., 2016).

A more recent study comes from Dawson (2019) based on 406 staff and 4514 student surveys, reported four broad categories of feedback in terms of their purposes, i.e., “identify strengths and weaknesses”, “affective”, “justify grades” and “improve”. Feedback used to “identify strengths and weaknesses” is similar to the conventional model of feedback where students are told what is good and bad about their work instead of how to improve. “Affective” feedback is to acknowledge student efforts and motivate them, whereas “justify grades” feedback is used to explain students' grades. Under the “improve” category, apart from “unspecified improvement”. Dawson listed five foci, i.e., “improvement in work”, “improvement in understanding (such as standards and learning objectives)”, “improvement in grades”, “improvement in study strategy” and “improvement in reflection, self-evaluation or critical thinking” (Chan & Luo, 2022).

The meaning of feedback has changed over recent decades, making it difficult to achieve a consistent understanding of what constitutes feedback. In general, three paradigms have contributed to how we define and understand feedback – (1) teacher-centred transmission-oriented paradigm; (2) student-centred process-oriented paradigm; and (3) ecological/sociomaterial paradigm (Chan & Luo, 2022).

Using feedback-as-event, as the teachable moment, also calls for considerable creativity on the part of the teacher and systematic study of the most effective feedback strategies on the part of the profession (Loacker, Cromwell, & O'Brien, 1985). Students need feedback when they have done well, to help them understand what is good about their work and how they can build on it and develop further. No one can pretend this is an easy task. Summative feedback, which enables judgements to be made for progression and completion, needs quite clearly and overtly to relate to the assessment criteria and to be strongly aligned to the curriculum objectives (Brown, 2005).

Students appreciate to receive feedback about their performance and knowledge (Craddock & Mathias, 2009; Blair, Wyburn-Powell, Godwin, & Shields, 2014). However, feedback is not always effective (Price, Handley, & O'Donovan, 2008) leading to students' dissatisfaction (Price et al., 2011) which may be related to problems of content and interpretation of feedback (Higgins, Hartley, & Skelton, 2001). Recent literature shows the existing gaps on feedback effectiveness. In a review on assessment feedback, Li and De Luca (2014) found that feedback is not always used by the students. Other studies show that although feedback given to the students may be significant (Jessop & Maleckar, 2014), it is not always synonymous with valued feedback to them (Blair & McGinty, 2013; Pereira et al., 2016).

In summary, a major challenge regarding assessment and feedback is that they need to be understood or used in ways that contribute to the improvement of teaching and learning. Given that students are "active makers and mediators of meaning within a particular learning context" (Higgins et al., 2002, p. 53) and the central role that assessment and feedback play in the education process, it needs to develop a greater understanding of students' conceptions of the overall purpose of assessment and feedback and their perceptions of their impact on them. Feedback is a privileged area for teachers to extend their assessment practices, as it is one of the most influential factors on students' learning and achievement (Pedrosa-de-Jesus et al., 2019).

Giving effective online feedback is an important skill for educators to develop because it guides the learner's development (Leibold & Schwarz, 2015). Effective feedback is constructive, which means to improve performance by correcting errors (Zsohar & Smith, 2009) using a positive, future-focused, helpful

manner. In addition, feedback can be informational, or it can be informational and instructional (Hattie & Timperley, 2007). When feedback takes on a corrective function, then it also becomes instructional.

Publications about the type of feedback that is the most effective for learners related to writing in online programmes is increasing in volume. Alvarez, Espasa, and Guasch (2011) studied types of feedback for writing assignments in an online learning environment and identified four types: corrective feedback, epistemic feedback, suggestive feedback, and epistemic plus suggestive feedback. Corrective feedback is the feedback that is specific to the requirements of the assignment and content. Epistemic feedback includes prompts or questions for further thought and explanation or clarification. Suggestive feedback contains advice, expansion, or ideas to improve an idea and combines the use of prompts/questions for further development and making suggestions for improvement (Leibold & Schwarz, 2015).

Over the last decade, assessment feedback practices in higher education have gained considerable attention among educators and scholars. This can be partially attributed to discouraging results of national surveys in Australia and the UK, which highlight that students are often dissatisfied with feedback comments (for example, Carroll, 2014; Higher Education Funding Council for England, 2014). Student dissatisfaction with feedback occurs for various reasons, such as issues with the content itself (e.g., ambiguous, unclear, or unspecific comments) (Huxham, 2007), timeliness (e.g., it occurs too late in a subject to be used) (Hartley & Chesworth, 2000), and impact – e.g., the comments are not relevant to a subsequent task (Boud & Molloy, 2013). Moreover, dissatisfied educators may point to increasing workloads (Gibbs & Simpson, 2004), or students' reluctance to use feedback (Winstone et al., 2017).

Despite a growing body of literature and considerable investment by universities, feedback continues to be poorly understood and enacted by both educators and students (Carless & Boud, 2018; Dawson et al., 2019). Some propose should focus on the characteristics of the feedback information (Rust, 2007; Price et al., 2011), the actors involved (Nicol et al., 2014), or promote student-centred models of feedback design (Boud & Molloy, 2013). Other researchers focus on students' attributes, such as self-regulation (Nicol, 2009) and feedback literacy (Carless & Boud, 2018), or on teaching staff pointing to the increasing pressures and expectations on those who may not be adequately resourced or trained (Gibbs & Simpson, 2004; Boud & Molloy, 2013). In contrast with these foci on feedback practices and individual capability, some researchers take a broader view and argue that policy frameworks and institutional cultures need to be developed to support effective feedback (Crisp, 2007).

In summary, in this chapter the fundamental aspects on which our main research was based were addressed. The conceptions of assessment of the different actors in the research were discussed, namely, teachers (and programme coordinators, who are also, in the first instance, teachers), students and particularly the conceptions of assessment in teacher education. The functions and methods of assessment were also addressed demonstrating its applicability in specific terms. Assessment of learning entails a way to demonstrate achievement; certification and accountability based on teacher-centred learning, using summative assessment as a way of to compare, to select and to measure through the use of so-called traditional assessment methods (tests and/exams). The assessment for learning was also addressed, highlighting the feedback on learning and teaching, focusing on self-regulation and improvement. Assessment as learning is seen as a way of self-regulation and critically evaluation talking about metacognition, critical thinking, and self-assessment. These last two conceptions of assessment act within the scope of student-learning, using the formative assessment as a way to regulate, to monitor, to guide, to improve and to support. In these kinds of assessment, the most used methods are the so-called alternative ones where, among others, portfolios, simulations, or projects are privileged (see Figure 8).

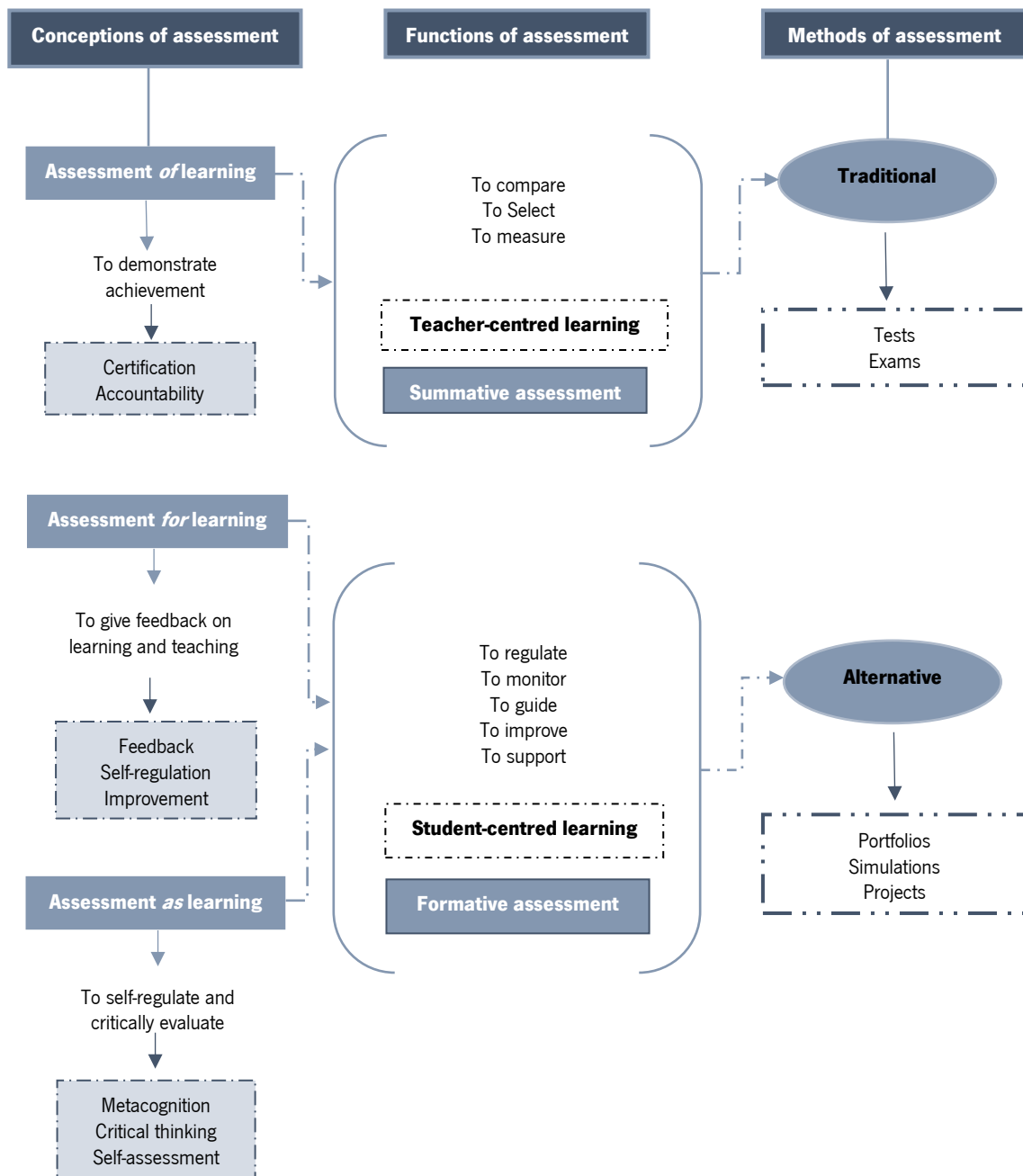


Figure 8: Synthesis of the main ideas that make up the assessment process (Source: Author)

1.2. Research literature on assessment in higher education

Understanding the research landscape in the area in which the theme of the study developed is fundamental. Therefore, *Assessment and Evaluation in Higher Education* was selected as a basis for analysis, because it falls into the scope of the research presented in this thesis. The analysis carried out was limited to the period of 2017 and 2022 as it corresponds to the duration of this research. The keywords “assessment” and “higher education” were used as a filter for our analysis allowing the results obtained to emerge freely. Then, the titles and abstracts of 110 articles were analysed.

Earlier study carried out by Pereira, Flores, & Niklasson (2015) on a review of articles published in *Assessment and Evaluation in Higher Education*, over eight years (2006–2013) showed that the studies were carried out in different countries using different methods. The study summarise and critically discuss a selection of empirical studies focusing on assessment in higher education, particularly on how different practices of assessment have been scrutinised in research since the implementation of the Bologna process in Europe. In addition, aspects directly related to the assessment process, i.e., related to teaching and learning process are also identified. As far as the topic of assessment methods is concerned, the focus of the majority of the studies is on portfolio assessment, followed by written examinations, oral examinations, group assessment and paper and digital diaries. In regard to modes of assessment, these are mainly studies on self- and peer-assessment, followed by formative, continuous and summative assessment. Concerning assessment related to a given teaching and learning method, the studies focused on portfolio assessment, group work assessment, problem solving and project-led education, alternative methods of assessment and online environments. The topic modes of assessment comprises the majority of the studies, followed by assessment methods and assessment related to a given teaching and learning method. Research over the period indicates benefits for students’ learning through assessment practices other than the conventional written test. Although there was a difference in the focus and pace of the implementation of the Bologna process in European countries, the use of alternative or student-centred assessment methods is consistent with the assumptions underpinning the Bologna process. The studies addressed issues related to the role of the student in the assessment process, which may be indicative of a more learner-centred approach that is required by the Bologna process. However, it is not possible to conclude that the emergence of research on assessment methods centred on learner in higher education in this period is directly or totally related to the Bologna process.

In present research, of the emerging themes of our analysis, the following clearly stand out: peer assessment (15), self-assessment (9), peer and self-assessment (7); feedback and/or feedforward (29), self-assessment and peer feedback (1) and online assessment (5) moving towards previous study (Pereira, Flores, & Niklasson, 2015). That is, 67 papers dealt with these topics, showing the main trends of the articles published in the journal. The other papers focused on collaborative assessment, group assessment, classroom assessment, co-assessment, and assessment for learning (AFL). The vast majority of published studies focused on students' perceptions, views, opinions, or documents. Only four of the analysed papers have preservice teachers as a sample. Only three studies had teachers and students as participants. The studies with teachers as a sample are scarce.

The fact that research is carried out to deepen these themes shows the need to explore and learn more about formative assessment. Although it is widely accepted that assessment has a great influence on learning and that formative assessment and feedback are the most powerful tools in the assessment toolbox, it seems that they are still just occasional add-ons to traditional assessment practice or even a luxury for many teachers in universities. In other words, the shift from assessment of learning towards assessment for/as learning is still an ongoing process (Stančić, 2021). As already mentioned, peer and self-assessment are important components of assessment for learning (Assessment Reform Group, 1999; Black et al., 2004; Stančić, 2021). Appendix 1 highlights the author and year of publication, the focus and aim of the study.

The papers focusing on peer assessment essentially deal with aspects related to challenges (Ashenafi, 2017) perspectives (Thondhlana & Belluigi, 2017), perceptions (Planas-Lladó, et al., 2018), feelings (Lee, 2017), attitudes (Wang, Gao, Guo & Liu, 2020) and experiences (Hauff & Nilsson, 2021) mainly by the students. However, papers focusing on impact (Zheng, Cui, Li & Huang, 2018), learning outcomes (Panadero & Alqassab, 2019), standards (To & Liu, 2018), performance (Bong & Park, 2020), quality (Usher & Barak, 2018) and reliability and validity (Zhang, Schunn, Li & Long, 2020) were also published, placing research in the scope of evaluation, measurement, and comparison. With regard to self-assessment, published studies focus on aspects such as effects (Yan, Wang, Boud & Lao, 2021) and reliability and validity (Mannion, 2021). The articles also explore students' actions (Yan & Brown, 2017), perceptions (Wang, 2017) and the self-regulation (Tormey, Hardebolle, Pinto & Jermann, 2020; Yan, 2020).

Concerning to the general topic of feedback, the papers highlight, on the one hand, themes related to the beliefs and opinions of the participants; on the other hand, they demonstrate results in the application of feedback. It is possible to find papers focusing on students' experiences (Steen-Utheim & Hopfenbeck, 2019; Schmulian & Coetzee, 2019; Hepburn, Borthwick, Kerr, & Vasnev, 2021), perceptions (Zhang & Zheng, 2018; Pentassuglia, 2018; Bader, Burner, Iversen, & Varga, 2019; Gaynor, 2020; Winstone, Pitt, & Nash, 2021), behaviours and/or beliefs (Leenknecht, Hompus, & van der Schaaf, 2019; Al Harrasi, 2021; Joughin, Boud, Dawson, & Tai, 2021; Adalberon, 2021) and the challenges in the use of feedback (Shafi, Hatley, Middleton, Millican, & Templeton, 2018); Henderson, Ryan, & Phillips, 2019). On the other hand, papers dealing with topics such as improvement (Cookson, 2017; Alcalá, Picos, & Pastor, 2019; Sozer, Zeybekoglu, & Kaya, 2019; Hill & West, 2020), performance (Huisman, Saab, van den Broek, & van Driel, 2019); Dickson, Harvey, & Blackwood, 2019), efficiency (Denton & McIlroy, 2018), effect (Wang & Zhang, 2020) and quality (Page, Gardner, & Booth, 2020) were also found. There are articles that explore the process (Grainger, 2020), intentions (Reimann, Sadler, & Sambell, 2019), and purposes of feedback (Dawson, Henderson, Mahoney, Phillips, Ryan, Boud, & Molloy, 2019). Lastly, the papers that focused on the topic of online assessment prove to deal with different issues, such as: conceptions of e-assessment (Mimirinis, 2019), tools of assessment (Akimov & Malin, 2020), and effectiveness (McCallum & Milner, 2021; Blondeel, Everaert, & Opdecam, 2022).

CHAPTER II

HIGHER EDUCATION AND INITIAL TEACHER EDUCATION - REFORMS, OPPORTUNITIES, AND CHALLENGES

Chapter II – Higher Education and Initial Teacher Education - reforms, opportunities, and challenges

2.1. Higher Education in Portugal and Poland – an overview

The movement towards the massification of Higher Education (HE) is particularly observable in the second half of the 20th century. It is founded upon a wider policy rationale that stresses the need for widening participation both as a passport for social mobility and economic development (Trow, 2010). A transnational narrative about the value of HE as an economical asset has become evident whereby the success of national economies is seen to be based on the productive connection between education system and industry (Teodoro & Guilherme, 2014; Alves & Tomlinson, 2021).

“Universities are expected to contribute to each country’s competitive standing in the global marketplace by producing and disseminating economically productive knowledge. Governments likewise seek to link the introduction of market forces in the HE sector to a high-skills policy agenda, whereby human capital in the form of scientific and technological knowledge leads to economic success in the knowledge economy by producing higher value-added products and services.” (Naidoo & Williams, 2015 p. 210).

The evolution of massification of HE is now a global trend that has been particularly noticeable since the 1970s and 1980s, in general, for all over the European area.

In Portugal, attendance of HE in the 1950s and 1960s was limited to just a small part of the population in an elitist system attended mainly by students from certain social groups (the most economically favoured, young people and predominantly men) (Almeida & Vieira, 2012). The democratisation of the country after the political change that took place in 1974 is an important factor to push the widening of participation in HE and prompted a remarkable evolution, even if current participation rates are still significantly below the values registered in average in the OECD (Organisation for Economic Co-operation and Development) and in the EU (European Union) (OECD, 2018). Nonetheless the number of students applying to HE in Portugal decreased between 2013 and 2015 in the context of severe financial and economic constraints linked to the debt crisis in southern European countries, that also involved “radical cuts in university budgets [that] have placed their basic functioning in jeopardy and has led to unprecedented regression in research and development” (Teodoro & Guilherme, 2014, p. 2). Since 2016, the number of students enrolling in HE has started to increase once again. However, it should be

acknowledged that public and political debates about HE in the country do not always clearly emphasise the importance of widening participation. Attention is often placed on demographic ageing of the population as a constraint and on the supposed enormous difficulties experienced by graduates to enter the labour market and obtain a proper graduate job (Alves & Tomlinson, 2021).

Thus, under the influence of factors such as globalisation and the knowledge economy, changes in HE institutions from the early 2000s seem to be “due to the central role assumed by New Public Management managerial values and logics in the public policies targeting HE, new governance and management ideals started to be imposed on institutions” (Santiago et al., 2015, p. 1473). This is linked essentially to efficiency, control throughout accountability systems and strong formal leadership, amongst others. Additionally, in some ways the governance in HE has been transformed from a “republic of scholars” to a logic of “stakeholder organisation” (Magalhães & Santiago, 2012, p. 243). In short, in Portugal the democratisation of access and participation of students in HE seems to coexist, somewhat paradoxically, with less democratic forms of governance of HE institutions in which students, academics and other professionals are less present in the major decisions and definition of institutional policies (Alves & Tomlinson, 2021).

A new narrative was initiated during the first decade of the 21st century, in Portugal, regarding the increased importance of employability both for the evaluation of HE and for its internal organisation and public image (Alves, 2015). This stage emerged with the signing of the Bologna declaration in 1999 (Alves & Tomlinson, 2021). The implementation of the Bologna process started in 2006 (Decree-Law 74/2006) and might have been the first significant driver to the increasing importance of employability as one of the major concerns within political and public debates regarding HE in Portugal (Alves & Tomlinson, 2021).

In the case of Poland, this country has undergone change processes typical for Central and Eastern Europe. The communist legacy in HE funding and organisation generated similar challenges across the region. After a relative boom after World War II, the Polish higher education system stagnated in the 1970s and 1980s. The numbers of institutions, students, and academics were relatively constant for about two decades. In 1990 the access to HE was heavily restricted. In Central Europe, HE as opposed to other industrialised nations, was as elite in 90s as it was in decades past (Kwiek & Szadkowski, 2019). However, student numbers in Poland were growing fast. The expansion period has found its peak in 2005. This moment marks the end of continuous growth and the beginning of a demographically driven process of slow decline in student numbers. In 2006, the Polish HE system entered a long and still ongoing period

of contraction (Kwiek, 2013). Until 2009, Polish universities remained largely unreformed, following the initial changes right after the collapse of communism in 1989. Their adaptation to the new post-communist and market realities was much slower than the adaptation of other public sector institutions. The latter were substantially reformed in the period from the mid-1990s to the mid-2000s. The core of the system, including its relatively non-competitive funding modes, heavily collegial governance modes, and a complicated and obsolete, multilevel system of academic degrees and careers, remained largely untouched until the early 2010s (Kwiek, 2014; Kwiek & Szadkowski, 2019).

Higher Education assumes itself as a “space for formative decisions” (Esteves, 2008, p. 103), resulting from contexts and external pressures that influence the perspectives and expectations of the agents who are part of it, demanding new ways of teaching and learning and enhancing cooperative and articulated contexts with the world of work, such as Välimaa (1999) reinforces stating that the idea of a new pragmatic university whose vision is centred on the need to establish a close relationship with society, companies, and academia itself towards a transformation of university pedagogy. This assumption also served as the basis on the triple helix model presented by Etzkowitz and Leydesdorff (2000, p. 109) expressing that “(...) the university can play an enhanced role in innovation in increasingly knowledge-based societies”. According to the authors, the university plays a relevant role in innovation and knowledge generation, which implies a network interaction with other entities, such as industry and government, with a view to creating alternative strategies for economic growth and social transformation. For Kolmos and Holgaard (2010) this is one of the biggest challenges facing higher education institutions in the current context (Mesquita, 2015).

2.2. The implementation of Bologna process in Portuguese and Polish Higher Education

The adequacy of HE to the organisation and teaching and learning model promoted by the Bologna process confronted the system with an unprecedented challenge.

In 1998, the education ministers of France, Italy, Great Britain, and Germany signed the Sorbonne Declaration (1998), therewith attempting to harmonise the architecture of the European higher education systems. This first step was substantiated one year later with the Bologna Declaration (1999), which was adopted by 29 European education ministers and led to the Bologna Process. By 2012, 47 states had joined the Bologna Process and with the inclusion of Belarus in 2015 (see Figure 9), the Bologna Process covers all of Europe and bordering states (Vögtle, 2019).



Figure 9: Key moments and members adhering to the Bologna process (Source: Author)

From the start of the Bologna process, the creation of a “Europe of Knowledge”, which later became labelled European Higher Education Area (EHEA), with a system of easily readable and comparable degrees was envisioned and with the Budapest-Vienna Declaration (2010), the EHEA was officially launched. Its basic objectives include the introduction of a tiered study system, a common credit transfer system, the promotion of academic mobility, and cooperation in quality assurance (Vögtle, 2019).

The inclusion of HE in the discourse of knowledge society (Gornitzka, 2010) alongside the imperative of never-ending growth necessitates new knowledge politics (Grek, 2010), more specifically a particular form of knowledge management based on the comparison by common metrics (standards), benchmarking, and best practice strategies (Lumino & Landri, 2020).

“A Europe of Knowledge is now widely recognised as an irreplaceable factor for social and human growth and as an indispensable component to consolidate and enrich the European citizenship, capable of giving its citizens the necessary competencies to face the challenges of the new millennium, together with an awareness of shared values and belonging to a common social and cultural space.” (Bologna Declaration, 1999, p. 1)

These dimensions are reassured in the objectives of the Declaration to consolidate the EHEA (adapted from Bologna Declaration, 1999, p. 2) (see Figure 10):

- Adoption of a system of easily readable and comparable degrees (through the implementation of the Diploma Supplement) in order to promote European citizens' employability and the international competitiveness of the European higher education system;
- Adoption of a system essentially based on two main cycles, undergraduate and graduate (the access to the second cycle shall require successful completion of first cycle studies, lasting at least three years). The degree awarded after the first cycle shall be relevant to the European labour market and should lead to the master and/or doctorate degree;
- Establishment of a system of credits – ECTS system – as a proper means of promoting student mobility. Credits could also be acquired in non-higher education contexts, including lifelong learning, provided they are recognised by receiving Universities concerned;
- Promotion of mobility of students (access to study and training opportunities and to related services) and for teachers, researchers, and administrative staff (recognition and valorisation of periods spent in a European context researching, teaching, and training, without prejudicing their statutory rights).
- Promotion of European co-operation in quality assurance with a view to developing comparable criteria and methodologies (development of quality assurance system; key elements of evaluation systems; implementation of ENQA (European Network for Quality Assurance in Higher Education) guidelines; development of external QA (Quality Assurance) system; Level of participation of students; Level of international collaboration);
- Promotion of the necessary European dimensions in HE, particularly with regards to curricular development, interinstitutional co-operation, mobility schemes and integrated programmes of study, training, and research.

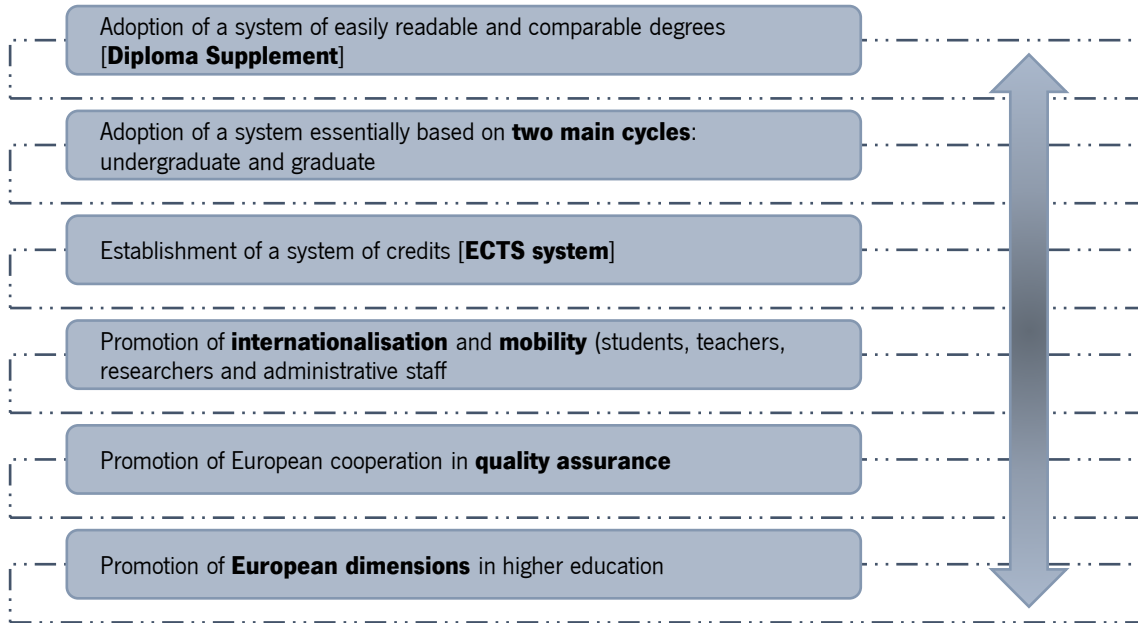


Figure 10: Bologna goals (Adapted from Fernandes, 2020)

As the national implementation of the Bologna process required a revision of national legal frameworks, the HE systems of signatory countries became closer to the European guidelines and the OECD recommendations. In fact, the Europeanisation of national administrations extended to HE, making the Bologna process the visible face of the internationalisation of the sector. This was also possible through the development of institutions at the European level, with some degree of coordination and coherence among them, such as quality agencies created alongside the consolidation of the EHEA (Diogo, 2020). A large number of studies dealing with HE transformations focus on the “Europeanisation of HE institutions” and systems (Dakowska, 2015).

The Bologna process has played a key role in stoking national HE reforms, including the governance structures of Higher Education Institutions (HEI) (Diogo, 2020). In Portugal, implementing the Bologna process (BP) coincided with higher education institutions’ governance and management reform enacted by Decree-Law 62/2007 (RJIES), which stipulates the new legal framework for HEI (Diogo, 2020). The discourse oriented towards the promotion of quality, prestige, and excellence in HE was intensified with the implementation of BP that pressured many institutions with few resources to reform their practices. Aside from passionate discussions that divided teachers about the advantages and disadvantages of the proposed changes, BP was coated with great complexity. Veiga and Amaral (2009) point out several reasons that account for such complexity: the existence of a dual system (polytechnic and university) with different purposes established in the Education System Act-Law (46/1986) that should have been

changed; the pressure of the polytechnics that wanted to take advantage and equalise with universities and the unpreparedness of teachers regarding a student based educational paradigm. Nevertheless, the dual system prevailed. Act Law 49/2005 conferred polytechnics the possibility of creating second cycle studies (Masters) but reserved the third cycle (PhD) to universities.

However, a governmental Decree Law of 2006 established the new Bologna structure. The possibility of academic degrees being conferred by HEI followed the certification of quality of what they teach. In each HEI there are two ways of guaranteeing quality of teaching: an internal quality assurance system for teaching and an external evaluation processes for accreditation of the programmes. The internal quality assurance systems of education must meet the requirements of Decree-Law 38/2007 regarding the obligation to periodically carry out, in each institution, self-assessment processes in which teachers and students participate. The external evaluation for accreditation of the existing programmes, which the Agency for Assessment and Accreditation of Higher Education (A3ES) is responsible for, according to Law 38/2007 (Bahia et al., 2017). In sum, Portuguese institutions have been obliged to define lines of action based on the priorities established by national and international authorities on education, aiming at quality and excellence, and have thus been confronted with an economic logic, aggravated by the economic crisis which has generated tensions difficult to resolve that are intensely and emotionally experienced by teachers, especially in less elite institutions (Bahia et al., 2017).

The training provided by the Portuguese HEI adopted the European credit system. Portuguese HE has a structure based on four cycles: a short cycle of study (not contemplated in Figure 10, as it does not confer any academic degree), with 120 ECTS, two-year duration and confer a diploma of professional superior technician, and three study cycles leading to the academic degrees of Graduation, Master, and Doctor (cf. Figure 11).

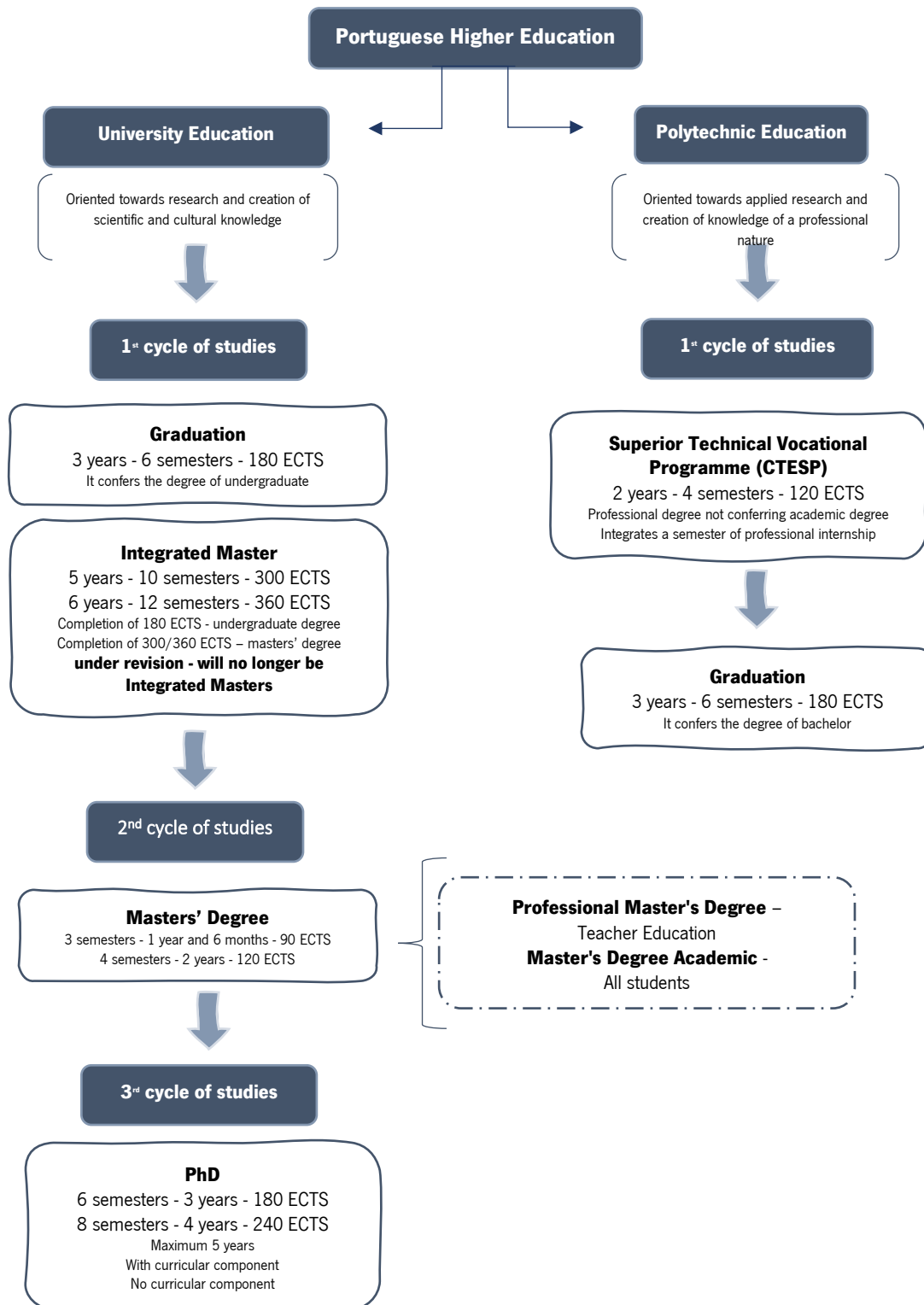


Figure 11: Portuguese Higher Education Organisation (Source: Author)

Recently, the Decree-Law 157/2018 of August 30 changed the legal regime for HE degrees and diplomas in an attempt to promote quality, internationalisation, and international recognition of the Portuguese higher education system. The end of integrated master's degrees in most programmes is expected, with a particular impact on the Engineering and Technology Sciences. The integrated master was a specificity

of the Portuguese context in the implementation of the Bologna process, being restricted, after the transitional period, to the areas internationally recommended in this regard, e.g., Medicine. This legislative change also provides the maintenance of the tuition fees when the combination of the degree of undergraduate and master is indispensable for access to the exercise of a professional activity.

In the case of the implementation of the Bologna process in Poland, it has been shaped by two parallel processes since 1989: a far-reaching privatisation of its HE sector and a gradual Europeanisation (Dakowska, 2015). After the fall of the communist regime, the Polish HE system underwent transformations that were in many respects similar to those of other countries from the region. These changes consisted in giving back a large degree of autonomy to the universities while opening them up to the market economy (Dakowska, 2015). Crucial changes were initiated in 1999, when a major reform was carried out, involving profound changes in the school structure, curricula, grading system, and requirements towards students, but also the system of teachers' professional development and promotion. The initiative for that reform derived from a combination of a number of significant social, economic, and political changes: the first and most important of these was the transformation of the Polish political system, which began in 1989. Legislative solutions introduced during that period enabled the creating of the first non-public/non-governmental (private) schools and universities. At the same time, they exposed the weaknesses of the Polish education system and its extreme subservience to the short-term political interests of consecutive Governments (Zdybel, Bogucki, & Głodzik, 2011). A national debate on the quality of education system in Poland, which was then initiated, could not be separated from reflecting on the state of the teacher's trade and the question of whether teachers were prepared to work in the Europe of the day; Another important reason for introducing these reforms was the acceptance of the Bologna Declaration by Poland and the process of adjusting HE to the developing such methods of cooperation between academic circles in Europe that would account for the differentiation and autonomy of particular countries and schools (Kraśniewski 2004).

In this way, Polish HE was included in the trend of thorough structural and content reforms, a process which has not yet ended (Zdybel, Bogucki, & Głodzik, 2011). However, the reforms of HE in Poland have been a paradoxical process in several regards. While the expansion of the private HE sector, concomitant with the post-communist transition, has been notable, the state regardless still plays an important role in HE management. Moreover, the opening up of the HE sector to market mechanisms, undertaken after 1989, was not limited to the creation of private HE institutions (HEI), which started competing with more traditional public establishments. On the contrary, public universities themselves have been strongly

affected by the lure of money. The expansion of the private sector by opening for-profit programmes, diplomas and subsidiaries had an exponential growth (Dakowska, 2015).

The legal basis to the transformations of the Polish tertiary education was provided by the Higher Education Act of 12 September 1990. The successive reforms of the Polish HE system redefined the role of the state without limiting it radically. While the opening up of the sector to market mechanisms has led to the emergence of a large private sector, the state nevertheless has retained much of its prerogatives in designing standard curricula of teaching, throughout the 1990s and until the 2011 reform. While with the 2011 Act universities have gained more autonomy in defining their curricula, the ministry attempts to steer HEI through the keywords of quality and competitiveness (Dakowska, 2015). The Bologna process has triggered a rethinking of teaching methods and of the student– teacher relationship. However, in spite of the changes affecting the academic profession, some structural patterns such as the dominantly local recruitment of academic teachers continue to be observed. The competitive financing of research projects appears to benefit research centres and departments that were already dominant at the national level. Overall, European recommendations have fuelled governmental policies and were translated according to their reform ambitions (Dakowska, 2015).

In order to produce a sensible description of teacher education in Poland, the most crucial Parliamentary Acts for the organisation of this area of education were stand out: The Law of 17 July 1998 on Student Loans and Credits (with new amendments); Law of 14 March 2003 on Academic Degrees and Titles and on Degrees and Titles in the Area of the Arts; Law of 8 October 2004 on Research Financing Rules; and Law of 27 July 2005 – Higher Education Law.

Since academic year 2007/2008 Polish HE system has been divided into three stages, which are: Bachelor's (licencjat, inżynier), Master's (Magister) and Doctor (Doktor) (cf. Figure 12). This system applies to all fields of education except Law, Pharmaceutical Studies, Psychology, Veterinary Medicine, Medicine, and Dentistry, which are still based on the two-phase system (Master and Doctor). It is worth noting that according to the Regulation of the Minister of Science and Higher Education of 25 July 2019 on the standard of education preparing for the teaching profession (Warsaw, 2 August 2019, item 1450) the unified 5 years study has been introduced for teachers who are supposed to work in kindergartens and primary schools, the first level (grades 1-3).

Doctoral studies (PhD)

3rd cycle

3 or 4 years

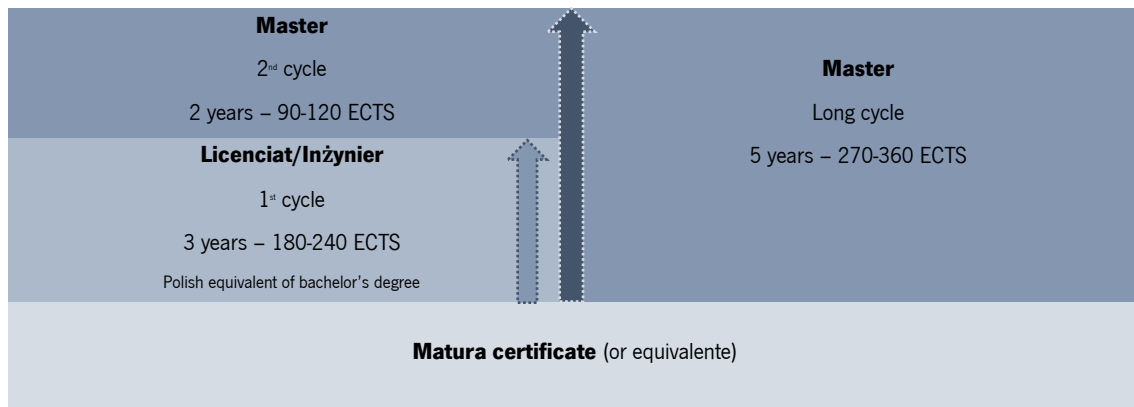


Figure 12: Polish Higher Education Organisation (Source: Author)

The Bologna process and the spread of new public management as convergent processes which increasingly subject HEI and systems to competitive visions of governance (Dobbins et al., 2011). The idea of competition is very sponsored by the European Commission (and other international organisations such as the OECD) through financial and logistical resources and economic expertise (Schmidt-Wellenburg, 2017) to gain legitimacy, sympathy, and freedom of manoeuvre to introduce a “neoliberal modernisation” agenda in the higher education systems (Diogo, 2020).

The Bologna process brings about a paradigm shift and profound changes in how HE teaching and learning process it's seen. The shift from teaching to learning involves core issues as the quality of the learning environment and teaching quality. Despite the acknowledged advances, some barriers to the quality of teaching are still identified, namely the overfocus on research that may “overshadowed the core value and seminal importance of teaching” (European Commission, 2013, p. 22). The European Commission (2013) also suggests the promotion of innovative teaching and learning methodologies and pedagogical approaches; guidance, counselling and coaching methods; improved programme design, taking account of the latest research on human learning; the professionalisation and development of teachers, trainers and staff; mobility and exchanges of academic staff for long term teaching assignments; and, systematic and regular data collection on issues affecting the quality of teaching and learning (Fernandes, 2020). Thereby, the teaching and learning process in HE can be seen as a “shared process, with responsibilities on both student and teacher to contribute to their success” (European Commission, 2013, p. 18). The importance of student-centred learning and learning-outcomes based learning gained enormous relevance because student-centred learning is a key feature of quality assurance processes.

Since the beginning of the BP, major progress has already been made at the role of students and teachers and learning environment to accomplish the student-centred learning (Fernandes, 2020). The EHEA 2020 targets identified the realisation of strategies for student-centred learning in all Bologna countries as well

as the implementation of curricula based on students' learning outcomes. Achieving this goal requires an effort from higher education institutions (staff and management) and the involvement of students in programme design, in line with institutional governance and quality assurance agencies. Then, in Figure 13, the general principles of the student-centred learning are presented.

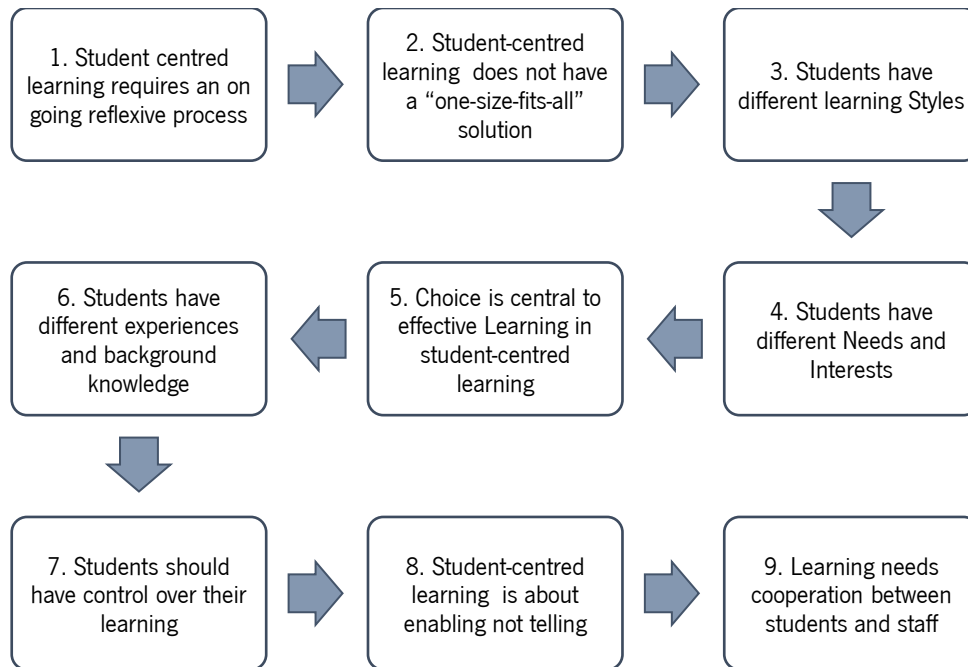


Figure 13: General principles of the student-centred learning (adapted from European Students' Union – ESU, 2015)

2.3. Initial Teacher Education in Portugal and Poland after the Bologna process

Regarding the Portuguese context, in general, the research pre-Bologna pointed out several difficulties in the way of organising and operating teacher training, which, according to Estrela et al. (2002), can be systematised in the following aspects: (i) scientific preparation of newly trained teachers (in relation to the contents to be taught, as well as the pedagogical knowledge of the content); (ii) development of skills of didactic order; (iii) prevalence of a transmissive logic of knowledge understood as a static heritage and the inherent non-initiation of students in epistemological issues in their area of knowledge or in scientific research; (iv) lack of articulation between different kinds of knowledge provided and time lags between its “acquisition” and its “use”; (v) lack of articulation between higher education and non-higher education institutions and trainers; (vi) predominantly technical view of the teacher's action in internships. In view of these reasons and the demand to adapt to the Bologna process, new policies were implemented for teacher education, approving the Legal Regime for Professional Qualification for Teaching (RJHPD).

Therefore, in Portugal, the reconfiguration of Initial Teacher Education (ITE) within the scope of Bologna process was guided by Decree-Law No. 43/2007 of 22 February 2007, which establishes the legal regime for professional qualification for teaching in pre-school education and basic education and secondary. The Decree presents relevant changes in the previous teacher education models. Among these changes, the stipulation of professional qualification, conferred by the master's degree, as a necessary condition for the exercise of teaching, which is an integral part of the teacher's initial training and no longer an undergraduate training (Alves, Silva & Silva, 2017). According to the Bologna guidelines teacher education was restructured according to three levels: first cycle of three years that confers the graduation diploma, the second cycle of two years that corresponds to the master's degree and the third cycle lasting three years to obtain a doctorate (cf. Figure 10).

Using the typology proposed by Viñao (2006), a reform was observed in two dimensions: structural and curricular. From a structural point of view, the levels, stages and/or cycles of the system were modified, as well as the requirements for accessing them, the titles or certificates issued upon completion and their academic value or effects. From the curricular point of view, a certain concept of curriculum was established, through legal and administrative means, in relation to the contents (what is taught), the methodology (how it is taught) and the evaluation (how and what is evaluated), observing a change in the training paradigms by focusing on the activity as a whole and on the skills that the student must acquire (Sousa-Pereira, Leite, & Carvalho, 2015).

The most recent legal framework (Decree-Law No. 79/2014) has further defined that the master complements the first degree by deepening the academic training focusing on subject knowledge, general educational knowledge, specific didactics, initiation to professional practice, and the cultural, social, and ethical dimensions. However, one of the most fundamental Bologna resolutions was that the initiation to professional practice happens exclusively during the practicum periods in the final semester or school year of the master's degree, during which teacher students develop pedagogic research. In fact, when the training component in educational research methodologies is distributed among the remaining components, research is neglected in curricular plans (Sousa, Lopes, & Boyd, 2021). The reduction of professional training to two years entailed substantial curricular changes and required particular attention to how practical training was introduced into the curriculum (Vieira, Flores, Silva, & Almeida, 2019). A specific formative strategy was designed in order to enact this specific requirement, based on the assumption that researching pedagogy creates powerful opportunities for student teachers to develop their epistemology of reflective practice during practicum periods (Vieira, Flores, & Almeida 2020; Pereira,

Fernandes, Braga, & Flores, 2021). The main goal was to reinforce and deepen the academic training focusing on the subject knowledge necessary for teaching (Madalińska-Michalak, Flores, & Lofstrom, 2021).

This new configuration has been seen as a drawback in relation to the “Integrated Model of Teacher Education” (Flores 2011, 2018; Flores, Vieira, & Ferreira 2014; Pereira et al., 2021). In other words, the post-Bologna model represented both new and old challenges and problems, namely the link between theory and practice and the fragmentation of the curriculum components of ITE (see Flores, 2011, 2014; Flores, Vieira, Silva, & Almeida, 2016; Vieira, Flores, Silva, & Almeida, 2019; Madalińska-Michalak, Flores, & Lofstrom, 2021). One of the great challenges within the new legal framework of the ITE was from the non-existence of a training model to the design of a training model that worked (Vieira et al., 2013), namely in regard to the lack of definition of the role of supervisors, the nature and goals of training strategies in terms of training and supervision, as far as observation was concerned, lack of connection between theory and practice and between research, training and teaching, lack of stability of university-school partnerships and lack of dialogue and inability to promote educational change (Flores, Vieira, & Ferreira 2014).

Furthermore, according to Ruivo (2015), the current ITE model presents a set of weaknesses, of which we highlight the following: the waste of training hours, with the introduction of a degree in Basic Education that ends up not granting any professional qualification for teaching; the scarcity of supervised teaching practice, which is practically concentrated in the master's degree; the replacement of integrated models by sequential models, which has consequences for the quality of training; and the fact that training schools continue to “prepare unprepared people” who do not have any follow-up and professional help device in the system, nor a consistent model of lifelong training (Sousa, Lopes, & Boyd, 2021).

Although the new configuration of preservice teacher education includes positive features such as a high qualification for all entrants into teaching (at master level) as well as the valuing of specific didactics and of professional practice, it has accentuated the curriculum fragmentation and separation between subject knowledge and educational knowledge (Flores, 2018; Vieira et al., 2019; Vieira, Flores, & Almeida, 2020; Pereira et al., 2021), thus not being fully able to overcome the theory practice divide that has long characterised teacher education (Korthagen, Loughran, & Russell, 2006; Flores, 2018; Vieira et al. 2019; Pereira et al., 2021). Leite and Ramos (2015) carried out a study on the adequacy of this model by teachers at a university in Portugal. These authors found that although teachers’ manifest adherence to the principles of Bologna process, but limits are expressed to its implementation (Alves, Silva, & Silva, 2017).

Flores, Vieira, Silva, and Almeida's study (2016), carried out a study with student teachers in training based on analysis of the data collected through a survey questionnaire, focus group interviews and reports revealing was both innovative and controversial, including tensions and challenges in regard to visions of teacher education, as well as (mis)matches between curriculum rhetoric and implementation. The authors point to the need to develop a scholarship of teacher education whereby ITE programmes are investigated and improved on the basis of negotiated understandings, particularly in regard to research and teaching nexus. This research also points to the relevance of research in developing pedagogical practice focused on the quality of teaching and learning (Vieira et al., 2013, 2019; Vieira, 2014; Flores et al., 2016). However, it also suggests the co-existence of different modes of articulating research and teaching which are associated with diverse views of teacher education and the role of research in practice and in the (re)construction of professional competences. Findings from this study also suggest that student teachers were able to mobilise various kinds of knowledge by expanding "the enactment of a praxeological epistemology" (Vieira, Flores, Silva, & Almeida, 2019). They are able to mobilise knowledge to characterise teaching contexts related to different aspects of the development of the pedagogical project, namely contextual, educational, content-related, and research-related knowledge (Flores, Vieira, Silva, & Almeida, 2016), to identify problems or concerns and to justify the focus of research. In addition, students were able to describe and justify pedagogical and research strategies and to examine own their practice (Madalińska-Michalak, Flores, & Lofstrom, 2021).

In Poland, twenty-years after Bologna Declaration, it is worth considering and highlighting successes as well as challenges in achieving the core objectives of the Bologna process. There is a need to look carefully at teacher education as a critical issue, considering the complex and changing role played by teachers in society, the demands directed to them for high quality education, and the desirability of creating a European Teacher Education Area (ENTEP/Dimitropoulos, 2008; Iucu, 2010), parallelly to EHEA (Madalińska-Michalak, 2020).

Teacher education is part of a Polish educational system, especially HE system, and it reflects the characteristics of this system. The current context for teacher education in Poland is the result of a radical reform processes, driven by repeated state interventions, which are visible in changes within the legal environment of education (Madalińska-Michalak, 2020).

Considering the reforms of education and their results, one can state that the Polish education system moved from the emphasis on the transmission of information and on vocational education and training

that prevailed under communism to an education system and aimed to equip its citizens with a more rounded education focused on the knowledge construction, development of skills and competences. An extreme reform process of the system of education driven by repeated state interventions entailed reforms in teaching and in teacher education in Poland. Teacher education was adjusted to the principles of pluralist democracy and a market economy. ITE institutions became autonomous, a decentralise curricula were adopted and changes in both methodology and content of study occurred (Madalińska-Michalak, Flores, & Lofstrom, 2021).

Following the Bologna system, teacher studies incorporate two stages, irrespective of the field which one majors in: the first-degree studies (the Bachelor level), and the second-degree studies (the Masters' level). The organisation of studies along with minimal content requirements is defined in the regulation on the standards of education in particular disciplines passed by the Ministry of National Education on 7 September 2004. These standards serve as an important factor uniting the Polish teacher education system, comparable to other European systems of this kind. The standards define five groups of subjects, which are (Dz. U. No. 207, poz. 2110, p. 14555):

- a) Major subjects – following the standards of teaching for particular fields and levels of education;
- b) Teacher-training subjects – psychology, pedagogy, subject methodology, and supplementary subjects, the range and set of which are specified independently by the university (including voice production, education law, safety regulations, first aid and teacher's liability, ethics, language culture, history and the culture of a region, art, etc.)
- c) Teaching practice;
- d) Information technology;
- e) Foreign language.

The basic common elements of that system are entry conditions for teacher training. All issues related to the conditions of enrolment to universities are defined in the Government Regulation of 27 July 2005 – the Higher Education Law – which states that a university's senate sets out entry conditions and procedure in the form of a regulation. The regulation is made publicly known no later than 31 May of the year prior to the academic year.

On 12 July 2007, the Ministry of Science and Higher Education approved a detailed list of qualifications on teacher education standards, which included a detailed description of the graduate teacher's profile, along with skills expected and the principles behind the organisation of studies. The teachers training,

regardless of the area of specialisation, should result in the acquisition of competences in the following aspects (Dz.U. No. 207, p. 14553):

- 1) Didactic – manifesting itself in the ability to conduct classes and their delivery in practice, making use of various teaching methods and learning styles;
- 2) Social – related to the ability of recognising students' needs and participating in teamwork;
- 3) creative – perceived through the capacity for self-training, being innovative, and acting in a non-conventional manner, combined with adaptation skills, mobility, and flexibility;
- 4) Praxeological – assessed on the basis of one's effectiveness at planning, implementation, organisation, control, and evaluation of educational processes;
- 5) Communicative – manifested in the effectiveness of verbal and nonverbal behaviours in educational contexts;
- 6) Media and informational – being familiar with information technology and making use of this technology in teaching particular subjects (conducting classes);
- 7) Linguistic – having a very good command of at least one foreign language.

All teacher educational institutions operate in both the public and non-public education sectors. Since 2015 ITE with the degree programmes, including first-, second- and long-cycle programs, has been provided only within university type HEIs, namely in universities, technical universities, polytechnics, and academies (Madalińska-Michalak, 2021; Madalińska-Michalak, Flores, & Lofstrom, 2022).

The legal regulations the Act on Higher Education introduced in October 2011 and the Law of Higher Education and Science from 30 August 2018 were needed to adjusting Polish HE system to the developmental challenges of current and future context of education and harmonise it with the solutions introduced in the EHEA, because according to the Ministry of Science and Higher Education increasing the quality of studies and of efficiency of the HE system and science becomes a priority (Madalińska-Michalak, 2020).

Pursuant to the regulations of the Minister of Science and Higher Education of 27 September 2018 and 25 July 2019 regarding ITE studies in the field of pre-school and early school education are conducted again as it was before 2005 - as uniform 5-year masters' studies (Madalińska-Michalak, 2021).

ITE and training standards were formulated in the Regulation of the Minister of Science and Higher Education on initial teacher training standards (2012). This legislation regulates ITE for school education

teachers, thus defining training models or paths which lead to qualifications required to practice the teaching profession. During studies, especially at the Master level, the importance of not only practice teaching but conducting research is stressed. Every student is expected to complete the diploma work based on original research and to defend the work during the final exam at university (Madalińska-Michalak, Flores, & Lofstrom, 2022). The minimum qualification for teaching at the following levels: (i) pre-primary level, (ii) primary level, and (iii) lower secondary level is a tertiary education degree at bachelor level, which lasts three years. For those intending to work at upper secondary level, the final qualification is a master's degree (Madalińska-Michalak, Flores, & Lofstrom, 2021).

An integral part of teacher-training standards are the requirements regarding the practical aspect of professional preparation. Apart from general specifications as to the minimal length of the practicum, central legislative Acts also regulate its objectives and forms. Accordingly, the general part of the teacher practicum, with regard to two teacher specialisations (the major and the supplementary), should amount to no fewer than 180 hours. These are the crucial objectives of the teacher practicum: i) getting acquainted with the organisation of a variety of institutions and schools, with special consideration given to students' prospective work places; ii) acquiring the ability of planning, conducting, and preparing class documentation; iii) acquiring the ability of observation of children's behaviour and of documenting it; iv) acquiring the ability of analysing the work of the teacher and the class during discussions with the internship supervisor and fellow students; and v) acquiring the ability of analysing one's own work and its effects, as well as the work of the pupils. The practicum should involve the following activities: visiting schools, observing classes, assisting the teacher who conducts the classes, running the classes together with the teacher, unassisted conducting of classes, planning and discussing the classes conducted on one's own and by others (teachers, fellow students). At least 30 percent of teacher practice should be devoted to unassisted conducting of classes. At least 40 percent of teaching practice should be implemented during the final year of teacher training. Additionally, at least 30 hours of the teacher practicum should be combined with psychological and pedagogical training (Zdybel, Bogucki, & Głodzik, 2011).

ITE is organised according to two models, i.e., a concurrent model and a consecutive one. The first one is a dominating model in Poland (Madalińska-Michalak, 2020). The concurrent model is a model in which the disciplinary content knowledge is taught alongside the educational and pedagogical studies throughout a long pre-service preparation period, usually lasting between three and five years. As its name indicates, the model utilises an integrated approach that combines disciplinary contents, educational

theory, research, and practice, which are taught concurrently. The spread of the practicum over a long period of time in this model is meant to improve the integration of the different components in the programme (Zuzovsky & Donitsa-Schmidt, 2017). In the consecutive model, the pedagogical studies are taught after candidates have obtained an academic degree in a specific discipline related to subjects taught in schools. The consecutive model that commences after candidates thoroughly studied the disciplinary content of their field is, therefore, less focused on the disciplinary component and is mostly devoted to general studies in education and pedagogy, with a shorter period of practical experiences. It, thus, offers less integration between theory, research, and practice (OECD, 2005). This model is often used by universities, lasts between one and two years, and awards only a teaching certificate. The consecutive model tends to recruit older and more mature candidates with varied life experiences, sometimes including parenthood, who have made a fairly late and informed decision to turn to teaching. As university graduates, they are more educated and often exhibit higher intellectual abilities, as determined by their scores in admission tests to higher education (Zuzovsky & Donitsa-Schmidt, 2017).

Reform of study programmes at universities, developed and gradually implemented from October 2019, should provide internships lasting one semester as part of three-year bachelor studies, which gives 720 hours of professional workplace training in schools. Thus, it seems likely that practical education will become an important element of ITE at universities in Poland (Madalińska-Michalak, 2020).

Teachers at schools serve as mentors for students (future teachers), support them and provide them with advice, specify topics for classes, watch over the students while they conduct classes unassisted, and help in adjusting the level of difficulty to a particular group. Students' appraisal written by teachers at the end of their practice is its important element. It takes a teacher with profound experience and knowledge (having a university degree) for this role, but the choice of such a professional rests with the head of a given school, who should consult the university teacher beforehand (Zdybel, Bogucki, & Głodzik, 2011).

According to a study carried out by Dróżka and Madalińska-Michalak (2016) the motives for profession selection generally have not changed in the last 25 years in Poland. Still the most dominant are the motives of internal nature, such as passion for work with children, vocation, interest in work at school. On further positions, but no less important, are motives connected to family traditions and the influence of the positive role models of teachers and homeroom teachers from earlier education, as well as the desire to work in a prestigious profession of high social importance. Nevertheless, the report of The Supreme Audit Office on Teacher Education in Poland highlighted a trend of negative selection for the

teaching profession in Poland since the academic year 2012/2013 (Dróżka & Madalińska-Michalak, 2019; Madalińska-Michalak, 2021).

To summarise, entry conditions for pedagogical studies in Poland are not very strict, based on the assumption that everyone has a right to study. The pedagogical potential of a particular candidate, as well as real skills and abilities acquired during studies should be verified rather by labour market than by entry conditions to the university (Zdybel, Bogucki, & Głodzik, 2011).

2.3.1. Admission in Initial Teacher Education in Portugal and Poland

As for the recruitment process of student teachers in Portugal, the mastery of Portuguese language both oral and written is required for all candidates as well as of the rules of logic and critical argumentation (Decree-Law No. 79/2014). A number of credits is also expected from the candidates to the Master' degree (usually 120 credits) on the subject knowledge. As for pre-school and first cycle of elementary schools and second cycle (primary school), student teachers have to do a first degree in Basic Education. The entry into this degree is dependent on national exams in year 12 in Mathematics and Portuguese. For the Master' degree for pre-school and first and second cycle, the candidates have to show the mastery of Portuguese language both oral and written as well as of the rules of logic and critical argumentation according to the legal framework (Madalińska-Michalak, Flores, & Lofstrom, 2022).

In Poland admission to ITE is governed by the general entrance requirements for entry to tertiary education rather than by specific selection criteria for teacher education. The main prerequisite is holding the final upper secondary examination certificate. For access to masters' programmes, the performance at bachelor level is taken into account. Alternative pathways to a teaching qualification are rare in Poland and are only available for future foreign language teachers (Madalińska-Michalak, 2021). They have been introduced because of the shortage of qualified foreign language teachers and an urgent need for their recruitment. In order to become a language teacher, in this way, it is necessary to obtain a certificate confirming language skills at "proficient" or "advanced" levels as well as a certificate in foreign language teaching awarded upon completion of a non-degree postgraduate program or a qualification programme. The admission to ITE generally do not include in the recruitment process such skills or competences of the candidate as interpersonal competences, previous work with children in the form of volunteering (e.g., in a scout team or an artistic or tourist group) or acquired competences by the candidate in the after-school system or in the process of self-education. The lack of specific recruitment criteria for prospective teachers and no monitoring of the suitability of candidates for the teaching profession during education are two the main

concerns of current policy reforms linked with Teacher Education in Poland (Madalińska-Michalak, 2021; Madalińska-Michalak, Flores, & Lofstrom, 2021).

2.3.2. Challenges to Initial Teacher Education in Portugal and Poland

In Portugal, according to Madalińska-Michalak, Flores, & Lofstrom (2021, p. 33) teacher education evolved a great deal over the last decades and teaching is now also a high qualified profession (master level for all sectors of teaching). However, teaching has a low socio-economic status, and it is not as attractive as it used to be in the past. There has been a significant reduction of the number of student teachers. The ageing of the teaching workforce and the lack of social valorisation of the teaching profession are also two key features characterizing the Portuguese context. As such three main challenges deserve further attention:

1. It is necessary to make the teaching profession more attractive both in material and symbolic terms which may include issues of salary and working conditions but also discourses of valorisation of the work of teachers and trust;
2. There is a need to revisit the recruitment process of teachers. The old model is obsolete and does not respond to the challenges and needs of schools and of teachers;
3. The development of an effective induction program is also a priority. This would enable the placement of new teachers in schools and will ensure the collaboration between new and experienced teachers as well as the assurance of quality in the recruitment process.

Research findings related to ITE in the post-Bologna context in Portugal suggest the importance of the practicum as a key component of the curriculum of ITE for developing professional knowledge and competencies. However, critical issues were also identified, such as the length of practicum, the quality of supervision, the support received and the articulation amongst the different components of the curriculum (Flores 2014, 2018).

In Poland the teaching profession is highly valued in society, but teachers are not satisfied with their socio-economic status. Teaching is a very popular study choice, and motives entering the teaching as a career are mainly motives of internal nature. However, the candidates for teachers seem sometimes to be not well oriented in the reality of teacher's work and its conditions. The new phenomenon – ageing of the teaching workforce is one of the key features characterising the Polish context. The analysis of the current situation of teachers and their education in the context of recruiting and educating the best teachers

allows to formulate some recommendations, regarding educational policies. In order to develop teaching as highly quality profession there is a need to (Madalińska-Michalak, Flores, & Lofstrom, 2021, p. 34):

1. Make teaching a more attractive and rewarding profession by investing in education, teacher education and teachers working conditions (for example, teachers' salaries);
2. Reinforcing the socio-professional position of a teacher – perceived as an actor on the educational stage, treated as a specific asset in education – is indispensable if we want to seriously discuss the quality of education in Poland;
3. Revisit the process for selecting candidates for teachers at the teacher education programs at universities. The current solutions do not respond to the challenges and needs of schools and teachers. The specific recruitment criteria for prospective teachers and monitoring of the suitability of candidates for the teaching profession during education should be introduced;
4. Pay attention to the further development of satisfying induction and mentoring programs in order to increase the quality of teachers and their teaching through intergenerational learning, the collaboration between new and experienced teachers, and among teachers in the teachers' team;
5. Already in a high school, some kind of dependable, expert knowledge about the teacher and educator profession, about the culture of these occupations, their ethos and practice of these professions should be introduced in a specific form of professional pre-orientation;
6. During the studies, already at the first year, an introduction into the reality of teaching as a profession should be done, which should be expanded on consecutive levels of studies: the master's degree and the doctoral degree;
7. The studies programme should include more content representing economics and culture of the social and political transformations, and cultural period that we live in today. This would help the prospective teachers to deepen their awareness of the times and the world in which they live and work as teachers and as homeroom teachers. Thoughtfulness demanded today assumes critical knowledge of a person's self, his/her motives, and desires in permanent confrontation with variable external, local, and global conditions.

2.4. Initial Teacher Education: key topics in international literature

Initial teacher education is an intensive experience that requires student teachers to be both learners and teachers simultaneously – being supported in learning how to teach and supporting pupils in how to learn. It is intellectually demanding as it requires analysing, questioning and reviewing ideas in the context

of practice. It involves the whole person - attitudes, beliefs, and emotions. The first and foremost resources teachers use are themselves; their personal characteristics can be catalysts for their own and others' learning, as much as their knowledge and competences (Caena, 2014). The need is not only about subject knowledge, but also a wide range of skills and attitudes – communication and collaboration skills, the ability to solve problems and make decisions, creativity, critical thinking, and positive attitudes towards learning. These are competences which teachers and teacher educators themselves need to master, as models for their students (OECD, 2011; Caena, 2014).

Across different cultures and school systems, there seems to be agreement on some core competence requirements (see Figure 14) that all teachers need (European Commission, 2013):

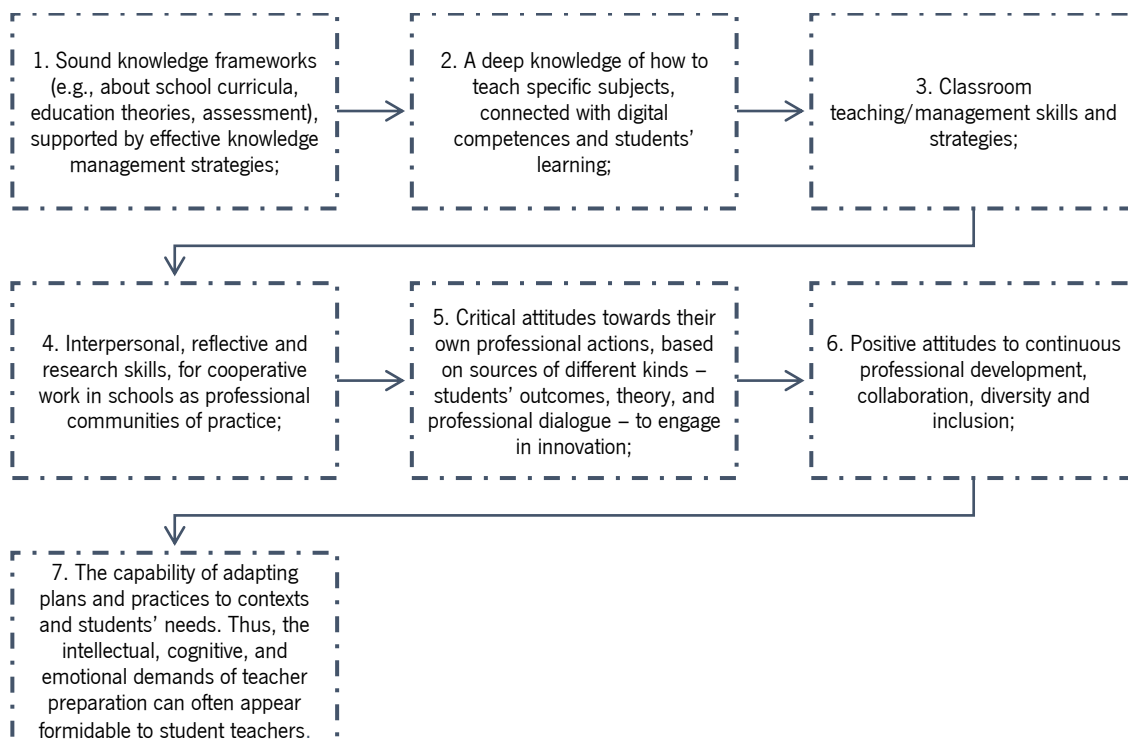


Figure 14: Core competence requirements (Adapted from European Commission, 2013)

ITE has been the subject of sustained reform and debate over the last decade. It is often defined as complex, as it poses a number of challenges for policymakers and providers – within each country (Caena, 2014, p. 4):

1. The fragmentation of responsibilities for ITE, induction and continuum professional development hinders the development of a long-term system strategy and implementation policy;

2. Related employment and job market issues – teacher supply and demand, broader economic issues, employment conditions, standards, and access to the profession – can affect ITE priorities;
3. The selection of teacher candidates is influenced by other policy strands (school/higher education; teacher status and recruitment);
4. There can be specific national requirements for ITE, but also varying degrees of autonomy granted to ITE providers across countries;
5. Diversity of regulations and priorities about education, governance, teaching and teacher development – within and between countries – are reflected in the content and delivery of ITE;
6. This wide heterogeneity in ITE programmes within a Member State can hamper professional quality and mobility;
7. There are organisational issues of coordination, communication, and consistency in ITE, across different contexts and teacher educators – schools and universities, presence, and virtual environments;
8. There is the challenge of integrating subject knowledge, teaching practice and interdisciplinary aspects in ITE curricula;
9. Quality assurance is key to ensure that an ITE programme is delivered according to stated objectives, actually meets teacher learning needs and yields expected results;
10. Clear-cut structures and roles for monitoring ITE programmes are needed, within a shared quality framework (about consistent aims, outcomes, and assessment - e.g., threshold competence levels of teacher candidates) (Menter et al. 2010; Zgaga 2013).

These demands cannot be met simply by “learning the tricks of the trade” in a working context. Teacher education cannot be boiled down to a short, intensive immersion in a school setting where future teachers, like apprentices, are placed to observe, imitate, and acquire the “craft of teaching” of expert practitioners (Korthagen et al., 2006).

ITE was influenced by international developments such as the Education & Training 2020 strategies and the EHEA (Biesta 2012). Becoming “universitised” and increasingly master-level, teacher education has been affected by the changes affecting universities across Europe, following the Bologna process. However, there have been challenges for teacher education arising from the implementation of the EHEA, with diverse national interpretations. This is due to the frequent mismatch between national teacher qualifications and general higher education requirements. There can also be quality assurance issues in

teacher education, characterised by the competing pressures of international influences, university autonomy and state control. Student mobility in European teacher education is another major issue: it lags far behind other study areas, due to national obstacles of time frames and regulations (Zgaga, 2013; Caena, 2014).

Globalisation and internationalisation are two prominent features influencing teacher education. ITE has been discussed from a wide range of perspectives, focusing on its structure and curriculum, on field experiences and coursework and the interplay between them, as well as on the learning experiences of student teachers (Darling-Hammond, Newton, & Wei, 2010; Flores, 2016; Flores, 2017).

A look at international reveals a number of restructuring processes in ITE taking place in different countries (Day, 1999; Flores, 2011; Imig, Wiseman, & Imig, 2011; Goodwin, 2012; Hammerness, van Tartwijk, & Snoek, 2012; Mayer, Pecheone, & Merino, 2012; Darling-Hammond, 2012; Ellis & McNicholl, 2015; Valeeva & Gafurov, 2017). An analysis of this literature suggests that teaching practice in ITE varies not only in terms of location in the different programmes and its length but also in regard to its philosophy, aims and assessment methods (Flores et al., 2016). Thus, it is possible to identify different practices in ITE curriculum internationally and diverse ways of articulating them with other components of the programmes (Flores, 2017).

In recent years, the issue of teaching quality and teacher education has attracted the attention of many researchers all over the world (Flores, 2011; Childs & Menter, 2013; Donitsa- Schmidt & Weinberger, 2014; Woolhouse & Cochrane, 2015; Brante et al., 2015; Friese, 2016; Maschke & Stecher, 2016; Valeeva & Gafurov, 2017). Linking theory and practice in ITE is of great importance internationally (Korthagen, Loughran, & Russell, 2006; Van Nuland, 2011; Flores, 2016; Valeeva & Gafurov, 2017). It is one of the major issues in ITE, but at the same time it is noted in international research that disconnection exists between theory and practice (Flores, 2016). Although practicum is recognised as a core element in ITE curriculum, there is no consensus about its goals, strategies and required competences (Flores, 2016). Meanwhile it is necessary to support classroom practice and research in the curriculum (Valeeva & Gafurov, 2017).

Several aspects related to ITE are discussed internationally. For example, Tang (2002) points out that student teachers are active agents making evaluative judgements on the more theoretical forms of knowledge learnt in HE. Evans (2010) identified teacher education graduates' strong focus on the classroom and their belief that only experience can truly prepare them for teaching. Wæge and

Haugaløkken's (2013) study shows the importance of the direct relevance of theory to daily tasks in the classroom (Tang, Wong, & Cheng, 2016). While these studies show the tendency to privilege practice over theory, in the study developed by Allen and Wright (2014), in a master's programme in postgraduate teaching, student teachers widely valued the theoretical components and practical in their programme. Taken together, these studies are important for understanding the subjective experiences of student teachers and assessing the value of different aspects of ITE (Tang, Wong, & Cheng, 2016).

The theory-practice debate has been a perennial issue in the field of teacher education (Shulman, 1998; Kessels & Korthagen, 1996; Korthagen, 2010). The issue has been analysed in the structural arrangement of ITE programmes. Hennissen, Beckers, and Moerkerke (2017) identify two major approaches of ITE programme structure regarding the theory-practice relationship: (1) a deductive (theory-first) approach which begins with theory and focuses on how to use theory in practice and (2) an inductive (practice-first) approach which starts with practice experiences and the need to link them to theory (Tang et al., 2019).

Research that examines student teachers' perspective suggests that they tend to prioritise practice over the more theoretical aspects of ITE (Hobson et al., 2008; Tang, Wong, & Cheng, 2012; Mayer et al., 2015) and judge the value of theory with respect to direct relevance to daily tasks in the classroom (Wæge & Haugaløkken, 2013; Tang et al., 2019). The emphasis on theory and the disconnection of university programmes from the real world of schools has been referred to in number of studies (Ebby, 2000; Flores, 2001, 2006; Formosinho, 2009). In Brazil, Marcondes, Leite and Ramos (2017) highlighted the concern in policy documents in regard to the articulation between theory and practice, research, and reflection. Sancho-Gil, Sánchez-Valero and Domingo-Coscolla (2017) looked at the development of teacher education in Spain and conclude that preservice teacher education has shifted from a rather traditional, craft-oriented model towards more academic and professional one. Nevertheless, the same authors stressed the prevalence of transmission-oriented methods and the distance between teaching and learning experiences at university and in schools. In the same way, Snoek, Bekebrede, Hanna, Creton, and Edze (2017), in Netherlands, showed the need to move beyond the individual level and to consider graduation research as a contribution for improving school practice as a collective endeavour. Flores (2017), in a recent special issue of the *European Journal of Teacher Education*, drawn attention the clear variations across preservice teacher education programmes internationally in terms of the research dimension and its connection (or lack of it) with theory and practice. It was argued for more explicit and coherent connection between practice, theory, and research in this field if it is to be seen as

a space of transformation. Because preservice teacher education is a key element to change in education (Vieira, Flores, Silva, & Almeida, 2019). However, change is a complex process, it requires time, energy, and commitment from the part of the various stakeholders (Vieira et al., 2019).

The implementation of research in ITE has been internationally identified as a key element in its development and improvement (Niemi & Nevgi, 2014; Munthe & Rogne, 2015; Flores, 2016). Flores (2016, p. 212) notes that “in some cases it is non-existent; in other cases, it is not explicit in the curriculum, but it is up to the training institutions to foster the development of student teachers” research competences, for instance during practicum; and, in other cases, an explicit curriculum unit on research methods is included in the curriculum as well as an inquiry approach to the practicum (Valeeva & Gafurov, 2017). Thus, it is essential that student teachers develop deep understandings about teaching and learning by investigating their own practice as learning to be a teacher is a complex, contextual and idiosyncratic process (Flores, 2001, 2006, 2019). As Cain (2016) suggests, teachers look at research in different ways not only in terms of attitudes but also in terms of the practical uses of it. For instance, Ion and Iucu (2016) found that postgraduate studies provide teachers with an opportunity to link research conducted by faculties of education and their own work in schools. This authors suggested the need to develop research projects involving both researchers and teachers as well as reading about research as examples of strategies that might facilitate research utilisation in practice.

The link between theory, practice, and research in ITE has been widely discussed in international literature (e.g., van Nuland, 2011; Flores, 2017; Valeeva & Gafurov, 2017; Marcondes, Leite, & Ramos, 2017; Sancho-Gil, Sánchez-Valero, & Domingo-Coscolla, 2017; Snoek et al., 2017). However, more needs to be done to foster these components in existing teacher education programmes. In general, there has been a growing recognition of the importance of the use of research to inform practice and to enhance teacher professionalism. In this context, the need to foster and sustain knowledge mobilisation and generation has been advocated through, for instance, developing an inquiry approach in ITE and to integrate research into practicum (e.g., Qvortrup 2016; Flores et al. 2016; Flores, 2018).

2.4.1. The process of becoming a teacher

“Learning to teach is a process that goes beyond the mere application of a set of acquired techniques and skills. Not only does it imply the mastery of practical and more technical issues, but it also encompasses the construction of knowledge and meaning in an ongoing dialogue with the practice.” (Flores, 2001, p. 146).

Learning to be a teacher has been described as a complex, dynamic, contextual, evolutive, and idiosyncratic process (Pacheco & Flores, 1999; Flores, 2001, 2006; Feiman-Nemser, 2012; Flores, 2019a). Existing literature points to the complex and ongoing nature of the process of becoming a teacher, which relates not only to issues pertaining to the content and form of teacher education programmes, but also to motivational, contextual, and professional aspects (Flores, 2006; Feiman-Nemser, 2012). It entails a diversity of learning contexts (Livingston & Shiach, 2010) and activities (for instance university course work and field work) and it is dependent on a wide array of factors such as opportunities for developing professional knowledge, support, facilitation of different forms of reflection, classroom observation and modelling by teacher educators (Flores, 2019a).

Maynard and Furlong (1994) reinforcing its complexity and multifaceted nature, they describe learning to teach as a process that includes the development of basic practical knowledge and interpersonal skills, changes in cognition, as well as aspects of an affective nature (Pacheco & Flores, 1999).

As Calderhead and Shorrock (1997, p. 2) underlined: "learning to teach presupposes the acquisition of certain knowledge and skills, but it is also a matter of individuality and personal expression; it is a subjectively focused process, but teachers' actions are conditioned by a specific institutional context to which they have to adapt, facing a complex phenomenon that must be understood in a given social, cultural and institutional framework."

Kember's (1997) "conceptual change" category that was identified more generally across higher education teaching and learning. The conception of a student teacher as teacher and a learner has imply the idea of student teachers being involved in both "learning to teach" and "teaching to learn" (Loughran, 2006). However, this leaves a key challenge for teacher education programmes of building links between formal taught sessions and the workplace learning gained through teaching practice. In same way, Taylor (2008) investigated conceptions of "learning to teach" held by student teachers, university-based teacher educators, and school-based teacher mentors, within a UK university-school partnership. To some extent the study aligned the conceptions held with those identified in previous phenomenographic research across a range of higher education students and lecturers (Kember, 1997). The author analysis of questionnaire and interview data identifies four ways of understanding "learning to teach" but arguably the most sophisticated conception identified went beyond transmission and apprenticeship to consider the "student as teacher and learner". This conception of learning to teach "focuses in a holistic way on student learning" and is about "enabling students to think critically and originally, question existing practices and explore new principle" (Taylor, 2008, p. 78; Boyd, 2014).

For the process of learning to teach, four procedural components stand out: metacognition, discontinuity, individualisation, and socialisation. The metacognitive process involves complex changes of a cognitive, affective, and behavioural nature recorded along a training path defined by Calderhead (1988). Discontinuity concerns the evolutionary process with distinct phases and impacts, in which the starting point is the experience acquired as a student and the point of arrival is the experience as a teacher. Individualisation comes from beliefs, attitudes, previous experiences, motivations, and expectations that depend on each teacher. It is a very personal process, little problematic, identifying the act of teaching as a matter of personality, with the valorisation of vocation and intuition rather than a matter of training. Lastly, the socialisation which results from a bureaucratic socialisation (at the level of school and administrative structures) and a didactic socialisation (at the level of the classroom that leads to practical knowledge (Pacheco & Flores, 1999).

Future teachers have a set of beliefs and ideas about teaching and what it means to be a teacher that they have internalised throughout their school career. Contrary to other future professionals, when they enter an initial training programme, student's future teacher already know the context in which they will work in schools and classrooms. Prolonged contact with the future profession, through observation of their teachers, will affect, to a greater or lesser degree, their understanding and teaching practice, both as student candidates for teacher and as beginning teachers (Flores, 2010).

An important and inseparable aspect of the teaching profession has to do with the value of emotions in the teacher's work and, in this context, some research has shown that emotions are inherent to teaching (Hargreaves, 1998, Nias, 1999; Day & Leitch, 2001; van Veen & Lasky, 2005; Zembylas & Barker, 2007; Day & Gu, 2009, 2010; Cooper, 2011; Corcoran & Tormey, 2012; Madalińska-Michalak & Goralska, 2012; Mortiboys, 2012; Goroshit & Hen, 2014). Some have argued that emotions are at the epicentre of teachers' work and that good teaching requires the emotional capacity to manage various personal, work-related, and external policy challenges (Day & Qu, 2010). An analysis related with emotion in teaching began following the empirical work on the importance of having a caring, moral teacher in the classroom (Noddings, 1992). Research suggests that teachers need to understand the emotional practice of their job in order to create a suitable environment for students' learning, interact positively with students, and build authentic teacher-student relationships (Hargreaves, 1998; Madalińska-Michalak & Goralska, 2012; Madalińska-Michalak, 2015). Teaching encompasses more than an instructional focus, and an understanding of the emotional component of teaching, especially in connection with teacher-student relationships, seems vital.

Unlike many other professions, teachers “bring their feelings into school or college with them and have to learn to take this into account in their dealings with others” (Nias, 1999, p. 14), teachers are not sufficiently supported or trained in how to handle emotional interactions within the workplace (Nias, 1999; Corcoran & Tormey, 2012). Despite this central role of the emotions in teaching, only very limited attention has been given to the emotional education for teachers and what teachers think about the necessity of such education throughout their teaching careers (Madalińska-Michalak, 2015).

According to Hargreaves (2001, p. 1057), “a tactful, caring, or passionate teacher is treated largely as a matter of personal disposition, moral commitment, or private virtue”, but in fact, these characteristics have to be an integral part of the teacher's daily practice. This is because, like nursing or social assistant, teaching is also recognised as a caring profession (Hargreaves & Goodson, 1996). Not only does common language encourage to construe caring as a virtue; traditional philosophy does also. The major moral orientations have long been described as deontological (duty-based), teleological (consequence-based), or virtue-based. In fact, is important to recognise that the word “caring” is regularly used to refer to a virtue. When establishing what it means for a relation to be properly called caring, it is possible to say that a “caring teacher” is one who quite regularly establishes caring relations over a broad range of individuals, groups, and situations. Thus, there is clearly a form of competence involved here, and such teachers must possess a set of qualities that it is rightly called virtues or excellences (Noddings, 1999).

In this way, Saarni (1999, p. 2) defined emotional competence saying that “entails resilience and self-efficacy (and self-efficacy includes acting with one’s sense of moral character)”. The same author claims that when a person is emotionally competent will demonstrate self-efficacy in emotion-eliciting transactions, which are social in nature. Also, the feeling of one’s own self-efficacy performs the key role in explaining the development of the emotional competence. Emotional competence is the knowledge and skills that an individual has learnt in order to be able to function in a way suited to different situations. It depends on the skill of functioning in social situations to “switch on” the emotions in such a way that will facilitate meeting specific goals. Emotional competence not only constitutes the efficiency of acting, but it is also a potential that is a condition for active and creative participation in a culture. It is an ability of individual reflection and social negotiation. Being emotionally competent, means being an active and creative person, who actively participates in the occurring processes of social changes (Madalińska-Michalak, 2015), distinguishing eight components of the emotional competence shown in the Figure 15.

Emotional competence components	1. Awareness of one's own emotions
	2. Ability to discern and understand other's emotions
	3. Ability to use the vocabulary of emotion and expression
	4. Capacity for empathic involvement
	5. Ability to differentiate subjective emotional experience from external emotion expression
	6. Adaptive coping with aversive emotions and distressing circumstances
	7. Awareness of emotional communication within relationships
	8. Capacity for emotional self-efficacy

Figure 15: Emotional competence components (Saarni, 1999, pp. 8-9)

Emotional competence (different skills) depends on the process of one's development and his or her education, which has an enormous value in the discussions on teacher education and teacher professional development (Madalińska-Michalak, 2015).

Hence, the broader research includes a sub-study sought to integrate training programmes for future teachers and nurses, as they are similar in terms of professional characteristics despite intervening in different areas, namely social sciences, and health sciences, because they are considered professions of care and/or of help by several authors (Noddings, 1992; Dubet, 2002; Hugman, 2005; Sommers-Flanagan & Sommers-Flanagan, 2007; Lopes, Boyd, Andrew, & Pereira, 2012; Pereira, Mouraz, Fernandes, Sousa, & Lopes, 2012).

Helping professions are professions of human interaction, where work is carried out on the other, so they are an important part of the world in general and the world of professions (Hugman, 2005) and are imbued with specific conditions and characteristics that pose particular challenges to future professionals and their trainers, especially in the current context in which profound social, technological and scientific changes are taking place, in society in general and in health in particular. Two features specify these professions: the relationship between professional knowledge and human development and the complex nature of professional activity multidimensional activity and human interaction (Dubet, 2002; Pereira et al., 2012).

2.5. Nursing Education

Teaching and nursing, both seen as helping or caring professions (Sommers-Flanagan & Sommers-Flanagan, 2007), have undergone an intense process of professionalisation (Lopes, 2013). Even though they are new academic disciplines, they need to respond to the exigencies of research and training that challenge more traditional disciplines (Lopes et al., 2014).

Caring is the structuring axis of nursing training, so the student must be encouraged to acquire skills, not only cognitive and technical, but also relational, which implies an interaction that is also “caring” and facilitates internalization and development. of these skills (Pereira, 2008).

In a clarification of the meaning of nursing as a helping profession, in the context of a knowledge society, and the resulting new social configurations, with a strong impetus to technological development and competitiveness, the helping professions occupy more and more prominence as they constitute forms of mediation between human beings, reconciling physical well-being, and health, emotional and psychological. In general terms, helping professions can be characterised by the relationship they establish between professional knowledge and human development and, therefore, are also understood as humanist professions (Dubet, 2002; Fernandes, 2013).

Teaching and nursing in Portugal have been through an important development process since the democratic revolution in 1974 (Pereira, 2006; Lopes & Pereira 2012). In just a few years Portugal has done what other countries have taken decades to achieve. Public Education and Health have strongly developed, and professional bodies have played an important role in this movement. Meanwhile, there are some differences between nurse and teacher education in Portugal. While nursing and nurse education is largely controlled by nurses, that is not the case with teaching and teacher education. Several kinds of professional bodies, related to curriculum subject disciplines, influence teaching and teacher education and the state is still the main source of professional decisions (Lopes et al., 2014).

The initial training, in general, and of nurses, in particular, have pointed to a closer link to the socio-constructivist paradigm that advocates training as a result of cultural production, which takes place in training contexts through interactions between trainer/trainee, deviating from thus the transmissive paradigm, centred on the acquisition of knowledge and where the trainer is the main actor. At the same time, they have consolidated the idea of the importance of training climates as a determining condition for improving the quality of training processes (Lopes et al., 2014).

In recent decades, the training climate has been considered an explanatory variable for the success of training (Kantorova, 2009). In this sense, studies on the training climate in HE have become increasingly relevant. Indeed, some studies suggest the existence of a strong relationship between the training climate, formal learning and the transfer of knowledge and skills to work contexts (Tracey & Tews, 2005; Lopes & Pereira, 2012).

Nursing education, like teacher training, has undergone major changes in recent years, essentially due to training paradigms, socio-pedagogical assumptions, and the professional context itself. Initial nursing training, although centred on the school, must be understood as an unfinished process, in order to meet the demands of “a world marked by the permanent transformation of techniques, which implies an equally permanent education” (Lapassade, cited in Costa, 1998, p. 21). Although the initial training of nurses requires the development of competences framed in the directives of the European Union, in the Statutes of the Nursing Career and of the Order of Nurses, the truth is that the new concepts of health, the evolution of health policies and the emergence of new health problems, as well as the principles set out in the Bologna Declaration, call for profound changes in the training of nurses. These changes allow us “to envision a new pedagogical paradigm that aims to qualify people for life, in the relationship with themselves, with others and with the surrounding environment” (Lima, 2010, p. 72; Pereira, 2012).

In Portugal, over time, the training of nurses was also marked by reforms and different legal milestones. With the publication of the Decree-law No 480/88, of December 23rd, 1988, the integration of the Nursing training in the Polytechnic Higher Education took place. This constitutes a fundamental milestone in the history of the Portuguese nursing because it produced the conditions for the development of the Nursing, whether as a subject or as a profession. In the two decades after that, transformations in the whole HE of the country took place, more particularly in the nursing teaching. Thus, a period of adequacy to the demands arising from the insertion of the programme into the HE came after another one that brought deep transformations with the beginning of the implementation of the Bologna process. It aimed at promoting a generalised harmonisation of educational structures (Santos, 2014).

In 1998, the Order of Nurses (*Ordem dos Enfermeiros*) was founded, which is constituted as a professional association of public law and has the fundamental purpose of promoting the defence of the quality of nursing care provided to the population, as well as the development, regulation, and control of the exercise of the nursing profession, thereby ensuring the compliance with the rules of ethics and professional deontology (Santos, 2014).

Since 1999, nurses have had a four-year basic education that provides a degree equivalent to the first cycle of Bologna structure (graduation, master, and doctorate). The shift from the traditional nursing programme to a graduated degree allowed “direct” access to master's or doctorate degrees, without requiring a degree in another area of knowledge, as was the case before (Fronteira, Jesus, & Dussault, 2020).

In 2001, the Order of Nurses (2001, p. 8) defined the quality standards of nursing care and in this context states that “the professional practice of nursing focuses on the interpersonal relationship of a nurse and a person or of a nurse and a group of people (family or community)” that “have frameworks of values, beliefs and desires of individual nature – the result of the different environmental conditions in which they live and develop”. It is also expressed that “the nurse is distinguished by the training and experience that allows him to understand and respect others in a multicultural perspective, in a framework where he seeks to abstain from value judgments regarding the client of nursing care”. In 2005, Portugal started the transformations inherent in the Bologna process (Santos, 2014).

In January 2019, the 240 ECTS graduated nursing programme (8 semesters) was offered at 20 Higher Schools of Nursing or Higher Schools of Health of the public sector, and 16 of the private sector. The conditions of access are completion of the 12th grade and the fulfilment of prerequisites (e.g., national exams), which vary according to educational institution. The specialised nursing training is performed through the Postgraduate Nursing Program (CPLE), which does not grant an academic degree. In an attempt to overcome this constraint, some educational institutions have developed master's degree programmes in nursing, some with a generic title, others with a title corresponding to specialty areas. Students enrol in both the master's programme and the CPLE. In the end, those who also complete the non-teaching component of the master's degree are qualified with the specialist title, conferred by the Association of Nurses, and with a Master, granted by the educational institution. The educational institutions establish the number of spaces for each specialty and the type of specialty offered (Fronteira, Jesus, & Dussault, 2020).

A first specificity is related to the admission process there is the requirement for a medical certificate for the admission to the nursing programme, under the form of response to an individual health questionnaire, with a view to proving the ability of interpersonal communication, the lack of a mental, sensory, or motor disability that can seriously interfere with the functional ability and of communication interpersonal to the point of preventing their own learning or of other people. It can be proved through

medical declaration, delivered in the act of enrolment, in an indispensable form, and constitutes in a requirement of the General Directorate of Higher Education of the Ministry of Education and Science (Santos, 2014). Further specificity is the presence of compulsory subjects such as: Clinical Reasoning in Nursing and Prospects of development of the Nursing, which are core themes for the professionals in the scope of the nursing teaching and practice. Another compulsory discipline is Rehabilitative Nursing, which contributes to the training of nurses to care of patients undergoing rehabilitation, in the acute or chronic phase of a disease, with actions directed to favour the recovery and adaptation to the limitations imposed by the disability and to meet the needs of patients/families, such as, for example, the functional, motor, psychosocial and spiritual. The basis is focused on clinical teaching. In nursing training, this type of teaching is constituted as an important period, by enabling the student to acquire and consolidate knowledge, develop clinical competencies, in addition to being an initial space for the socialisation process and for the professional identity. Such teaching takes place in contexts selected according to the quality patterns of the school, by establishing relationships with nurses, where the actual and effective learning takes place (Santos, 2014).

The curriculum structure of the nursing programme was designed around two major components: the theoretical teaching component and the clinical teaching component. Consequently, the training of nurses takes place in two fundamental spaces – the school and the clinical/internship teaching places (hospitals and health centres) – and involves several actors: student, teaching nurse and practice nurse. Nursing training is, therefore, a space for sharing in which each actor shares with others “their projects, their concerns, the time, the setbacks, in a personal and singular journey but sharing their ideas, experiences and knowledge” (Santos, 1994).

CHAPTER III

THE RESEARCH DESIGN

Chapter III – The research design

In this chapter, a description of the research design and research processes followed during this study to address the research questions are presented and explained. The chapter describes the sampling and selection strategies, the statistical data analysis processes, and the data analysis procedures as well as ethical considerations.

3.1. Research aims

The current study aimed to add to the growing sphere of research on assessment process in teacher education programmes at universities. It also relates to discourses from European policies to create new insights into the methods and practices of assessment in teacher education and nursing programmes.

In global knowledge economies, higher education institutions are more important than ever as mediums for a wide range of cross-border relationships and continuous global flows of people, information, knowledge, technologies, products, and financial capital (Marginson & van der Wende, 2007). Education and research are key elements in the development of the global environment, being foundational to knowledge, the take-up of technologies and sustaining complex communities. Though higher education institutions often see themselves as objects of globalisation they are also its agents (Scott, 1998; Marginson & van der Wende, 2007). Coutinho (2011) rightly pointed out that:

“Research is an activity of a cognitive nature that consists of a systematic, flexible, and objective process of inquiry that contributes to explaining and understanding social phenomena. It is through research that problems born in practice are reflected and discussed, that debate is raised, and innovative ideas built.”

Research in the field of social sciences can take many different forms and be guided by different and multiple goals. In a quantitative perspective, some researchers seek to quantify and explain reality (Creswell, 1994). Some researchers focus on understanding it (Alvesson & Sandberg, 2013), and some of them try to articulate and/or integrate both perspectives through a common study (Bryman, 2006; Clark & Ivankova, 2016). The purpose and goals of research play a central role, especially in mixed methods research, as they provide a basis for integrating quantitative and qualitative methods to address a specific target (Teddlie & Tashakkori, 2009).

The review of the existing literature in the field of assessment in higher education led to realise the existing gap in the approach to this theme, namely in teacher education programme and nursing in Portugal. It

was intended to present, not only the perspective of Portuguese context, but an interesting and innovative element was introduced, which was the Polish perspective establishing comparisons and/or similarities between Portugal and Poland in initial teacher education programmes.

The research questions were formulated in order to translate the research problem and to guide the research process (Quivy & Campenhoudt, 1995). According to Bryman (2008,) the research questions guide the literature search, the data collection, the analysis of data and direct the way to follow. The research question “must have a clear social scientific angle” (Bryman, 2008, p. 70).

The main purpose of this study is to answer to the following key research questions (see Table 1). Based on the research questions and goals, more specific ones were identified and presented according to the sub-studies that integrated the broader research project (see Table 17):

- What are the students' views of assessment process in teacher education programmes in Portugal and Poland?
- How do university teachers and students look at the methods and practices of assessment in teacher education and nursing programmes?

Table 2: Specific research goals in each sub-study

MAIN PURPOSES OF THE STUDY	SUB-STUDIES	RESEARCH GOALS
<ul style="list-style-type: none"> • What are the students' views of assessment process in teacher education programmes in Portugal and Poland? 	<p>SUB-STUDY 1</p> <p>Student teachers' views of assessment in Poland and Portugal</p>	<ul style="list-style-type: none"> • To identify the most associated ideas with assessment from the point of view of Portuguese and Polish students in the teacher education programme (TEP); • To get to know the most used assessment methods in Poland and Portugal in TEP; • To understand the differences and/or similarities between Poland and Portugal regarding the ideas and methods in TEP; • To analyse the implications of approaches to assessment in Portugal and Poland.
	<p>SUB-STUDY 2</p> <p>Assessment in Higher Education: the views of the coordinators of Teacher Education Programme</p>	<ul style="list-style-type: none"> • To get to know the perceptions of TEP coordinators about teaching, learning and assessment in Poland and Portugal; • To understand the perceptions of TEP coordinators about teaching, learning and assessment in Poland and Portugal; • To identify the challenges about teaching, learning and assessment in TEP from the point of view of coordinators in Poland and Portugal; • To identify the improvements to be developed in assessment in TEP from the perspective of the coordinators in Poland and Portugal; • To understand the differences and/or similarities between Poland and Portugal about teaching, learning and assessment from the perspective of the coordinators.
	<p>SUB-STUDY 3</p> <p>Being a university teacher: views of the profession and of assessment in Higher Education</p>	<ul style="list-style-type: none"> • To get to know the key characteristics of the teacher profession in TEP and Nursing programme in a Portuguese public university; • To get to know the assessment process in TEP and Nursing programme in a Portuguese public university; • To identify the difficulties of teacher profession and of assessment in TEP and nursing programme in a Portuguese public university; • To understand the implications of the way of being and assessing in Higher Education in TEP and nursing programme in a Portuguese public university.
<ul style="list-style-type: none"> • How do university teachers and students look at the methods and practices of assessment in teacher education and nursing programmes? 	<p>SUB-STUDY 4</p> <p>Being a university student: views on teaching, learning and assessment in Higher Education</p>	<ul style="list-style-type: none"> • To get to know university students' perceptions about what it is to be a student in TEP and nursing programme in a Portuguese public university; • To understand what is perceived from students' point of view about teaching, learning and assessment process in TEP and nursing programme in a Portuguese public university; • To get to know the students' perceptions about assessment/learning relationship between in university teachers and students in TEP and nursing programme in a Portuguese public university.
	<p>SUB-STUDY 5</p> <p>Experiences of assessment during the Covid-19 pandemic: students' views</p>	<ul style="list-style-type: none"> • To get to know students' views on online learning as a result of the forced closure of the institutions during the Covid-19 pandemic in TEP and nursing programme in a Portuguese public university; • To understand students' views of online assessment during lockdown; • To get to know students' perceptions about assessment methods used by university teachers during lockdown; • To get to know students' perceptions about the means of providing feedback to during lockdown; • To get to know the experience of online teaching and learning during lockdown; • To identify the conditions for teaching and learning online during lockdown; • To understand students' perceptions about the implications of teaching, learning and assessment during lockdown; <ul style="list-style-type: none"> • To develop a peer assessment experience in a curricular unit of nursing programme in a Portuguese public university; • To understand the effects of a peer assessment experience of nursing programme in a Portuguese public university; • To understand the experience of teaching, learning, assessment and providing feedback particularly in a curricular unit of TEP; • To contribute to improving the quality of the assessment process in Higher Education, specifically in TEP and nursing programme.

(Source: Author)

As such, this study was designed to achieve the following research goals:

- To get to know the assessment process in teacher education programmes in Portugal and Poland from the point of view of university students and programme coordinators;
- To identify the assessment practices from the perspective of both Portuguese and Polish university students and coordinators in teacher education programmes;
- To get to know the university teachers' views about the profession and of assessment in a Portuguese public university in teacher education and nursing programmes;
- To get to know the university students' views on teaching, learning and assessment in a Portuguese public university in teacher education and nursing programmes;
- To understand the role of alternative methods of assessment play in teacher education in Portugal and Poland;
- To understand the role of alternative methods of assessment play in nursing programmes in Portugal.

3.2. Research design

A mixed method approach guides this project combining diversity of methods and techniques, moments for data collection and sources (Flores, 2003; Fernandes, 2020). It addresses the views of university students, teachers, and programme coordinators on teaching, learning and assessment process in general. As such, a research design was defined in order to understand the dynamic nature of aspects from the perspective of different stakeholders comparing both Portugal and Poland and presenting a general point of view about assessment methods and practices. The focus also goes to a Portuguese public university in relation to aspects related to teaching, learning and assessment process during the pandemic. The design was based on the following guiding principles (cf. Figure 16):

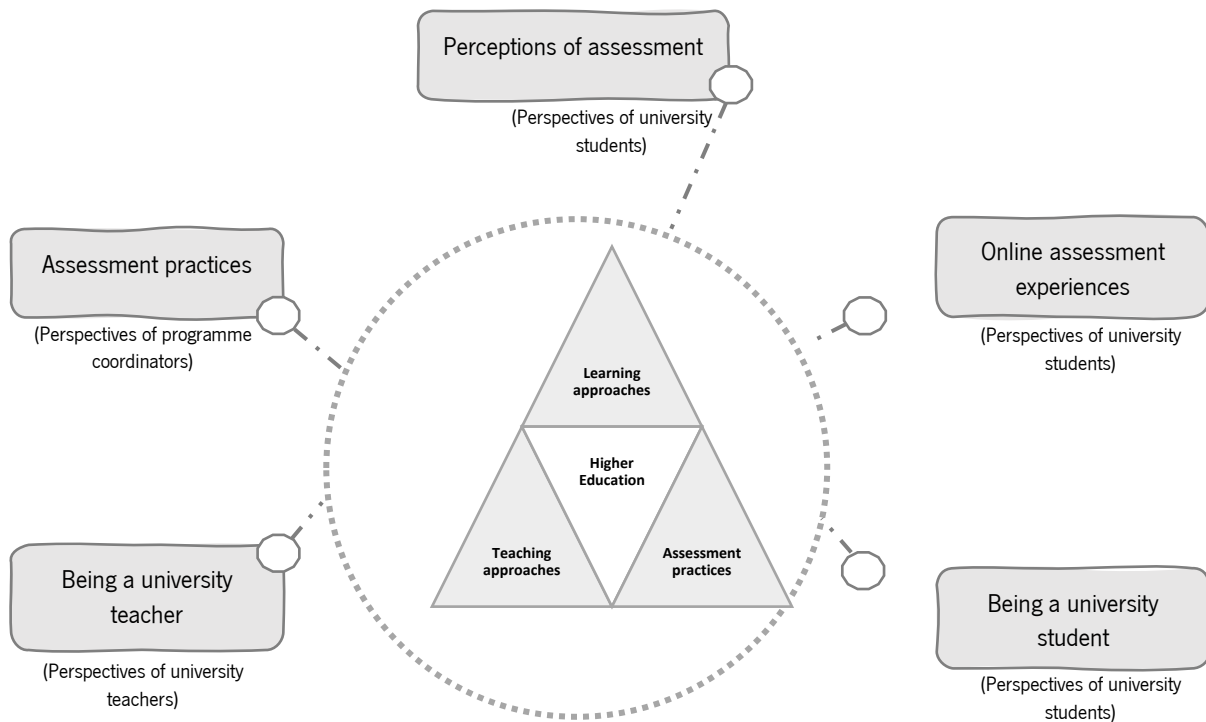


Figure 16: Synthesis of the guiding principles of research (Source: Author)

As illustrated in the Figure 16, despite the greater focus on students' perceptions, for the development of the project it was decided to include the perspective of other stakeholders in the educational process, namely teachers and programme coordinators. This holistic approach led to the adoption of a methodology that allows us to understand the dynamic nature and complexity of the processes intended for the study.

3.2.1. Sub-studies

The research was designed in five sub-studies (cf. Figure 17). Two sub-studies were carried out in Portugal and Poland, and the other three sub-studies were carried out only in Portugal.

The first sub-study was carried out in Portugal between February and June 2017 and in Poland between March and July 2019. A document analysis was performed in order to deepen the international literature in the domain and in order to gathering information about the context in which the study was carried out. It was supported by a continuous review of the literature leading to the construction. The second sub-study was carried out between April and June 2018 in Portugal and Poland. The third sub-study was carried in June and July 2019 in Portugal and the fourth sub-study was carried out between October 2018 and March 2019. The fifth, and final sub-study, was carried out between February and July 2020,

during the pandemic lockdown. During the collection of data for the different sub-studies, several challenges were experienced. The resistance in the adhesion of the different participants (mainly the students), the availability of time to participate in the research (which was the case of teachers and students) and the need to adapt the research to the constraints imposed by the pandemic of COVID-19. However, the research was possible due to the possibility of adaptation and flexibility of both the researcher and the different participants.

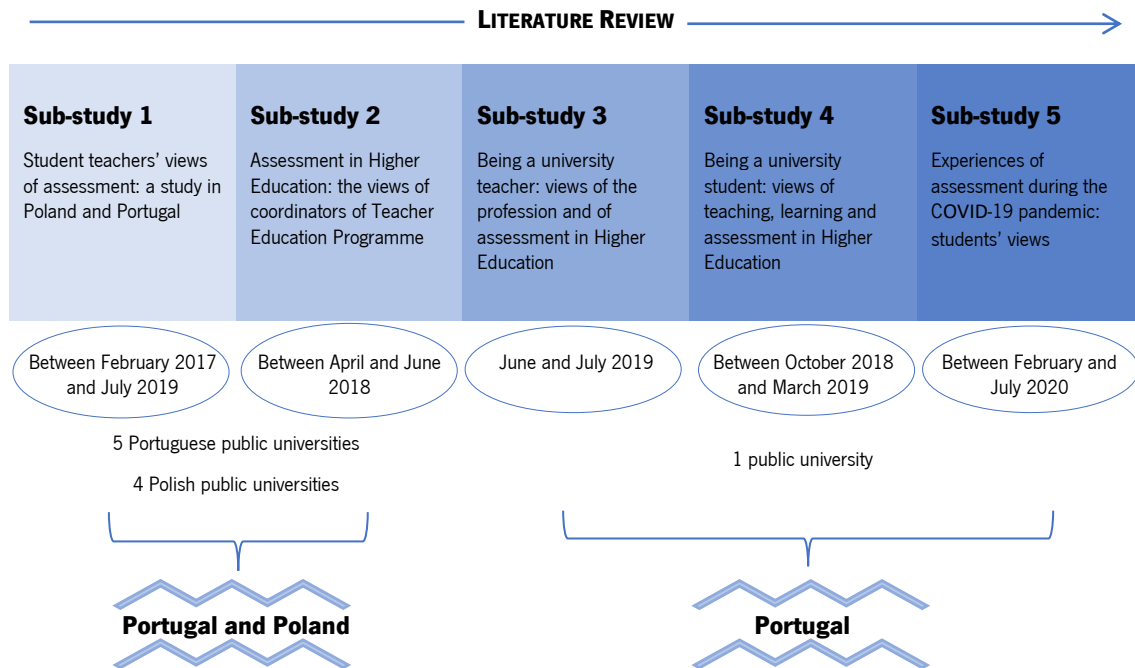


Figure 17: Illustration of the sub-studies and research phases that make up the broader project (Source: Author)

3.2.2. Research perspective

Selecting an appropriate paradigmatic framework is crucial for researchers because a paradigm, as Guba and Lincoln (1994) suggest, provides a views that defines the nature of the world as well as the range of possibilities for its holders in relation to reality. Thus ontological, epistemological, and methodological concerns shape the dimensions of any paradigm (Guba & Lincoln, 1994; Richards, 2003; Asghar, 2013).

Application of paradigms in research varies from one researcher to another depending on the researcher's choice and the nature of the phenomenon being studied. Moreover, the importance of selecting a paradigm for a research study lies in the fact that it establishes the basis on which research designs and methodologies are adopted for the study (Easterby-Smith, Thorpe, & Lowe, 2002; Kankam, 2019). While a paradigm looks into the way knowledge is interpreted and studied, it clearly defines the purpose, motivation, and desired outcomes of the study (Mackenzie & Knipe, 2006; Kankam, 2019). Theories are

employed to offer explanations, while paradigms on the other hand, provide ways of looking for explanations (Babbie, 2014; Kankam, 2019). The development of a specific research project requires the analysis of the multiple of possibilities offered by the research paradigms. The choice of a particular approach implies an in-depth reflection on its philosophical, ideological, and epistemological assumptions (Flores, 2003; Fernandes, 2020).

In the Social Sciences, two major research paradigms have prevailed that represent divergent ontological and epistemological positions: the positivist paradigm and the interpretative paradigm (Flores, 2003; Bryman, 2008; Flick, 2009; Coutinho, 2011; Smeyers & Smith, 2014). Thereby two main distinct ways of looking and conceiving social reality are shown: a positivist/objectivist conception, and an interpretive/subjectivist way (Cohen, Manion & Morrison, 2007; Bryman, 2008).

The positivist paradigm, also called traditionalist, empirical-analyst, or empiricist (Latorre, Del Rincón, & Arnal, 1996; Usher, 1996; Mertens, 1998; Shaw, 1999; Babbie, 2014) implies that the reality to be investigated is objective insofar as it exists independently of the subject - the events in an organised way being possible the laws that govern them to predict and control them. It is a research paradigm that emphasises determinism (there is a truth that can be discovered), rationality (there can be no contradictory explanations), impersonality (the more objective and less subjective the better) and even prediction (the ultimate end) of research is to find generalisations capable of controlling and predicting phenomena (Fernandes, 2010).

The idea of the positivism paradigm generally investigates the process of gathering data, observing regularities, and extracting laws (Turner, 1992). Aliyu et al. further (2014, p. 82) asserted that the methodologies frequently employed by positivist researchers include: confirmatory analysis, nomothetic experiments, quantitative analysis, laboratory experiments, and deduction. The positivist paradigm therefore emphasises that factual, genuine, and real happenings can be observed and studied “scientifically and empirically and could as well be elucidated by way of lucid and rational investigation and analysis” (Aliyu et al., 2014, p. 83). It is important to note that, in some instances, researchers that employ positivism typically tend to determine forecasts of human occurrences so as to gain deeper understanding of what constitutes truth (Grix & Watkins, 2010, Kankam, 2019).

The post-positivist paradigm is viewed as an extension to positivism by challenging the traditional positivist worldview (Creswell & Creswell, 2018; Panhwar et al., 2017). Post-positivism postulates that the world is

ambiguous and open to interpretation (O'Leary, 2017) and aims to understand phenomena holistically whilst still embracing the scientific method (Cohen et al., 2018).

The interpretative paradigm, supported by a qualitative approach, is based on the interpretation of the phenomena, by understanding the meanings through the experiences of the individuals in a constantly changing reality (Fernandes, 2010). Qualitative research seeks to understand the meaning or interpretation attributed (sometimes implicit) by the subjects themselves to the events that concern them and the "behaviours" they manifest (Lessard-Hébert et al., 1990).

Interpretivism, according to Aliyu et al. (2014, p. 84), "is a word that is quite new, however, simultaneously everywhere in the midst of non-positivist researchers and scholars". Bryman (2008, p. 13) defines interpretivism research paradigm as "an epistemological position that requires the social scientist to grasp the subjective meaning of social action". According to Cronje (2011, p. 3), "interpretivists believe that the human experience of the world is subjective, and they have a concern to understand it as it is", hence their purpose is to describe situations. This paradigm explores the social dimension (Cohen & Crabtree, 2006; Creswell, 2007; Blaikie, 2010) having the researcher a systematic and integrated idea of the context and through the holistic dimension obtains a complex and substantial information (Miles, Huberman, & Saldaña, 2014).

The interpretivist researchers, therefore, generally rely heavily on the views of participants of the subject being investigated (Creswell, 2003; Kankam, 2019). However, Byrman (2008) identified some limitations regarding the qualitative research, such as the subjectivity, the lack of transparency and the difficulty to replication and generalisation (Pereira, 2016). However, an integrated approach of these two paradigms has grown in popularity and has been discussed in social and behaviour sciences: the mixed methods research (Bergman, 2008; Byrman, 2008). This research adopted the combination of post positivist and interpretivist paradigms for considering the most adequate to the intended objectives and purposes. Mixed methods research is becoming increasingly articulated, attached to research practice, and recognised as the third major research approach or research paradigm (Creswell & Plano Clark, 2007), along with qualitative research and quantitative research (Johnson, Onwuegbuzie, & Turner, 2007; Plano Clark et al., 2008). Mixed methods research is an approach to knowledge (theory and practice) that attempts to consider multiple viewpoints, provides a variety of choices, perspectives, positions, approaches, and standpoints (always including the standpoints of qualitative and quantitative research) (Johnson & Onwuegbuzie, 2004; Johnson, Onwuegbuzie, & Turner, 2007). Based on the complexity of emergent

research problems and the acknowledgment that multiple paths to meaning exist, researchers face what is best described as a series of choices (Palys, 1992). The mixed methods research brings benefits in so far as it contemplates the strengths and weaknesses of each paradigm producing a broader view of the reality (Coutinho, 2011; Johnson & Christensen, 2012; Creswell, 2014) and answering questions that cannot be answered by each paradigm alone (Creswell & Clark, 2007). In general, a designed based on a mixed approach absorbs what is better in quantitative and qualitative methods (Bergman, 2008). Regarding the relationship between theory and practice, this research contemplates both inductive and deductive assumptions (Babbie, Wagner, & Zaino, 2015). As mentioned Byrman (2008, p. 624):

“Mixed methods research should not be considered as an approach that is universally applicable or as a panacea. It may provide a better understanding of a phenomenon than if just one method had been used. It may also frequently enhance our confidence in our own or others’ findings”.

Mixed methods in research designs have attracted increasing attention and popularity in recent years (Howe, 2004; Johnstone, 2004; Gilbert, 2006). Although, as Creswell (2003), notes mixed-methods approaches have been in use since the early 1960s, citing the work of Campbell and Stanley (1963) and Glaser and Strauss (1968) as examples. Nevertheless, in areas such as education and nursing, the phenomena studied are complex and tensions arise over the efficacy of both qualitative and quantitative research (McKim, 2017). Sandelowski (2000), for example, notes that mixed methods can expand the impact and enhance the flexibility of research designs, while Johnstone (2004) suggests that using mixed methods can triangulate, complement, or expand the contribution of single approach (McKim, 2017).

As mixed methods research has grown in practice and recognition, the combination of quantitative and qualitative strategies has required new thinking about the theoretical basis for integrative research (Wheeldon, 2010). Greene and Caracelli (1997) have highlighted a number of purposes or justifications for mixing methods. These include the following: to test the consistency of findings obtained through different instruments, to clarify and build on the results of one method with another, and to show how the results from one method shape subsequent methods or research decisions. A variety of views on this paradigmatic issue have been suggested (Tashakkori & Teddlie, 1998; Greene, Benjamin, & Goodyear, 2001), and pragmatism has emerged as a common alternative to the either/or choice of positivism and constructivism (Creswell & Plano Clark, 2007). Thus, instead of relying on deductive reasoning and general premises to reach specific conclusions, or inductive approaches that seek general conclusions

based on specific premises, pragmatism allows for a more flexible abductive approach (Wheeldon, 2010). Abduction is crucial in this respect. Through an innovative combination of existing knowledge, one can both generate possible research solutions and at the same time attempt to integrate various theories and approaches (Tomiyaamal et. al., 2003). In this way, abductive reasoning allows for tentative explanations and hypotheses to emerge through the research process based on the expertise, experience, and intuition of researchers (Schurz, 2002; Wheeldon, 2010). Another value of mixed methods is the integration component. Integration gives readers more confidence in the results and the conclusions they draw from the study (O’Cathain, Murphy, & Nicholl, 2010; McKim, 2017). Mixed methods also help researchers cultivate ideas for future research (O’Cathain, Murphy, & Nicholl, 2010). In addition, researchers state mixed methods research is the only way to be certain of findings (Coyle & Williams, 2000) and interpretation (Morse & Chung, 2003; Tashakkori & Teddlie, 2003; McKim, 2017). Figure 18 summarises the three research approaches as a basis for the research process.

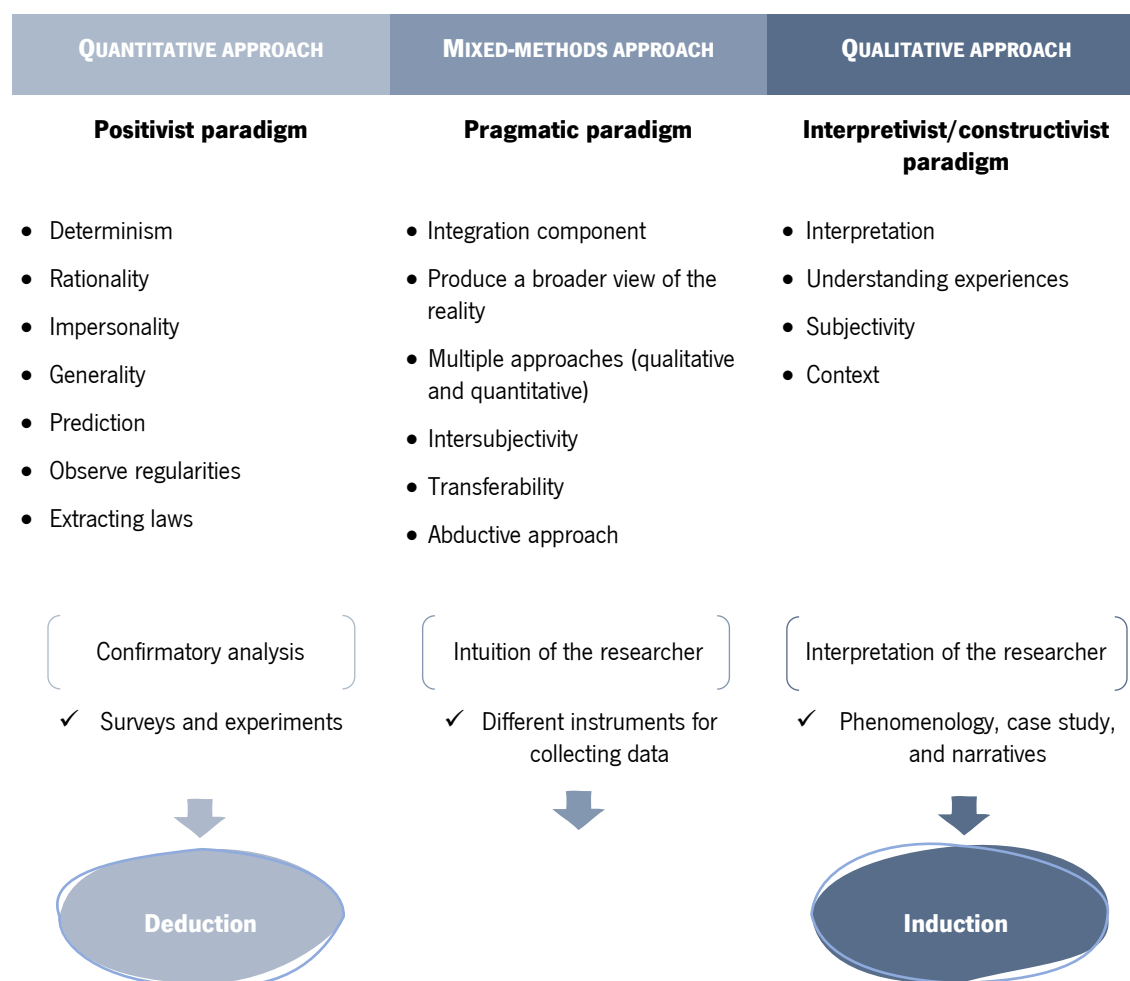


Figure 18: Guiding principles of the research process (Source: Author)

Methodologically the present study included elements of the interpretative and positivist paradigms by combining quantitative and qualitative methods to provide empirically reliable data on, generally speaking, the process of assessment in higher education. The research process, on the one hand, enables to relate variables to each other, from a quantitative perspective; and, on the other hand, from a qualitative perspective, the process and the context are emphasised.

3.3. Context of the study

The study focused on higher education, namely in Initial Teacher Education (ITE) in Portugal and Poland and Nursing programmes only in Portugal.

ITE programmes in Portugal and Poland as study contexts

The development of the European Higher Education Area (EHEA), widely known as the Bologna Process (BP), has been characterised as the most important endeavour for the convergence of European countries policies for Higher Education (HE) (Kwiek, 2004; Adelman, 2009; Koustourakis & Sklavenitis, 2013). In Portugal, the BP resulted in a new policy on ITE, which was set out in Decree-Law 43/2007, “as to grant teachers a socio-professional status and to improve the quality of teachers, in order to face the challenges of training and education within the Portuguese society” (Flores, 2014, p. 331). The new requirements for becoming a teacher in Portugal point to the primacy of subject knowledge and to a research-based approach to teaching and teaching practice, with mastery of the Portuguese language, in speaking and writing, being a common quality of all student teacher candidates (Flores, 2014, pp. 331–332). In Poland, at present, ITE is regulated by the regulation of the Minister of Science and Higher Education of 2 August 2019 on the standard of ITE, which, in addition to theory, places emphasis on psychological and pedagogical training and on teaching practice (Madalińska-Michalak, Flores, Lofström, 2021; Michalak-Dawidziuk, 2021).

Besides belonging to the same EHEA, in Portugal and Poland, similar phenomena are observed, including a surplus of teachers (European Commission/EACEA/Eurydice 2018, p. 30), low salaries, frequent education system reforms, constant teacher evaluation and an employment structure featuring 6% and 1% of teachers under 30 (Madalińska-Michalak, Flores, Lofström, 2021; Madalińska-Michalak, 2019, 2017; Michalak-Dawidziuk, 2021). The feminisation of the profession occurs on a similar scale and has continued for many years. In Poland, the percentage of women in the occupation was 76% in 2005 and

77% in 2018. In Portugal, it remained at the same level in 2005 and 2018 and amounted to 74% (OECD, 2020, pp. 438–439).

Literature does not feature a comparative empirical study on the assessment in higher education ITE in Poland and Portugal, so the presented study fill the gap and serve as an inspiration for further exploration of this research area.

ITE and Nursing programmes in Portugal as study contexts

In the research, teacher education and nursing programmes were taken into account as they are two areas that make up the so-called caring or helping professions (Fish, 1999; Hugman, 2005; Sommers-Flanagan & Sommers-Flanagan, 2007; Pereira, Lopes, & Marta, 2015). Due to the lack of research, it was understood to be relevant and innovative for the Portuguese context, adding quality scientific knowledge.

The designation “caring professions” covers all the professions where the well-being of the “client” – in terms of health, education, or social aspects of life – is the primary concern of the practitioner (Fish, 1998). This approach gives pride of place to a holistic conception of the profession that considers not only its visible aspects but also the invisible (e.g., the practitioner’s capacities, theories, beliefs, and values, along with the moral dimension of her or his practice) (Pereira, Lopes, & Marta, 2015)

Helping professions are professions of human interaction, where work is carried out on the other, so they are an important part of the world in general and the world of professions (Hugman, 2005; Pereira et al., 2012) and are imbued with specific conditions and characteristics that pose particular challenges to future professionals and their trainers, especially in the current context in which profound social, technological and scientific changes are taking place, in society in general and in health in particular. Two characteristics specify these professions: the relationship between professional knowledge and human development and the complex nature of professional activity, a multidimensional activity and human interaction (Dubet, 2002; Pereira et al., 2012).

In the context of a knowledge society, and the resulting new social configurations, with a strong impetus to technological development and competitiveness, the helping professions occupy more and more prominence as they constitute forms of mediation between human beings, reconciling physical well-being, health, emotional, and psychological. In general terms, helping professions can be characterised by the

relationship they establish between professional knowledge and human development and, therefore, are also understood as humanist professions (Dubet, 2002; Fernandes et al., 2013).

A more theoretically powerful use of caring is relational. There is no need to rule out the use of virtue. Indeed, it must be recognised that the word “care” is regularly used to refer to a virtue, and there are many occasions to use it in this way, even in a relational structure. Once it is established what it means for a relationship to be properly called care, it will be possible to say that a "caring" professional is one who regularly establishes care relationships in a wide range of individuals, groups, and situations (Noddings, 1999). Many feelings are associated with caring as relation. A carer is concerned to realise a caring relation – however brief – in each encounter. Sympathy (or empathy) can be felt even before the actual encounter. It is this capacity to be moved by the affective condition of the other that teachers try to develop in students as part of their moral education (Noddings, 2012). A caregiver is above all attentive, observes and listens. Listening is important emotionally and intellectually. It is assumed that the time spent in building a relationship of care and trust is not wasted time (Noddings, 2012).

As stated by Noddings (1995) caring is not just a warm, fuzzy feeling that makes people kind and likable. Caring implies a continuous search for competence. Rather, it demonstrates respect for the full range of human talents. Any human being can be driven to develop the skills and knowledge necessary to make positive contributions, regardless of the occupation they choose (Noddings, 1995).

The consideration of teaching as a helping profession is based on phenomenological perspectives of the profession that emphasises the experiential dimension (relative to life experience), as well as the ethics of the process of professionalisation (Sommers-Flanagan & Sommers-Flanagan 2007; Pereira, Lopes, & Marta, 2015). Viewing teaching as a ‘helping profession’ is justified by the understanding that it is an activity generated in complex multidimensional interaction processes, where professional knowledge takes shape and is used for the promotion of individuals and societies (Hugman, 2005; Pereira, Lopes, & Marta, 2015)

In the specific case of nursing, “taking care of people is (its) fundamental purpose (Bueno, Ebisui, & Cintrão, 2004, p.137). In the same vein, Pereira (2008) recognises that caring is the structuring axis of the profession and, simultaneously, of nursing training. From her perspective, the nursing profession implies the acquisition of not only cognitive and technical skills, but also relational skills, thus presupposing a professional interaction that is always “caring”. (Fernandes et al., 2013)

Teaching and nursing, both seen as helping professions (Sommers-Flanagan & Sommers-Flanagan, 2007), have undergone an intense process of professionalisation (Lopes, 2013). In the majority of countries, initial education of nurses and teachers now takes place in higher education institutions (universities or polytechnic institutes). Even though they are new academic disciplines, they need to respond to the exigencies of research and training that challenge more traditional disciplines (Lopes et al., 2014).

3.3.1. The context of Initial Teacher Education in Portugal and Poland

Portugal and Poland are both part of the European Union and thus, despite many cultural differences, there are also similar aspects that led us to consider these two countries in the present study.

Teacher education in Portugal and Poland, especially Initial Teacher Education, is – similarly to other European countries – part of the higher education system (Madalińska-Michalak, 2018). In Poland in 2005 and in Portugal in 2006, the governments approved the Acts that made changes to the new model of higher education organisation regarding studies and their duration, in accordance with the principles of the Bologna Declaration (in Poland, the Law on Higher Education Act of 27 July 2005; in Portugal, Decree-Law No. 74/2006 of 24 March). In both countries, higher education is organised into a binary system consisting of university education and polytechnic education, each with distinct purposes that translate into specific curricular concepts (Rede Eurydice, 2010). The first cycle of the higher education system – Undergraduate level – lasts for three years; the second cycle – Master's degree level – lasts for two years, and the Integrated Master's degree combines the first and second cycles (five years); and the third cycle – PhD – lasts for a maximum of five years. Under the Bologna Process, a number of common tools have been developed to support the transformation process for more student-focused systems. These include the European Credit Transfer and Accumulation System (ECTS), the Diploma Supplement and the National Qualification Frameworks. In the course of the Bologna Process, the ECTS has clearly emerged as a crucial element in a process aimed at making European higher education more transparent and intelligible (Rede Eurydice, 2009; Stachowiak-Kudła, 2012).

3.3.2. Portuguese context of Initial Teacher Education

The ITE programmes in Portugal have been restructured as a result of the implementation of the Bologna Process. According to the legal framework (Decree-Law No. 43/2007), the professional qualifications for teaching (from pre-school to secondary education) are to be based on a number of key elements: (i) a

higher professional qualification for teachers (second-cycle level, i.e. Master's degree); (ii) a curriculum based on learning outcomes in the light of teacher performance; (iii) a research-based qualification; (iv) the importance of practicum (observation and collaboration in teaching situations under the supervision of a mentor/supervisor); (v) school-university partnerships; and (vi) the quality assurance of teachers' qualifications and ITE (Flores & Ferreira, 2016). In 2014, a new legal framework for ITE in Portugal was published (Decree-Law No. 79/2014), which includes the following curriculum components: (i) training in the subject matter; (ii) general educational training; (iii) specific didactics (for a given level of teaching and subject matter); (iv) cultural, social, and ethical education; and (v) professional practice.

3.3.3. Polish context of Initial Teacher Education

In Poland, from 1990 up to 2015, ITE was provided within two sectors of the education system: the higher education sector and the school education sector. Degree programmes, including first-, second- and long-cycle programmes, were offered within university type HEIs, namely universities, technical universities, polytechnics, and academies. Non-degree postgraduate programmes were offered in non-university HEIs (with no rights to confer the academic degree of doctor). In the school education sector, college programmes, including teacher training colleges and foreign language teacher training colleges, were offered. From 2015 onwards, ITE has been only offered at higher education institutions.

ITE and training standards were formulated in the Regulations of the Minister of Science and Higher Education on initial teacher training standards (2012, 2019). This legislation regulates ITE for school education teachers, thus defining training models or paths that lead to the qualifications required to enter the teaching profession. However, a huge level of autonomy was left to the universities that were responsible for designing the programmes for prospective teachers.

In the current context, the minimum qualification for teaching at pre-primary and primary level (the first stage: grades 1-3) is still a tertiary education degree at bachelor level, which is obtained after three years. However, pursuant to the Regulation of the Minister of Science and Higher Education of 27 September 2018, the Regulation of the Minister of Science and Higher Education of 25 July 2019 regarding ITE studies, studies in the field of pre-school and early school education are conducted – as it was before 2005 – as uniform five-year Master's studies. This has obvious consequences for teacher education in this field.

For those intending to work at primary schools (the second stage: grades 4-8) and at upper secondary level, the final qualification is a Master's degree. At present, teachers who hold a higher education diploma (a bachelor's or Master's degree) represent 98% of all teachers working in the school education sector. Master's degree studies seem to be the most popular route of training for teachers in school education of all levels. In Poland, the high quality of pre-school education is guaranteed by the very well-prepared teaching staff at nursery schools. They are mostly university graduates holding a Master's degree (84.0% of teaching staff) or, less often, a bachelor's degree (11.8%) (Madalińska-Michalak, 2017).

Two models of initial training exist side by side: first, the concurrent model, which is the prevalent one. Students following a degree programme in a given field of study may choose a teacher specialisation track; in this way, they complete their professional teacher training and acquire a teaching qualification, as part of their degree programme, parallel to their subject-specific training. Second, the consecutive model, which is available to those who have not taken a teacher specialisation track as part of a degree programme in a given field of study and choose the teaching profession later. They may obtain a teaching qualification upon the completion of a non-degree postgraduate programme or a qualification course (The System of Education in Poland, 2018).

3.3.4. The context of Nursing in Portugal

Nursing education began in Portugal as a professional programme, with schools emerging, many of them managed by religious orders or private foundations with training focused on the field of practice. Emphasis was placed on manual dexterity and competences and the nurse would be a mixture of kindness, competence, and obedience. During the 1940s, Portuguese nursing was a kind of priesthood – of dedication and sacrifice for the life and health of others – in which the order of duty was always present (Mendes & Mantovani, 2009). Through Decree-Law No. 38884 of August 28, 1952, nursing education would finally be organised in official schools. The objective of this new legislative change was to train and prepare better professionals to work in hospital and public health services. Teaching began to be provided in official or private Nursing Schools, which were granted technical and administrative autonomy. In 1976, the new regulation of the management bodies of nursing schools was published and in 1979 the minimum qualification for admission to the general nursing course was required for the current 11th year of schooling. One of the last changes in nursing education was its integration into the Polytechnic Higher Education – PHE, under the dual tutelage of the Ministry of Education and the Ministry of Health, which took place in 1988 (Nogueira, 1990). With Decree-Law No. 480/88, of 23 December, Nursing Education

is integrated into the National Educational System at the level of Polytechnic Higher Education. In this context, the schools are reconverted into Higher Nursing Schools, by Ordinance No. 821/89, of 15 September. Thus, in 1990, higher education began, with the Higher Nursing Programme, which conferred a bachelor's degree. In 1995, through the application of Decree-Law No. 205/95, of 5 August, the schools became Polytechnic Higher Education establishments, endowed with legal personality and administrative, financial, scientific, and pedagogical autonomy.

In 1997, the creation of the Nurses' Order contributed decisively to the development of Nursing as an increasingly complex and differentiated professional practice. It comes to affirm as a professional and scientific community of the greatest relevance in the functioning of the health system. Also, to guarantee the population's access to quality health care and, indirectly, to pressure nursing education to respond to the increasingly demanding training of Portuguese nurses (Mendes & Mantovani, 2009).

In the academic year 1999/2000, through Decree-Law No. 353/99 of September 3, the Degree in Nursing, so-called higher graduation programmes in the country, and the Post-License Specialisation Nursing Programmes, previously called Specialisation Programmes in Nursing, began. With this change, many schools became part of the Polytechnic Institutes of their area of insertion, others to the Universities of the respective geographical area and still others underwent merger processes, remaining as non-integrated Higher Schools – as is the case of schools in the three largest Portuguese cities (Lisbon, Porto, and Coimbra).

The academic system is based on cycles. The first cycle is the bachelor's degree with 180–240 ECTS (European Credit Transfer System) and the second cycle is the master's degree with 90–120 credits points in accordance with European directives (European Commission, 2005, 2009). Ultimately, a third cycle would lead to a doctoral degree. This Bologna Agreement was the driving force for creating transferable degrees between participating European Union countries and for offering students greater international mobility (Maas-Garcia, & Ter Maten-Speksnijder, 2009).

European nursing organisations (EFN – European Federation of Nurses Associations; ENSA – European Nursing Students Association; ESNO – European Specialist Nurses in Europe; ICN – International Council of Nurses) also call for tools to facilitate learning outcome assessment (Salminen et al., 2010). Success is not only about how learning outcomes can be achieved but also how they can be measured. Continuing professional development, post-graduate specialisations, lifelong learning and nursing career development are central in any response to societal challenges. In order to safeguard quality of care and

patient safety, there is a need for a large number of highly qualified nurses. The Bologna process offers a structure for lifelong learning and therefore European Union legislation needs to set out a clear framework to assist in harmonising the outcomes between European countries. Work needs to be done in comparing and defining an agreed master's degree in terms of an integrated theoretical and practical career such as nursing (Salminen et al., 2010).

Bologna Process have influenced changes in nursing education in European countries like Slovenia (Dornik, Vidmar, & Žumer, 2005), Croatia (Kalauz, Orlić-Šumić, & Šimunec, 2008; Šimunović et al., 2010), Czech Republic (Tóthová & Sedláková, 2007), Turkey (Bahçecik & Alpar, 2009), Greece (Patelarou et al., 2009), Poland (Sztembis, 2006), Sweden (Kapborg, 1997; Öhlén et al., 2011), Norway (Kyrkjebø & Hage, 2005), Netherlands (Maas-Garcia & ter Maten-Speksnijder, 2009), or Spain (Zabalegui & Cabrera, 2009). Portugal was not an exception. Countries have worked to establish nursing education as higher education institutions, establishing comparable nursing degrees (Maas-Garcia & Ter Maten-Speksnijder, 2009) and collaborating on quality assurance issues (Maas - Garcia and Ter Maten-Speksnijder, 2009).

It is important to note that implementing changes in nursing education systems can be challenging for countries (Bahçecik & Alpar, 2009; Sztembis, 2006). Also, every country has its own legislation, culture, healthcare needs, healthcare philosophies and structures and economic situations (Salminen et al., 2010; Lahtinen, Leino-Kilpi, & Salminen, 2014).

3.3.5 Participants

Teacher education programmes (TEP) students and coordinators make up the sample of this study attending different years in five Portuguese public universities and four public universities in Poland. University teachers and students attending TEP, and Nursing programme were also part of the study sample. These participants were chosen as they are the ones that who are directly related to the assessment process in higher education contexts. They have the knowledge on the issue under study and through their individual experience it is possible to get to know how assessment works. On the one hand, university teachers and coordinators provide information about the ways in which the process occurs especially how assessment is structured, the methods that are chosen and why, the frequency of the assessment process, etc. On the other hand, the students provide information about the positive and negative aspects of the assessment process, their perceptions about what can be improved and their

approaches to the assessment process. A brief characterisation of the participants, in the different sub-studies and phases of data collection is presented.

Sub-study 1: Student teachers' views of assessment: a study in Poland and Portugal

Sub-study 1 included Portuguese and Polish university students from five public universities in Portugal and four public universities in Poland. In both countries most students were female (Portugal N=280; Poland N=407), between 20 and 25 years old and attending the 1st year. In Poland, most attended the degree, while in Portugal there were 194 students for the degree and 161 students for the master's degree (cf. Table 3). In total, 789 students participated in this sub-study. This sub-study presents data collected from university students in initial teacher education programmes.

Table 3: Demographic characteristics of the participants in sub-study 1

DEMOGRAPHIC CHARACTERISTICS	PORTUGAL		POLAND	
	<i>n</i>	%	<i>n</i>	%
<i>Gender</i>				
Male	57	16.1	16	3.7
Female	280	78.9	407	93.8
No information	18	5.0	11	2.5
<i>Age</i>				
Less than 20	97	27.3	74	17.1
[20-25]	191	53.8	323	74.4
[26-30]	22	6.2	18	4.1
[31-35]	17	4.8	7	1.6
[36-40]	13	3.7	9	2.1
More than 40	13	3.7	1	0.2
No information	2	0.5	2	0.5
<i>Cycle of study</i>				
Undergraduate	194	54.6	268	61.8
Masters' degree	161	45.4	166	38.2
<i>Year of study</i>				
First year	183	51.6	262	60.4
Second year	109	30.7	75	17.3
Third year	61	17.2	96	22.1
Fourth year	-	-	1	0.2
No information	2	0.5	-	-
Total	355	100.0	434	100.0

(Source: Author)

Sub-study 2: Assessment in Higher Education: the views of coordinators of Teacher Education Programme

Both in Portugal and Poland most programme coordinators were female (Portugal 83.3%; Poland 62.5%). Most programme coordinators in both countries preferred not to reveal their age. In both countries, mostly

the programme coordinators hold Ph.D. qualifications (Portugal 66.6%; Poland 75.0%). In Portugal, 49.9% of programme coordinators revealed that they had between 21 and 30 years of experience as university teachers. Meanwhile, the Polish programme coordinators attested to having between 10 and 20 years of experience as university teachers. In both Portugal and Poland, the university teachers expressed having between 10 and 20 years of experience in the position of programme coordinator (cf. Table 4). In total, 14 programme coordinators participated. This sub-study presents data collected from coordinators in initial teacher education programmes.

Table 4: Demographic characteristics of the participants in sub-study 2

DEMOGRAPHIC CHARACTERISTICS	PORTUGAL		POLAND	
	<i>n</i>	%	<i>n</i>	%
Gender				
Male	1	16.7	3	37.5
Female	5	83.3	5	62.5
<i>No information</i>	0	0.0	0	0.0
Age				
[30-40]	0	0.0	1	12.5
[41-50]	0	0.0	1	12.5
[51-60]	2	33.4	0	0.0
More than 60	0	0.0	0	0.0
<i>No information</i>	4	66.6	6	75.0
Qualifications				
Graduation	0	0.0	0	0.0
Masters	0	0.0	0	0.0
Ph. D	4	66.6	6	75.0
Aggregation	2	33.4	-	-
<i>No information</i>	0	0.0	2	25.0
Year of experience as university teacher				
[10-20]	1	16.7	3	37.5
[21-30]	3	49.9	2	25.0
More than 30	1	16.7	1	12.5
<i>No information</i>	1	16.7	2	25.0
Year of experience as programme coordinator				
<i>Less than 10</i>	2	33.4	2	25.0
[10-20]	3	49.9	3	37.5
More than 20	1	16.7	1	12.5
<i>No information</i>	0	0.0	2	25.0
Total	6	100.0	8	100.0

(Source: Author)

Sub-study 3: Being a university teacher: views of the profession and of assessment in Higher Education

The demographic characterisation of the participants in sub-study 3 is presented (cf. Table 5), which consisted of collecting data from university teachers from the initial teacher education programmes and from the nursing programme collected at a Portuguese public university. Six focus groups were held, with

15 university teachers. Of which 11 university teachers from the teacher education programme and four from the nursing programme. Most were female (N=12), aged between 45 and 60 years old and with teaching experience between 14 and 38 years old.

Table 5: Demographic characteristics of the participants in sub-study 3

FOCUS GROUP IDENTIFICATION	NUMBER OF PARTICIPANTS	GENDER		AGE	TEACHING EXPERIENCE
		Male	Female		
FG1	3	0	3	[45-60]	[23-38]
FG2	2	1	1	[45-50]	[20-25]
FG3	3	0	3	[50-65]	[27-39]
FG4	3	1	2	[45-55]	[19-25]
FG5	2	1	1	[50-60]	[14-17]
FG6	2	0	2	[40-50]	[14-20]
Total	15		15		

(Source: Author)

Sub-study 4: Being a university student: views on teaching, learning and assessment in Higher Education

The demographic characterisation of the participants in sub-study 4 is presented (cf. Table 6), which consisted of collecting data from university students from the initial teacher education programmes and from the nursing programme collected at a Portuguese public university. Six focus groups were held, with 35 university students. Of which 30 university students from the teacher education programme and five from the nursing programme. Most were female (N=29) and aged between 21 and 40 years old.

Table 6: Demographic characteristics of the participants in sub-study 4

FOCUS GROUP IDENTIFICATION	NUMBER OF PARTICIPANTS	GENDER		AGE
		Male	Female	
FG1	6	1	5	21
FG2	3	0	3	[24-40]
FG3	6	0	6	20
FG4	5	1	4	21
FG5	8	3	5	[21-38]
FG6	7	1	6	-
Total	35	6	29	

(Source: Author)

Sub-study 5: Experiences of assessment during the Covid-19 pandemic: students' views

In sub-study 5, which was divided into two parts: the online questionnaire and experience of assessment during lockdown due to the COVID-19 pandemic. In first part, 74 students participated, of which 65 were from the nursing programme and eight were from the 2nd year of the teacher education programme with

the aim to get to know students' perceptions regarding assessment, teaching and feedback during lockdown. Most students were between 20 and 25 years old, were female and were in the third year of the nursing programme (cf. Table 7). The second part consisted of intervention by the researcher in a specific curricular unit, in the nursing programme and in the teacher education programme. In the nursing programme, an experience of peer assessment was promoted, that is, a form of assessment about which university students and teachers were unaware or had never experienced. In the teacher education programme, it was sought to get to know in depth the experience of assessment, teaching and learning, since it was a programme where various ways of assessing, teaching, and learning are taken into account. These aspects were explored but taking into account the students' experience in the online context due to the COVID-19 pandemic. In this second moment, only students from the third year of the nursing programme volunteered to participate in the study. A total of 84 students participated, most of whom were female and aged between 20 and 25 years. Eight students participated in the teacher education programme, most of them were male and aged between 20 and 25.

Table 7: Demographic characteristics of the participants in sub-study 5

DEMOGRAPHIC CHARACTERISTICS		PORTUGAL	
		<i>n</i>	<i>%</i>
<i>Gender</i>			
Male		9	12.2
Female		65	87.8
<i>Age</i>			
Less than 20		11	14.8
[20-25]		57	77.0
[26-30]		2	2.7
[31-35]		3	4.1
[36-40]		1	1.4
More than 40		0	0.0
<i>Year</i>			
1 st year	Degree	11	14.8
2 nd year		3	4.1
3 rd year		40	54.1
4 th year		12	16.2
1 st year	Masters	0	0.0
2 nd year		8	10.8
Total		74	100.0

(Source: Author)

3.4. Methods and procedures for data collection

The data collection methods used at different stages of the research were document analysis, questionnaires, focus group and interviews in order to obtain qualitative and quantitative diversified data

to respond to proposed objectives. In this section a description of the methods and procedures used in the data collection are presented.

To conduct research, it is first necessary to identify a problem in need of a solution. Once a researchable problem has been identified, the literature relevant to this problem should be reviewed. A literature review will reveal the current state of knowledge about the selected topic (Christensen, Johnson & Turner, 2015).

The literature review in a research study accomplishes several purposes. "It shares with the reader the results of other studies that are closely related to the study being reported" (Creswell, 2003, p. 29). It relates a study to the larger ongoing dialogue in the literature about a topic, filling in gaps and extending prior studies (Cooper, 1984; Marshall & Rossman, 1999; Creswell, 2003). "It provides a framework for establishing the importance of the study as well as a benchmark for comparing the results of a study with other findings" (Creswell, 2003, p. 30).

The objective of the literature review is "to place the study in the context and, with that, to establish a link between the existing knowledge on the subject and the problem to be investigated. A good literature review enhances research credibility by relating and connecting previous research with the problem under investigation" (Coutinho, 2011, p. 55). Also, according to Coutinho (2011, pp. 55-56) the review has other functions such as:

1. "Help focus and refine the problem by informing the reader of what has been done so far and what is known about the research topic;
2. Deepen knowledge of the problem and develop its meaning;
3. Analyse the research methods used by other researchers to investigate the topic;
4. Identify possible contradictory results in the previous research;
5. Provide the theoretical basis for the formulation of research hypotheses;
6. Suggest ideas and methodological procedures to plan empirical research;
7. Provide the researcher with recent and current information about the problem being investigated."

In sum, the literature review accomplishes several purposes: sharing the results of other subject related studies; relating the study with the existing state of art; providing a framework for establishing the relevance of the study; and providing a benchmark for comparing the research findings (Creswell, 2009). It also contributes to a better understanding of the methods and procedures keeping the researcher

updated about the study. Considering these assumptions, the review of national and international literature assumed an important role through the various research phases, shaping the research and enabling critical and integrative analysis of the research findings (Fernandes, 2020).

3.4.1. Methods of data collection

In empirical research, researchers collect data, analyse data, and report and interpret the results. The term method of data collection refers to how the researcher obtains the empirical data to be used to answer to research questions (Christensen, Johnson & Turner, 2015).

Document analysis

Document analysis is a technique that assumes relevance in the social and human sciences, as it allows the identification of pertinent information, facts, and evidence in documents, having as presupposition the guiding questions of the research. In addition, this method allows the collection and verification of data and, furthermore, can create new empirical material (Albarello et al., 1997; Coutinho, 2013). The objective is to collect information that allows to know and better understand a particular phenomenon. To this end, document analysis also leads the researcher to produce a set of inferences that constitute a significant contribution to the investigation (Coutinho, 2013). In this research, document analysis was used for collecting data as accurate and valid as possible, first, to contextualise the different studies the Portuguese and Polish context of Higher Education; second, to analyse the organisation of each of the higher education institutions in Portugal and Poland, and lastly, to research, read and analyse journal papers on assessment in higher education and teacher education, and the relevant legal regulations essential for understanding the subject under study.

Questionnaire

The questionnaire is a data collection technique that allows, through a set of questions, to obtain information (opinions, expectations, behaviours, etc.) (Ghiglione & Matalon, 1997; Quivy & Campenhoudt, 1998; Fortin, 2009). The questions on which the questionnaire is centred presuppose rigorous work strictly linked to the theoretical framework and hypotheses, insofar as the questions presented must indicate what the research proposes to do. This has been a technique widely used in research, because of its potential: uniform presentation and administration, it is inexpensive, favours comparison between participants, is characterised by its impersonal nature and anonymity of responses and allows for the collection of reliable and valid data, assuming that the instrument is well built (Ghiglione & Matalon,

1997). The questionnaire provides a quantitative or numeric “portrait” of tendencies, attitudes, or opinions of a population (by studying a sample of that population) (Creswell, 2009; Johnson & Christensen, 2012) and it is possible to be applied to a universe (Leedy & Ormrod, 2010; Langdrige & Johnson, 2009).

Like any other data collection method, the questionnaire has strengths and weaknesses that shown in Table 8.

Table 8: Strengths and weaknesses of questionnaires

STRENGTHS OF QUESTIONNAIRES	WEAKNESSES OF QUESTIONNAIRES
◆ Good for measuring attitudes and eliciting other content from research participants;	◆ Usually must be kept short;
◆ Inexpensive (especially mail questionnaires, Internet, and group-administered questionnaires);	◆ Reactive effects might occur (e.g., respondents might try to show only what is socially desirable);
◆ Can provide information about participants' subjective perspectives and ways of thinking;	◆ Nonresponse to selective items,
◆ Can administer to probability samples;	◆ People filling out questionnaires might not recall important information and might lack self-awareness;
◆ Quick turnaround for group-administered questionnaires;	◆ Response rate may be low for mail and e-mail questionnaires;
◆ Perceived anonymity by respondent can be high if situation is carefully controlled;	◆ Open-ended items may reflect differences in verbal ability, obscuring the issues of interest;
◆ Moderately high measurement validity (i.e., high reliability and validity) for well-constructed and validated questionnaires;	◆ Data analysis can be time consuming for open-ended items;
◆ Closed-ended items can provide exact information needed by researcher;	◆ Measures need validation.
◆ Open-ended items can provide detailed information in respondents' own words;	
◆ Ease of data analysis for closed-ended items;	
◆ Useful for exploration as well as hypothesis testing research.	

(Adapted from Christensen, Johnson, and Turner, 2015, p. 72)

The questionnaire was applied in two different moments. First, face-to-face questionnaires were administered to Portuguese students in 2017 in five public universities and to Polish students in 2019 in four public universities. In total, 789 students for the sub-study 1. Second, online questionnaires were applied in a Portuguese public university to students of teacher education and nursing programmes in the context of the second lockdown due to covid-19 in May 2020.

A revision of the literature was carried out in order to design the questionnaire. The questionnaire was prepared based on the study by Pereira and Flores (2012) and Flores et al. (2015) and was developed to identify the perceptions and beliefs of the participants concerning dimensions of assessment like perceptions on assessment in terms of ideas associated and most used methods (see Appendix 8).

The group of questions in sub-study 1 was organised by rating scales allowing a single response by the students. In the first scale a four-point Likert-scale was used, ranging from 1=not at all to 4= very much. The second scale is based also on a four-point Likert- scale, ranging from 1=not at all to 4= always (cf. Table 9). This type of scale based on the method of summated ratings, assesses attitudes toward an issue (Ary, Jacobs, Sorensen, & Razavieh, 2010) and allows to assess a continuum of agreement of a particular statement providing a more reliable information about individual's opinion (Anderson, 1990; Johnson & Christensen, 2012).

Table 9: Structure of the questionnaire with students in sub-study 1

I – DEMOGRAPHIC CHARACTERISTICS			
Gender, age, programme, year of the programme and cycle of studies			
II – SCALES			
	Scale identification	Number of items	Authors
1 st scale	Ideas associated to assessment	14	Pereira, 2011; Pereira, 2016
2 nd scale	Most used assessment methods	14	

(Source: Author)

The group of questions in sub-study 5 was organised by rating scales allowing a single response by the students and applied online. In the first, second and fourth scale a five-point Likert was used, ranging from 1= strongly disagree to 5= strongly agree. In the third scale, a Likert frequency of 1=never to 5=always was used. In the sixth question, a temporal frequency scale between less than one hour and more than four hours was used. And in the seventh question, an answer between 1=yes, 2=no and 3=maybe was used. Finally, two open-ended items were used (cf. Table 10).

Table 10: Structure of the questionnaire with students in sub-study 5

I – DEMOGRAPHIC CHARACTERISTICS			
Gender, age, programme, year of the programme and cycle of studies			
II – SCALES			
	Scale identification	Number of items	Authors
1 st scale	Students views of online assessment	11	
2 nd scale	Assessment methods used by teachers	12	
3 rd scale	Online feedback	6	
4 th scale	Means of providing feedback used by the teachers	10	Source: Author
5 th scale	The experience of online teaching and learning	30	
6 th scale	Time devoted to learn in an online environment	3	
7 th scale	Conditions for teaching and learning online	7	
III – OPEN-ENDED QUESTIONS			
1 st question	Pedagogical strategies used by teachers in an online context that promote effective learning	-	Source: Author
2 nd question	Students' online learning experience (an episode/situation that has marked)	-	

(Source: Author)

In the second moment of intervention and monitoring process of assessment with the students in an online context, a questionnaire was applied in the curricular unit of "History Teaching Methodology II". On the three questions a five-point Likert scale was used, ranging from 1= strongly disagree to 5= strongly agree and one open-ended item was used (cf. Table 11).

Table 11: Structure of the questionnaire with teacher education students in sub-study 5

I – SCALES			
	Scale identification	Number of items	Authors
1 st scale	Teaching and learning experience in "History Teaching Methodology II"	13	Source: Author
2 nd scale	Feedback experience in "History Teaching Methodology II"	7	
3 rd scale	Assessment process in "History Teaching Methodology II"	6	
III – OPEN-ENDED QUESTION			
1 st question	Describe an episode/situation that marked the student in the online learning experience.	-	Source: Author

(Source: Author)

Procedures to collect data in Portugal and Poland through questionnaires

A set of filling instructions was provided, with an introductory note, to avoid misinterpretations, according to the principle of clarity of questions, structuring them in a precise, concise, and univocal manner, according to the characteristics and specific language of the receivers (Quivy & Campenhoudt, 1992). In

Portugal the native language was used and in Poland the English language was used to explain or clarify any doubts that might arise.

In this research, a non-probabilistic sample to target a specific group “in the full knowledge that it does not represent the wider population; it simply represents itself” (Cohen, Manion & Morrison, 2007, p. 113) was used. Within a non-probabilistic approach (Coutinho, 2014), a convenience sample was defined. The convenience sample “involves choosing the nearest individuals to serve as respondents and continuing that process until the required sample size has been obtained” (Cohen, Manion & Morrison, 2007, pp. 113-4). This type of sampling is commonly used in studies with students and teachers (Cohen, Manion & Morrison, 2007). In the convenience sampling, the researcher selects his/her sample from those to whom he/she has easy access. This type of sampling represents only itself and does not seek to represent the general population.

This research used a convenience sample of university students from five Portuguese universities, representing both new (created in the 70's) and classic (old) universities, complemented with a convenience sample of students from a Portuguese public university. A convenience sample of university students from four Polish universities from different parts of the country with a similar training offer were selected in both countries. The same questionnaire was administered in both contexts. For the application of the questionnaire in Poland, it was translated into English, validated by specialists in the English language, and later translated into Polish and validated by Polish specialists in the field of education, more specifically in teacher education.

For the application of the online questionnaire in Portugal, an introductory note was created explaining the purpose of the study, the role of the researcher and the participant. The questionnaire was applied online, through google forms. After being validated by specialists from each scientific area (teacher education and nursing) and by assessment specialists.

The data collected through the questionnaires have been maintaining the confidentiality of the information, having been encoded.

Focus Group

In order to explore and expand the meaning of the data obtained through the questionnaire, several university students and teachers were invited to participate in focus groups. The focus group is a technique that makes it possible to control the discussion of a group of people, from an interview structure

not directive, also allowing the observation of reactions and interactions between the subjects that form the group that it would be difficult to capture with other techniques and that are equally important aspects for the investigation (Krueger & Casey, 2009; Morgan, 2009; Bryman, 2012). This technique makes it possible to discuss planned and focused on a certain theme and the data are the product of the interaction that is generated between the participants, who can be complementary – when they share common experiences and do not reach consensus – or arguments – when there are changes in opinions, questions, and differences between individuals (Barbour & Kitzinger, 1999).

The participants were selected according to specific and common characteristics that allow the researcher to recreate a suitable environment and encourage participant communication to promote discussion among participants (Fernandes, 2020). Small focus groups, which ranged between two and seven participants, were conducted (cf. Tables 5 and 6). Focus groups are usually composed of groups between five and 10 people, or in some cases, groups between four and 12 people with specific characteristics. Small focus groups allow for greater discussion of themes and ideas, while larger groups can lead to fragmentation of the discussion (Krueger & Casey, 2009).

Like any other data collection method, the focus group has strengths and weaknesses that shown in Table 12.

Table 12: Strengths and weaknesses of focus groups

STRENGTHS OF FOCUS GROUPS	WEAKNESSES OF FOCUS GROUPS
◆ Useful for exploring ideas and concepts;	◆ Sometimes expensive;
◆ Provides window into participants' internal thinking;	◆ Might be difficult to find a focus group moderator with good facilitative and rapport-building skills;
◆ Can obtain in-deep information;	◆ Reactive and investigator effects might occur if participants feel they are being watched or studied;
◆ Can examine how participants react to each other;	◆ Might be dominated by one or two participants;
◆ Allows probing;	◆ Difficult to generalise results if small, unrepresentative samples of participants are used;
◆ Most content can be tapped;	◆ Might include large amount of extra or unnecessary information;
◆ Allows quick turnaround.	◆ Measurement validity might be low;
	◆ Usually, should not be the only data collection method used in study;
	◆ Data analysis can be time consuming because of the open-ended nature of the data.

(Adapted from Christensen, Johnson, and Turner, 2015, p. 74)

For sub-studies 3 and 4, focus groups were conducted with university teachers and students. The results of sub-study 3 deal with teachers' perceptions about being a teacher in higher education and the teaching, learning and assessment process. Six focus groups were held, consisting of groups of two or three participants. Four focus groups with teachers from teacher education programmes and two with teachers from the nursing programme. In total, 15 university teachers participated (cf. Table 5). These focus groups were held between July and August 2019. In sub-study 4, it was intentional to get to know the students' perceptions about being a student in higher education and the teaching, learning and assessment process in which 35 students participated, 30 from the teacher education programme and five from the nursing programme. Six focus groups were carried out with six to eight participants (cf. Table 5). These focus groups were held between October 2018 and March 2019.

Procedures to collect data in Portugal through focus group

An oral introduction about the study was provided to the participants by the researcher after having had prior access to consent and research protocol. The data collected through the focus group have been recorded in audio with the consent of the participants, and later transcribed verbatim and coded, maintaining the data confidentiality of the information, namely the data related to the names, institutions, locations, or persons.

Interviews

The interview as a qualitative method of collecting data is characterised by producing knowledge through the interaction of the interviewer and the interviewee (Kvale, 2007; Given, 2008). The interviews can be used as a dominant strategy or combined with other data collection methods (Bogdam & Biklen, 1994). The interview is not just about collecting information about various aspects of life, "it is part of life itself, its human embeddedness is inescapable" (Cohen, Manion & Morrison, 2007, p. 349). Through the researcher's questions, the interviewee expresses their perceptions and opinions about a given situation (cf. Table 13). This level of understanding is given not only through the content of the discourse, but also through its intensity and through the non-verbal language, which the researcher must also be aware of (Ghiglione & Matalon, 1997).

Table 13: Strengths and weaknesses of interviews

STRENGTHS OF INTERVIEWS	WEAKNESSES OF INTERVIEWS
◆ Good for measuring attitudes and most other content of interest;	◆ In-person interviews usually are expensive and time consuming;
◆ Allows probing and posing of follow-up questions by interviewer;	◆ Reactive effects (e.g., interviewees might try to show only what is socially desirable);
◆ Can provide in-depth information;	◆ Investigator effects might occur (e.g., untrained interviewers might distort data because of personal biases and poor interviewing skills);
◆ Can provide information about participants' subjective perspectives and ways of thinking;	◆ Interviewees might recall important information and might lack self-awareness;
◆ Closed-ended interviews provide exact information needed by researcher;	◆ Perceived anonymity by respondents might be low;
◆ Telephone and e-mail interviews usually provide very quick turnaround;	◆ Data analysis can be time consuming for open-ended items;
◆ Moderately high measurement validity (i.e., high reliability and validity) for well-constructed and well-tested interview protocols;	◆ Measures need validation.
◆ Can use with probability samples;	
◆ Relatively high response rates are often attainable;	
◆ Useful for exploration as well as hypothesis.	

(Adapted from Christensen, Johnson, and Turner, 2015, p. 73)

In order to complementing and deepening the information already collected through other data collection methods from university teachers and students, data collection was also carried out from programme coordinators, in Portugal and Poland, as it is essential to know their perception of the assessment process and practices. Therefore, in sub-study 2, six Portuguese programme coordinators and eight Polish programme coordinators from the teacher education programme were listened through individual interviews (cf. Table 4). The interviews took place between April and June 2019. In this sub-study, the use of semi-structured interview allowed to obtain comparable data between the various participants while trying, at the same time, a more general understanding of their perspectives on the theme (Bogdam & Biklen, 1994; Bryman, 2008).

Procedures to collect data in Portugal and Poland through interviews

An oral introduction about the study was provided to the participants by the researcher after having had prior access to consent and research protocol. The data collected through the interview has been recorded in audio with the consent of the participants, and later transcribed verbatim and coded, maintaining the data confidentiality of the information, namely the data related to the names, institutions, locations, or persons. In Portugal the native language was used and in Poland the English language. The same interview guide was used but to be applied in Poland it was translated into English and validated by specialists in the field of education, more specifically in teacher education. To carry out the interviews in Poland, participants and the researcher favoured the English language to communicate.

3.5. Methods and procedures for data analysis

3.5.1. Quantitative Data

The quantitative data follow a statistical analysis of a descriptive nature, as it was not our intention to define a statistical procedure that would allow inferring results from the sample for the population (inferential statistics). The descriptive statistics rather, it allows “to obtain a first reading of the data, capable of giving an insight into the dispersion, shape and structure of the distribution” (Coutinho, 2013, p. 153). This assumption is in line with the objective of the research phase in which the questionnaire was applied, which is characterised by its exploratory nature, insofar as it allowed the collection of the first evidence from the participants regarding the main study problem. In this context, the analysis of this information passes through statistical treatment that consists of procedures for classification, calculation, analysis, and synthesis of numerical data obtained in a systematic way (Sampieri et al., 2006). The use of quantitative data in social research has its attractions, because it uses numbers and can present findings objectives, systematics, and generics (Descombe, 1998) and it “is a powerful form” (Cohen et al., 2008, p. 501) of large-scale research. For the analysis of the quantitative data of the investigation, the Mplus version 5 software was used in order to establish differences and/or similarities between Portugal and Poland regarding students' perceptions of ideas associated with assessment and the assessment methods most used by teachers in teacher education programmes.

In very broader terms, quantitative data it was described as entailing the collection of numerical data, as exhibiting a view of the relationship between theory and research as deductive and a predilection for a natural science approach (and of positivism in particular and having an objectivist conception of social reality (Bryman, 2008). Figure 19 outlines the main steps in quantitative research.



Figure 19: Main steps in quantitative research (Adapted from Bryman, 2008, p. 141)

MPlus

Mplus makes multiple valuable functions (e.g., WLSMV estimation, multilevel modelling, mixture modelling, survival modelling) available in a single package. It is relatively simple to use modern modelling techniques like robust standard errors that allow researchers to relax modelling assumptions and Bayesian modelling which allows for estimation of complex models that would not converge in maximum likelihood models (Klopack & Wickrama, 2020).

The most used test to check global model fit is the chi-square test (Cochran, 1952), but it is dependent on the sample size: it rejects reasonable models if the sample is large, and it fails to reject poor models if the sample is rather small. There are three other types of fit indices that can be used to assess the fit of a model (Van de Schoot, Lugtig, & Hox, 2012).

First, the comparative indices that compare the fit of the model under consideration with fit of baseline model, for example the Tucker-Lewis Index (TLI) and Comparative Fit Index (CFI). Fit is considered adequate if the CFI and TLI values are $> .90$, and better if they are $> .95$. The TLI attempts to correct for complexity of the model but is somewhat sensitive to a small sample size. Also, it can become > 1.0 , which can be interpreted as an indication of over fitting: making the model more complex than needed. If the $\chi^2 < df$, the CFI is set to 1.0, which makes it a normed fit index. Second, there are absolute indices that examine closeness of fit, for example the Root Mean Square Error of Approximation (RMSEA). The

cut-off value is $RMSEA < .08$, better is $< .05$. The RMSEA is insensitive to sample size, but sensitive to model complexity. Third, there are information theoretic indices, for example the Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC). Both can be used to compare competing models and make a trade-off between model fit (i.e., $72 \cdot \log$ likelihood value) and model complexity (i.e., a computation of the number of parameters). A lower AIC/BIC value indicates a better trade-off between fit and complexity. There is no rule of thumb, the values depend on actual dataset and the model, simply chooses the model with the lowest IC value (Van de Schoot, Lugtig, & Hox, 2012).

SPSS

In this research, the IBM Statistical Package for the Social Sciences (SPSS) Statistics (v.27) was used to analyse the quantitative data. The SPSS is one of the most widely used software in social sciences (Bryman, 2008; Muijs, 2011; Wagner & Zaino, 2015). The use of this computer programme allows to analyse large data sets and prepare data in a single step with automated data preparation. It also allows organising data and rigorously and systematically analysing the information statistics. Different procedures were used, e.g., confirmatory factor analysis (CFA), standards deviations, correlation between variables; multivariate analysis of variance (MANOVA), non-parametric tests, among others. The quantitative analysis is characterised by the mathematical analysis of quantitative numerical data (Muijs, 2011) to explain a given phenomenon. The quantitative data analysis was used to analyse questionnaires to answers some questions within the context of this research.

3.5.2. Qualitative Data

Qualitative data is an umbrella term that covers a variety of styles of social research, drawing on a variety of disciplines such as sociology, social anthropology, and social psychology (Descombe, 1998). It is a research strategy that usually emphasises words rather than quantification in the collection and analysis of data. As a research strategy it is inductive, constructivist, and interpretivist (Bryman, 2008). The analysis of qualitative data provides “rich descriptions and explanations of human processes with strong potential for revealing complexity” (Miles et al., 2014, p. 4) and it is based on interpretation and reflection (Pereira, 2016).

In this sense, the inductive approach is the most common data analysis procedure in qualitative research, since nothing is defined and access to in-depth knowledge of a phenomenon and its results can only be obtained through – collected insights based on participants' personal experiences (Usher, 1996; Latorre

et al., 1996; Myers, 1997). To this extent, the approach followed for data analysis in this research was based mainly on this inductive perspective (Miles & Huberman, 1994), starting from the emerging themes of the collected data, then focus groups were held with university students and teachers in teacher education and nursing programmes in Portugal and with programme coordinators from Portugal and Poland in teacher education programmes.

In this kind of analysis, the research can be influenced by a certain subjectivity, through researcher beliefs, preferences, preconceptions, among others (Cohen et al., 2008). What the researcher intends to do with the data will determine the kind of analysis to be done. The main challenge for a qualitative researcher is “finding coherent descriptions and explanations that still include all of the gaps, inconsistencies, and contradictions inherent in personal and social life” (Miles et al., 2014, p. 10). Figure 20 outlines the main steps in qualitative research.

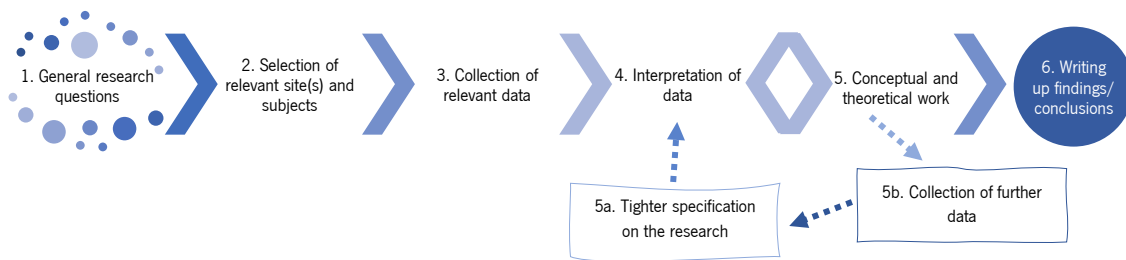


Figure 20: Main steps in qualitative research (Adapted from Bryman, 2008, p. 370)

This research has a flexible design, which made it possible to analyse the data according to a continuous interaction that allowed the interpretation of the collected information (Flores, 2003). In this way, the result of one phase influenced the planning of the next phase, in order to contemplate the inherent complexity of the study problem assuming an interactivity of the data (Miles & Huberman, 1994) that implies a dynamic process between research planning and development.

Content analysis

“Content analysis is an approach to the analysis of documents and texts (which may be printed or visual that seeks to quantify content in terms of predetermined categories and in a systematic and replicable manner. It is a very flexible method that can be applied to a variety of different media. In a sense, it is not a research method in that it is an approach to the analysis of documents and texts rather than a means of generating data. However,

it is usually treated as a research method because of its distinctive approach to analysis.”
(Bryman, 2008, p. 274)

Content analysis is described as the scientific study of content of communication. It is the study of the content with reference to the meanings, contexts and intentions contained in messages. A few definitions of content analysis are available as observed it is a research technique for the objective, systematic, and quantitative description of the manifest content of communication (Berelson, 1952; Kerlinger, 1986), it is any technique for making inferences by systematically and objectively identifying specified characteristics of messages (Holsti, 1968), a research technique for making replicable and valid inferences from data to their context (Krippendorff, 1980), that utilises a set of procedures to make valid inferences from text (Weber, 1985) or according Stone (1966), content analysis refers to any procedure for assessing the relative extent to which specified references, attitudes, or themes permeate a given message or document (Prasad, 2008)

A careful examination of the definitions of the method show emphasis placed on aspects such as system, objectivity, quantification, context, and validity - with reference to the inferences drawn from the communication content about the sender, the message, or the receiver of the message (Prasad, 2008). Thus, content analysis is all about making valid, replicable, and objective inferences about the message on the basis of explicit rules. Thus, according to Prasad (2008) content analysis follows three basic principles (cf. Figure 21):

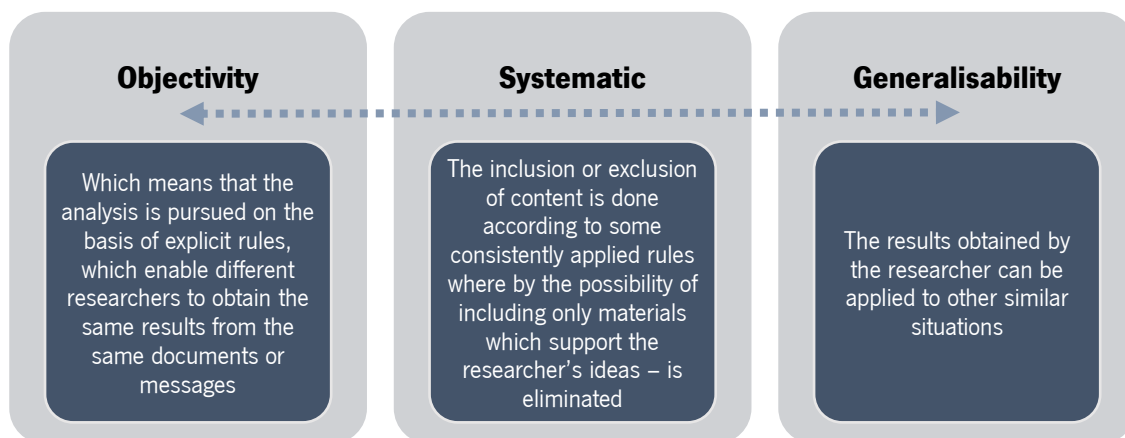


Figure 21: Basic principles of content analysis (Adapted from Prasad, 2008, p. 3)

Content analysis can be performed in two ways (Esteves, 2006), first, closed procedures that presuppose a simple description, based on a set of categories previously defined according to the theoretical framework in which the research is inserted; and second, open procedures that presuppose an analytical description, in which the categories emerge from the collected data. The open procedure based on

document analysis and open-ended questions from the questionnaire (online). The closed procedure based on the transcription of focus groups and interviews.

3.6. Data triangulation

In sum, this research, several types of triangulations presented in the literature were used (Bryman, 2012; Denzin, 1978; Flick, Kardoff, & Steinske, 2004). *Theoretical triangulation* consists of the use of different assumptions and theoretical principles in the analysis and interpretation of the collected data. *Methodologies triangulation* contemplates an approach with multiple methods to address the problem under study. It is used in a research design marked by the diversity of techniques (document analysis, questionnaire, interviews, and focus group) and by the diversity of moments in which the information was collected. Hence, *data triangulation* also plays an important role for rigorous and consistent research, seeking to confront information derived from different sources. This study is marked by an integrated data analysis ensured by the perspective of the participants; therefore, the crossing of data was a recurrent process in the analysis, determined by the interactivity of the data (Miles & Huberman, 1994). Finally, *researcher's triangulation* is justified in order to identify deviations or contamination linked to the influence and subjectivity of the researcher. Interaction with other researchers was always present throughout the research process. A constant triangulation of techniques and inferences between researcher and participants was set up (Lessard-Hébert, Goyette, & Boutin, 2005). The adequate statistical treatments of the data were guaranteed (Cohen, Manion, & Morrison, 2001).

3.7. Reliability and validity of the research

The research process must contain rigor as a key aspect. According to Bryman (2008) the most prominent criteria for the evaluation of social research are reliability and validity. The reliability concerns if the results of a given study are repeatable regarding the consistency or stability of measures. Stability (little variation in the re-administration of a measure to a group). There are four types of reliability: Test-retest reliability (consistency of a group of individuals' scores on a test over time); Equivalent-forms reliability (consistency of a group of individuals' scores on two versions of the same test); Internal consistency reliability (consistency with which items on a test measure a single construct); Interrater reliability (the degree of consistency or agreement between two or more scores, judges, observers, or ratters) (Christensen, Johnson, & Turner, 2015).

These concepts are particularly at issue in connection with quantitative research. Reliability is a “synonym for consistency and replicability over time, over the instrument and over groups of respondents” (Cohen, Manion, & Morrison, 2007, p. 146) and is related to accuracy and precision (Cohen, Manion, & Morrison, 2007).

The validity concerns the quality of the results regarding the truth, accuracy, consistency, and integrity (Burton & Bartlett, 2005; Bryman, 2008; Coutinho, 2011). It is a central key to effective research (Cohen, Manion, & Morrison, 2007) and has specific requirements both in quantitative and qualitative research. Internal and external validity are distinguished (LeCompte & Goetz, 1982; Shadish, Cook, & Campbell, 2002). The internal validity is based on the correspondence between observations, measurements and the reality investigated. The external validity is based on the generalisation of the results.

Concerns about the validity and reliability of qualitative research require extra careful by the researcher, who must ensure that a set of procedures is carried out, such as, for example, obtaining innumerable information collected in different ways, the reiteration of the collection and analysis processes, data saturation and exhaustiveness, contrasting points of view, redefinition of conceptual frameworks for analysis, among others (Fernandes, 2010).

Rigor, a term used by the quantitative paradigm, or trustworthiness, an equivalent concept in the qualitative paradigm, are the fundamental criteria that allow to trust or believe in the results obtained in research of an interpretive nature. A set of five criteria that must be covered to ensure reliability and validity in the research process were outlined: credibility, transferability, consistency (reliability) and applicability (confirmability) (Lincoln & Guba, 1985).

3.8. Ethical considerations

Ethics is concerned with the attempt to formulate codes and principles of moral behaviour (May, 2001). Research ethics is a set of principles that assist the community of researchers in deciding how conduct ethical research (Christensen, Johnson, & Turner, 2015).

Conducting research in Social Sciences requires special care in the way of approaching people and reality, which implies a set of ethical aspects that the researcher must consider throughout the entire research (Miles & Huberman, 1994; Kvale, 1996; Tuckman, 2005; Flores, 2003). Ethical issues aim to protect the individual, the communities and the environments that are under research (Israel & Hay, 2006) and

should be considered during all phases of the research process (Cohen et al., 2008; Coutinho, 2011; Hammersley & Traianou, 2012).

There was a concern and reflection on the research process, in particular in regard to procedures and options taken during the research, as well as the role of the researcher and the role of participants. With regard to the role of the researcher in conducting the research process, the literature reveals concerns mainly related to the relationship established between the researcher and the participants, with the participants' rights and the risks and benefits that the research itself entails for the participants stakeholders (Flores, 2003). It is compulsory for a social researcher conducting research involving humans to apply for ethical clearance (Madushani, 2016). Ethics should not be perceived as a constraint, but rather as a dynamic procedure aimed to guide and support the responsible exercise of professional judgment and, thus, enhance the quality of research (Ferreira & Serpa, 2018).

Two ethical dimensions can be considered in contexts where regulation takes place: procedural ethics and ethics in practice (Guillemin & Gillam, 2004; Ferreira & Serpa, 2018). Procedural ethics refers to one of the first stages of the research process, when the project is submitted to the authorisation of an ethics committee, whether it belongs to the organisations that promote research or to where the work will be developed. This procedural ethics is seen as a sheer formality, a hindrance that has to be overcome in order to progress with the project (Roriz Padez, 2017). That way, this research it was submitted and approved from the Ethics subcommittee of research on social sciences and humanities was sought (Ref. SECSH 037/2016) (cf. Appendix 2). On the other hand, ethics in practice regards the ethical issues that emerge in the course of research, the real issues that arise in the field research (Guillemin & Gillam, 2004; Roriz & Padez, 2017; Ferreira & Serpa, 2018). Ethics in research is a core element in the regulation of the scientific practice (Ferreira & Serpa, 2018). There is no ethically neutral research, and ethics goes through all phases of scientific research, whatever its audience (Gómez, Flores, & Jiménez, 1999; Tuckman, 2000; Lima, 2006; Miller, et al., 2017).

3.8.1. Access to the context of the research

This research was conducted in five Portuguese public universities and one Polish public university. A research protocol (see Appendix 3) was written between the researcher and the Presidents, Deans of faculties/schools/institutes. The research protocol was also held between the researcher and each teacher and programme coordinator. In this protocol the goals of the research project, the participants, a statement about voluntary participation, information about the confidentiality of the information,

information about data analysis, and the reference to funding entities, as well as the phases and data collection procedures were explained. The contacts of the researcher were also included. Permission for each sub-study was provided in writing in each university. Ethical considerations such as the informed consent and confidentiality were respected.

3.8.2 Informed consent

Informed consent it is a document that inform the research participant of all aspects of the study that might influence the participant willingness to volunteer to participate (Christensen, Johnson, & Turner, 2015). The informed procedure in the context of scientific research, in many situations, is a "fundamental principle for the ethical acceptability of a study" (Lima, 2006, p. 142).

The consent procedure establishes the precise conditions for the development of the research activity and the commitments to ethics, namely the issues inherent in anonymity, the level of intrusion and the degree of sensitivity of the information collected and treated (Ferreira & Serpa, 2018). It is important, whenever possible and relevant, to ensure that participants in research may consciously accept their role, and there must be a guarantee that they have been informed beforehand about the research and its present and future implications, e.g., during the research process and in the product of its dissemination. In the informed consent procedure, the use of a written document signed by both parties is valued, inasmuch that it is evidence of the aware role of the participant and that of the researcher, with delivery of a copy to the respondent upon signature by both parties (Bogdan & Biklen, 1999; Lima, 2006; Ferreira & Serpa, 2018).

In the context of this research, the informed consent was a concern in all phases of research and in each sub-study (see Appendix 5, Appendix 6, Appendix 7, Appendix 8, Appendix 9 and, Appendix 10).

3.8.3 Confidentiality

According to Ferreira and Serpa (2018, p. 18): "Several consent forms are structured in two parts: one encompasses information on the research project, and the other refers to the participant or his/her legal representative's statement in the research". Thus, in this research, the right to privacy was guaranteed through anonymity, meaning that any other person cannot associate a participant with the collected information, which corresponds to a guarantee that all information provided by the participants will not be publicly disclosed or made accessible to persons other than those involved in the research.

3.8.4. Role of the researcher

The role of the researcher during the research process is crucial, as methodological, conceptual, and ethical requirements are raised. The requirements are established by the investigator's profile and proximity to the study participants (Flores, 2003).

Since this research was composed of quantitative and qualitative methods, the researcher experienced a dual role during the collection, analysis, and interpretation of data. During quantitative research, the researcher played a neutral role in the research process. The meaning that participants attribute to the phenomenon studied is largely ignored in studies of this nature (Patton, 2002) only concerned with outcomes, generalisation, prediction, and cause-effect relationships through deductive reasoning.

In turn, in qualitative sub-studies, the researcher was concerned with the process, context, interpretation, meaning or understanding through inductive reasoning. The objective was to describe and understand the phenomenon studied by capturing and communicating the participants' experiences in their own words through interviews and focus groups. What is emphasised is the examination of the context that influences people's actions or interactions, and the meaning people attach to their experiences (Yilmaz, 2013). Open-ended responses let the researcher understand and present the world as it is seen and experienced by the participants without predetermining those standpoints. Direct quotations document the participants' depth of feelings, experiences, thoughts about what is happening, and meaning at a personal level. Hence, qualitative findings are far longer, more detailed and variable in content than quantitative ones. Purposeful sampling plays a key role (Yilmaz, 2013).

3.9. Challenges and limitations of the study

Throughout this research, some difficulties and constraints related to the nature of the study developed were felt. The nature of the research and the presence of the researcher in the context of the study, in order to apply questionnaires and carry out interviews in Portugal and Poland and to carry out focus groups with university teachers and students face to face, led to a well-structured schedule.

The first difficulty concerns to time constraints and availability of participants. Data collection took place in 2017 and 2020 in order to obtain information from university students and teachers and programme coordinators. The application of the questionnaires to the students proved to be relatively simple, as the authorisation to enter the classrooms was previously obtained. However, with regard to the holding of focus groups, it was difficult to reconcile the availability of participants in the different groups, in order to

fulfil the necessary requirements for holding a focus group. In order to carry out individual interviews with the programme coordinators, due to the numerous professional requests, it was difficult to find available dates delaying the conclusion of this research phase. But it turned out to be an insurmountable constraint. As a way of circumventing the constraints felt, the data collection was scheduled taking into account the availability of the participants and the most convenient location for the participants.

The second difficulty had to do with the data analysis process, carrying out an integrated analysis that considered the analysis dimensions inherent to the study problem proved to be a challenge. The large volume of data, resulting from the existence of various dimensions of analysis and different data collection techniques, has made the organisation of information a complex and demanding activity. However, over time, carrying out all the research phases and through an integrated view of the entire research process, it was possible to achieve the intended results and reflected in this work. Despite the constraints, a more targeted and critical approach to the assumptions and dimensions implicit in each of the themes studied was carried out, such as through the publication of scientific articles, book chapters and the presentation of communications at scientific meetings of the area of research.

The last constraint felt was intended with the COVID-19 pandemic, which led to global lockdown, blocking the realisation of the intervention project as planned. However, it was possible to make an adaptation to the pandemic context. Hence, an online monitoring and assessment project was carried out online. This last research phase was only possible due to the availability shown by the teachers who allowed them to intervene in their classes, despite the fact that they were also facing a totally new situation such as mandatory teaching, practices, and online assessment.

CHAPTER IV

STUDENT TEACHERS' VIEWS OF ASSESSMENT: A STUDY IN POLAND AND PORTUGAL

Chapter IV – Student teachers' views of assessment: A study in Poland and Portugal

This chapter presents data collected through questionnaires administered to student teachers in Portugal and Poland (see Appendix 11 and Appendix 12). First, data about the ideas that students in both countries most associate with assessment are presented. Second, data on the methods most used by teachers to assess students are shown. Third and last, data about the most used assessment practices in higher education in both countries are presented. In all quantitative data presented, the differences and similarities between both countries are presented.

4.1. Ideas about assessment in the perspective of student teachers in Portugal and in Poland

This section presents the findings of the questionnaire with student teachers. Data were collected through a questionnaire administered to Portuguese and Polish university student teachers. In Portugal 335 questionnaires were received from five public universities. In Poland, applied total of 434 student teachers responded to the questionnaire coming from four public universities.

Data from the questionnaire with student teachers are presented, particularly concerning the identification of the ideas that Portuguese and Polish students associate with assessment taking into account their experience and the differences between the two countries in these ideas. The construction of the scale was based upon previous work (Pereira, 2011; 2016) focusing on ideas associated with assessment. The list of ideas associated with assessment derived from the literature namely from the work by Hadji (1994) and Figari (1996) related to functions of assessment. A three-factor model is presented constituted by formative purpose of assessment (reflection, participation, help and success), summative purpose of assessment (grades, tests/exams, and verification of knowledge) and negative emotions associated to assessment (anxiety/stress and fear) there is a fourth factor (lack management) but that the validation study showed low internal consistency and therefore it was not used in this study.

Data analysis

Following the guidelines suggested by Van de Schoot, Lugtig, and Hox (2012), the measurement model was first tested separately for each sample (Portugal/Poland). In order to assess the global fit of the model, the chi-square (χ^2) values, CFI, and RMSEA were considered. Cut-off values for fit were considered adequate when CFI values were higher than .90 (Byrne, 2011; Hu & Bentler, 1999), RMSEA was lower

than .08 and SRMR below .10 (Browne & Cudeck, 1993; Schermelleh-Engel, Moosbrugger, & Müller, 2003). After achieving an adequate fit, measurement invariance as a function of country was tested, by testing configural, metric and scalar invariance models. Evidence for the invariance of the model is achieved when the constraint of parameters performed in testing the subsequent models does not worsen the fit indices. The BIC was used to perform this comparison: lower values indicate better model fit. These models were tested using Mplus version 7 (Muthén & Muthén, 2012).

After establishing invariance, multivariate analysis of variance (MANOVA) was used in order to test the differences between both samples (Portuguese and Polish) on the factor scores. Partial eta squared (η^2) was computed as a measure of effect size: values higher than 0.01 represent a small effect, higher than 0.06 a medium effect and higher than 0.14 a large effect (Cohen 1988). This analysis was performed using IBM SPSS Statistics 27.

Results

Table 14 presents the results for the measurement invariance. The fit of the three-factor model was poor in both samples. In the Polish sample, the inspection of the factor loadings and the modification indices suggested that the item 10 (*Learning*) had the lowest factor loading ($\lambda=.312$) and the modification indices suggested a better fit of the model if this item was included in factor 2 (Summative purpose of assessment). This item had a high loading in factor 1 (Formative purpose of assessment) in the model estimated using the Portuguese sample. Given that the purpose of this study was to compare the latent scores between both countries, this item was removed from the model and the analysis was rerun for both samples (revised models). In the case of the Portuguese sample, the revised model also included the estimation of two error covariances (items 8 and 7; and 8 and 9), suggested by the inspection of the modification indices. The final revised models had an acceptable fit in both samples (see Table 13). Next, measurement invariance across both samples was tested. The models for measurement invariance did not include item 10 and the two error covariances previously identified were estimated. The fit of the configural and metric models was adequate, but a significant decrease was observed in the fit of the scalar model. The inspection of the modification indices indicated that six intercepts were non-invariant. A partial scalar measurement model was run, where these intercepts were freely estimated. This partial scalar model obtained a good fit (see Table 14). Therefore, after guaranteeing partial measurement invariance, we proceeded and tested the differences in the latent means.

Table 14: Results of measurement invariance across Portuguese and Polish students for the ideas associated to assessment

Model	χ^2	df	p	CFI	RMSEA [90% CI]	SRMR	BIC
Poland	181.499	32	<.001	.822	.104 [.089, .119]	.078	9771.246
Poland (revised) ¹	93.785	24	<.001	.905	.082 [.065, .100]	.059	8865.311
Portugal	157.323	32	<.001	.843	.105 [.089, .122]	.084	7175.287
Portugal (revised) ²	64.320	22	<.001	.936	.074 [.053, .095]	.053	6558.481
Configural	154.524	44	<.001	.921	.080 [.066, .094]	.055	15477.037
Metric	175.093	53	<.001	.913	.077 [.064, .089]	.070	15437.593
Scalar	469.962	62	<.001	.708	.129 [.119, .140]	.147	15672.447
Partial scalar ³	192.786	56	<.001	.902	.079 [.067, .091]	.080	15435.281

Notes. χ^2 = Chi-Square; df = degrees of freedom; CFI = comparative fit index; RMSEA = root mean square error of approximation; CI=confidence interval; BIC = Bayesian information criterion.

¹After removing item 10 (Learning); ²After removing item 10 (Learning) and estimating two error covariances; ³Intercepts of items 1 (Verification of knowledge), 3 (Participation), 7 (Grades), 8 (Tests/Exams), 9 (Individual reports) and 12 (Help) freely estimated. (Source: Author)

Table 15 reports the item estimates in the final model in Portugal and Poland related to the data of the ideas of assessment scale. Factor loadings are highest in Portugal than in Poland with the exception of items 8 and 13 linked to the summative purpose of the assessment and negative emotions associated to the assessment factors. The loading values refer to the partial scalar model.

Table 15: Factor loading of items related to the scale “Ideas of assessment”

Item	Std loadings	
	Portugal	Poland
Factor 1 – Formative purpose of assessment		
9. Reflection	.533	.501
3. Participation	.510	.423
12. Help	.517	.489
6. Success	.676	.579
Factor 2 – Summative purpose of assessment		
7. Grades	.379	.316
8. Tests/Exams	.287	.341
1. Verification of knowledge	.742	.711
Factor 3 – Negative emotions associated to assessment		
13. Anxiety/Stress	.840	.842
14. Fear	.925	.881

(Source: Author)

The results of the multivariate analysis of variance (MANOVA) suggested a significant effect of country (Wilks' Lambda=.867, $F(3, 783)=39.929$, $p<.001$, $\eta p^2=.133$). Table 16 presents the univariate results

of this analysis. A significant effect was found for the formative and summative purposes of assessment. However, the effect for the summative purpose of assessment was small, whereas a medium-sized effect was found for the formative purpose. In both cases, the Portuguese sample scored higher than the Polish sample.

Table 16: Descriptive statistics and MANOVA univariate results

Effect		M (SD)	F (df)	p	η^2
Formative purpose of assessment					
	Portugal	0.290 (0.708)	89.551 (1, 785)	<.001	.102
	Poland	-0.237 (0.828)			
Summative purpose of assessment					
	Portugal	0.118 (0.667)	17.679 (1, 785)	<.001	.022
	Poland	-0.096 (0.746)			
Negative emotions associated to assessment					
	Portugal	-0.005 (0.973)	0.014 (1, 785)	.905	.000
	Poland	0.004 (1.018)			

(Source: Author)

Key findings

The scale used in this study has already been validated in a previous study in the Portuguese context (Flores et al, 2019; Flores et al., 2020). A three-factor structure was presented for the scale “Ideas associated to assessment” in factor analyses: (1) formative purpose of assessment; (2) summative purpose of assessment; and (3) negative emotions associated to assessment. The main goals of this scale were to identify the ideas that Portuguese and Polish students associate with assessment taking into account their experience and to explore whether there are differences between the two countries in these ideas. The results of this study show only partial invariance of the measurement model. The item related to “learning” was dropped, as it clearly was not associated to the same factor in both samples. The main result that the Portuguese sample depict is that it associates assessment with a formative purpose much more than the Polish sample.

4.2. Most used assessment methods in the perspective of student teachers in Portugal and in Poland

Data from the scale of questionnaire with student teachers’ are presented, particularly concerning the assessment methods most used by teachers taking into account the perspective of Portuguese and Polish

students and the differences between the two countries in the use of these methods. The construction of the scale was based upon previous work (Pereira, 2011, 2016) related to assessment methods, included 14 items comprising learner-centered methods (e.g., project-based work, portfolios, practical work) and traditional methods (e.g., tests/exams, oral tests). The list of assessment methods derived from the literature, namely Struyven, Dochy, and Janssens (2005); Falchikov (2005), Webber (2012) and Flores et al. (2015). A three-factor model is presented consisting of collective methods (practical or experimental, group reports, group projects and group oral presentations), individual methods (individual oral presentations, individual projects, individual reports, and individual written reflections) and portfolios. Given that the items written tests/exams and oral tests/exams did not load into any of the factors in the validation study for the Portuguese population, these items were excluded.

Data analysis

The three-factor model was tested using confirmatory factor analyses (CFA). Following the guidelines suggested by Van de Schoot, Lugtig, and Hox (2012), the measurement model was first tested separately for each sample (Portugal/Poland). In order to assess the global fit of the model, the chi-square (χ^2) values, CFI, and RMSEA were considered. Cut-off values for fit were considered adequate when CFI values were higher than .90 (Byrne, 2011; Hu & Bentler, 1999), RMSEA was lower than .08 and SRMR below .10 (Browne & Cudeck, 1993; Schermelleh-Engel, Moosbrugger, & Müller, 2003). After achieving an adequate fit, measurement invariance was tested, by testing configural, metric and scalar invariance models. Evidence for the invariance of the model is achieved when the constraint of parameters performed in testing the subsequent models does not worsen the fit indices. The BIC was used to perform this comparison: lower values indicate better model fit. These models were tested using Mplus version 7 (Muthén & Muthén, 2012). Two students from the Portuguese sample had missing values in all items and were therefore excluded from the sample. The proportion of missing data in the remaining sample was low: 0.74% in the Portuguese dataset and 0.58% of the Polish dataset. Moreover, the pattern of missingness was completely at random, as indicated by Little's MCAR test, $\chi^2_{(117)}=128.38$, $p=.222$. Missing values were accounted for by means of the full information maximum likelihood (FIML) estimator so that all the information available was used in model estimation. Next, multivariate analysis of variance (MANOVA) was used in order to test the effects of country and cycle of studies on the factor scores. Partial eta squared (η^2) was used as measure of effect size: $\eta^2>.14$ indicates a large effect; $\eta^2>.06$, a medium effect, $\eta^2>.01$, a small effect.

Results

The three-factor model was firstly tested for each sample separately. In both samples, the model included the estimation of five residual covariances. These residual covariances reflect the fact that the use of similar assessment methods in both modalities are related (e.g., individual, and collective reports). Model fit for this model was good in both samples (see Table 15). Configural, metric and scalar invariance across Portugal and Poland were then tested in successive models (see Table 15). The fit of the configural and metric invariance models was adequate. However, model fit dropped considerably in the scalar model. The inspection of the modification indices suggested that estimating freely five item intercepts led to an improvement in the model. Without constraining the estimation of these intercepts in a partial scalar model (see Table 17) led to an improvement in the model fit. Therefore, partial measurement invariance was achieved.

Table 17: Results of measurement invariance across Portuguese and Polish students

Model	χ^2	df	<i>p</i>	CFI	RMSEA [90% CI]	SRMR	BIC
Portugal	102.93	27	<.001	.92	.09 [.07, .11]	.07	8519.18
Poland	100.30	27	<.001	.95	.08 [.06, .10]	.05	10203.33
Configural	203.23	54	<.001	.94	.08 [.07, .10]	.06	18775.59
Metric	274.87	64	<.001	.91	.09 [.08, .10]	.10	18780.55
Scalar	831.37	74	<.001	.67	.16 [.15, .17]	.21	19270.36
Partial scalar	300.73	69	<.001	.90	.09 [.08, .10]	.09	18773.08

Notes. All models include the estimation of five error covariances. χ^2 = Chi-Square; df = degrees of freedom; CFI = comparative fit index; RMSEA = root mean square error of approximation; BIC = Bayesian information criterion (Source: Author)

Table 18 report the item estimates in the final model in Portugal and Poland related to the data of the assessment methods scale. Factor loadings are highest in Portugal than in Poland apart from items 10 and 13 linked to the collective methods and items 13 and 14 from the factor portfolios. The loadings values refer to the partial scalar model.

Table 18: Factor loading of items related to the scale “Assessment methods”

Item	Std loadings	
	Portugal	Poland
Factor 1 – Collective methods		
6. Practical or experimental group work	.543	.442
10. Group reports	.588	.602
8. Group projects	.632	.654
14. Group oral presentations	.707	.626
Factor 2 – Individual methods		
13. Individual oral presentations	.372	.389
7. Individual projects	.429	.421
9. Individual reports	.678	.656
11. Individual written reflections	.858	.511
Factor 3 – Portfolios		
3. Collective portfolios	.773	.834
4. Individual portfolios	.722	.842

(Source: Author)

Differences in assessment methods as a function of country and cycle of studies

MANOVA multivariate results indicated significant effects of country, $F(3, 781)=95.74, p<.001, \eta^2=.269$, and of the cycle of studies, $F(3, 781)=35.09, p<.001, \eta^2=.119$, as well as a significant interaction effect between these variables, $F(3, 781)=22.98, p<.001, \eta^2=.081$. A high effect size of country ($\eta^2>.14$) and a medium effect size of the cycle of studies ($\eta^2>.06$) were obtained. Table 17 presents the descriptive statistics and the MANOVA univariate results (see Table 19).

Table 19: Descriptive statistics and MANOVA univariate results

	Portugal				Poland				Country			Cycle of studies			Country*cycle of studies		
	Underg.		Master		Underg.		Master		F (gl)	p	η_p^2	F (gl)	p	η_p^2	F (gl)	p	η_p^2
	M	SD	M	SD	M	SD	M	SD									
Collective methods	0.50	0.67	0.46	0.80	-0.26	0.77	-0.60	0.74	278.72 (1, 783)	<.001	.263	12.31 (1, 783)	<.001	.015	8.02 (1, 783)	.005	.010
Individual methods	0.04	0.84	0.75	0.74	-0.24	0.74	-0.39	0.72	164.28 (1, 783)	<.001	.173	25.85 (1, 783)	<.001	.032	60.94 (1, 783)	<.001	.072
Portfolios	0.19	0.91	0.43	0.94	-0.14	0.84	-0.40	0.74	86.24 (1, 783)	<.001	.099	0.01 (1, 783)	.919	.000	16.01 (1, 783)	<.001	.020

Note: M=Means; SD=Standard deviation; η_p^2 = partial eta squared (Source: Author)

However, the interaction effects suggest differences between cycles that vary across countries: in the group of Polish students, master students reported less use of collective methods than undergraduate students; and in the group of Portuguese students, master students report more use of individual methods than undergraduate students. Regarding the use of portfolios, there was an opposite effect: in the Portuguese sample, master students reported significantly more use of portfolios than undergraduate students, whereas in the Polish sample undergraduate students reported more use of portfolios than master students (see Figure 22, 23, and 24). Overall, the Portuguese students reported more use of collective and individual methods than Polish students.

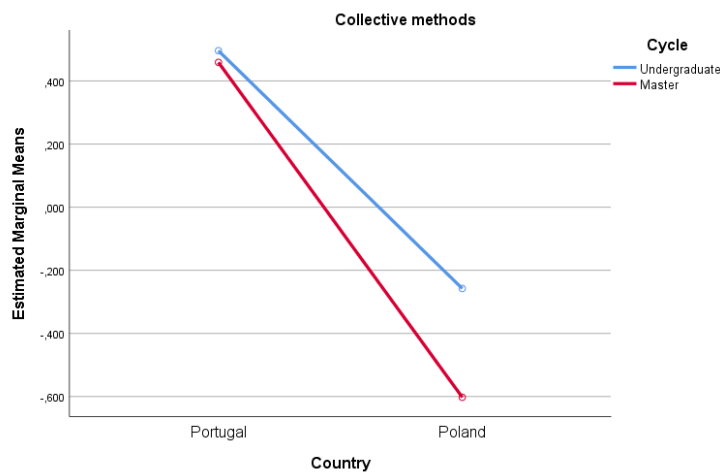


Figure 22: Interaction effects between country and cycle of studies in the collective methods of assessment (Source: Author)

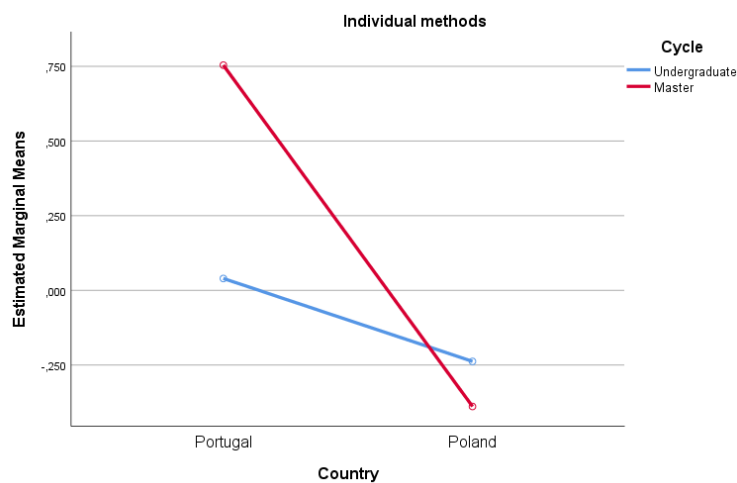


Figure 23: Interaction effects between country and cycle of studies in the individual methods of assessment (Source: Author)

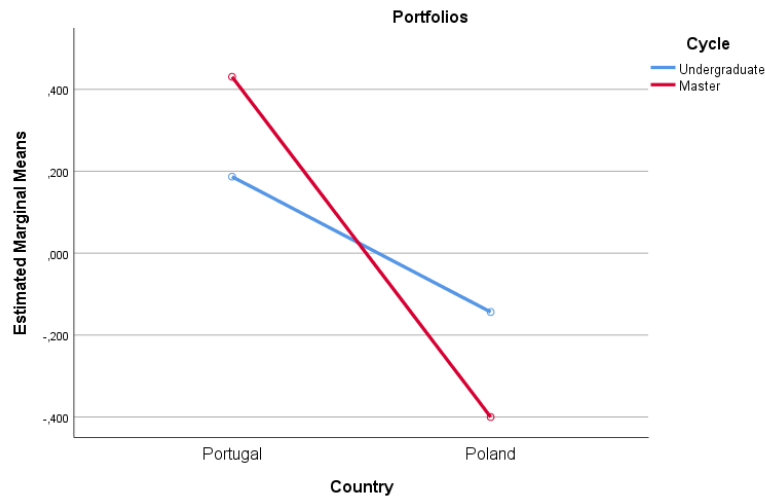


Figure 24: Interaction effects between country and cycle of studies in the portfolios as method of assessment (Source: Author)

Key findings

This scale of the questionnaire sets out to analyse the types of assessment methods used in higher education, from students' point of view, in teacher training courses from Portugal and Poland. The scale used in this study has already been validated in a previous study in the Portuguese context (Flores et al., 2019; Flores et al., 2020). A three-factor structure was presented for the scale "Assessment methods" in factor analyses: (1) Collective methods of assessment; (2) Individual methods of assessment; and (3) Portfolios. The emergence of a factor related to the use of portfolios, separated from collective and individual methods, is consistent with the literature that suggests that portfolios have a specific nature. It implies both the process and the product of learning and an ongoing and gradual construction throughout a given period of time. Henkin (1993) finds that the portfolio provides a holistic assessment that contributes to a valid measure of higher order thinking skills. As such, it is interactive, dynamic, evolving, in progress and it requires the involvement of the student through an ongoing decision-making process (Authors 2020). As a student-centred method of assessment, the portfolio is said to promote self-regulation and self-assessment (Lam, 2016; Flores et al., 2020), to foster language skills and feedback (Burkšaitienė & Teresevičienė, 2008; Flores et al., 2020) as well as critical thinking and deep approaches to learning (Segers & Dochy, 2001; Flores et al., 2020). Formative assessments and feedback are essential both for judging work and for permitting learning to become a logical outcome.

In this study, the results show that there are only differences between cycle of studies in the Polish sample regarding the use of collective methods of assessment, that is, master students report less use of these

methods than undergraduate students, but this difference does not occur in the Portuguese sample. Regarding individual methods of assessment, there are only differences between cycle of studies in the Portuguese sample, that is, master students report more the use of individual methods than undergraduate students. At last, as regard the use of portfolios, the results are exactly the opposite in both countries, that is, in Portugal, it is the master students who use more portfolios, while in Poland it is the undergraduate students who say they use this one more as a method of assessment. It was not possible to find statistically significant differences regarding the gender, age or year attending in both countries.

Through this study, it is concluded that, in terms of cycle of study, different assessment methods are used in the two countries. Poland focusing on student-centred methods (Webber 2012; Huba and Freed 2000) during the degree, such as group essays, project work in teams, group oral presentations in classroom and portfolios. These are assessment methods that enable knowledge construction, skills' development such as autonomy, reflection, and collaborative work (Sambell & McDowell 1998; Myers & Myers 2014), increasing feedback and students' motivation (Huba & Freed, 2000; Gasiewski, Eagan, Garcia, Hurtado, & Chang, 2012). Meanwhile, in Portugal, emphasis is placed on the use of the portfolio in the master's programme.

CHAPTER V

ASSESSMENT IN HIGHER EDUCATION: THE VIEWS OF THE COORDINATORS OF TEACHER EDUCATION PROGRAMMES

Chapter V – Assessment in higher education: the views of the coordinators of Teacher Education Programmes

This chapter presents data collected through individual interviews with Teacher Education Programme (TEP) coordinators in Portugal and in Poland. It addresses their perceptions about learning and assessment, the key challenges as well as improvements to be developed in assessment in TEP from the perspective of the coordinators.

5.1. Key themes arising from the interviews

This section presents findings of the individual interviews with TEP coordinators in Portugal and Poland. Data were collected through an individual interview to Portuguese and Polish university teachers with management positions in TEP in Portugal and in Poland. In Portugal, 7 interviews were conducted in 1 public university. In Poland, eight interviews in three public universities were carried out.

From the data collected from the programme coordinators in the two countries, three major categories emerged (see Figure 25): i) students' learning and assessment, ii) challenges in TEP and student assessment, and iii) improvements in learning, assessment and in TEP. In each category different elements were identified which are also related the cultural, political, and geographic differences of the two countries find themselves, which, in turn, influence the way teaching, learning and assessment is operationalised.

First category, *students' learning and assessment*, in Portugal, includes elements pointing to a positive balance in regard to student learning and academic results which are, in TEP coordinators' views, influenced by an inflation of grades, originating, on the one hand, from the need for students to obtain jobs in the future and, on the other hand, by the fact that private institutions offer the same programmes as public institutions but, in general, present higher grades. In addition, students show difficulties in applying learning acquired during the internship. In turn, the Polish coordinators highlighted aspects such as the passive attitude of the students and the predominance of traditional assessment methods.

In the second category, *challenges in TEP and student assessment*, the Portuguese coordinators focused on aspects such as teachers' work and the condition of students as workers; while the Polish coordinators highlighted aspects related to the role of the student, as well as issues related to the organisation of the programme and a broader understanding of the portfolio as an assessment method.

In the third and last category, the Polish coordinators focus on elements such as access to the teacher education programme and coordination and communication between teachers. In turn, the Portuguese coordinators focus on aspects related to the internship.

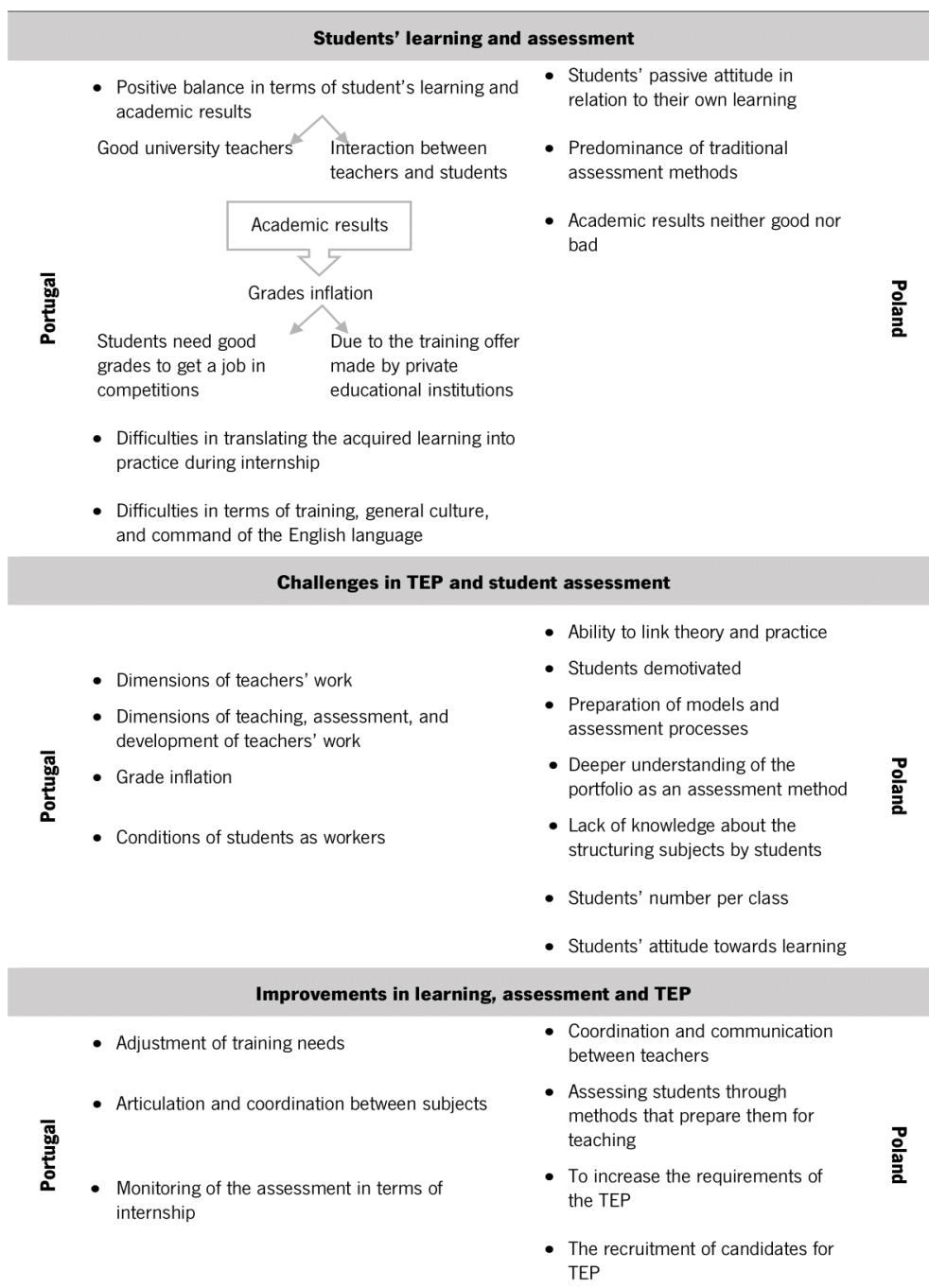


Figure 25: Categories emerging from the TEP coordinators' accounts (Source: Author)

5.2. Portuguese programme coordinators' views of assessment in higher education

5.2.1. Students' learning and assessment

The Portuguese coordinators refer to a positive balance of student learning and assessment and report that there is a great diversity of methods through which students are assessed throughout the programme:

From what I know there is a diversity of methods, which does not mean that some more traditional methods do not persist, often reconciled with less traditional ones (PC2).

TEP coordinators emphasize a positive balance in terms of student learning and academic results due to the good university teachers that the institution has, due to the interaction that is promoted between teachers and students, as well as a good learning process.

The interaction that students have with the variety of teachers we offer them (...) interacting with them and teaching them and I think they also appreciate and value even if they don't express this formative experience. (PC1)

[the academic results] are good in general, also because of the training they have. (PC5)

The balance is very positive, given formal and informal conversations with students. The balance I do in terms of learning and academic results is very positive. (PC2)

I think the programme guarantees good training. (PC3)

We have teachers who are very good at national level, and I think this ends up being reflected in the way they teach, because they bring their own experience into the classroom. (PC5)

However, the good academic results are also related to the inflation of grades that has been occurred over time. A wide range of countries have documented that the majority of academic institutions are awarding higher grades to current students for the same level of work compared to their predecessors. Similar increases in top marks and grades have been documented in Canada, France, Israel, EUA, and Sweden, among many other countries from high school to university level (Wikstrom & Wikstrom, 2005; Maagan & Shapira, 2013; Caruth, 2013; Alphonso, 2014; Bamat, 2014; Chowdhury, 2018; Jephcote, Medland, & Lygo-Baker, 2021). In the Portuguese case, the coordinators attribute the higher grades, on the one hand, due to the training offer at private educational institutions, which, as a rule, inflate grades to attract more customers. On the other hand, students need good grades to get jobs in competitions when they finish their training, posing the problem of creating the false sense of high quality in higher

education institution, in teaching, staff and students without corresponding increases in learning or performance. In addition, grade inflation makes it difficult to distinguish between exceptional students and good students or between good students and average students (Caruth, 2013).

Usually very satisfied in terms of academic results (...). Then, in terms of grades, I'm able to think that maybe it's a little high, especially if compared to other times. Due, to a great extent, to the pressure of the times because it is neither today nor yesterday, but when private training institutions began to proliferate where they give high grades as a way of attracting students, programmes in public institutions ended up realizing that they also had to do the same. (PC3)

In terms of academic results, in a more general perspective, or specific to the subjects, or even in terms of final assessment, they are very well assessed. In terms of rankings, I think they will come out with spectacular grades, so they are all excellent in terms of results. This translates into inflation, excessively inflated grades and for various reasons, the grades are inflated across the board, but I think there are several reasons, there are many factors. I think it's not easy. (PC4)

The coordinators also made report difficulties in translating the acquired learning into practice during the internship. This is an aspect that may arise from the fact that students, during classes, have not developed the necessary competencies to get into the practice due to the lack of training in class. Nevertheless, the coordinators' accounts reveal that some students do not devote to study as much as they should.

I think this year went very well in the sense that the students ended up being able to develop progressively because at the beginning they were having a lot of difficulties in terms of implementing the practice of many aspects that they had addressed in theory. In the beginning it was a bit complicated to internalize this new approach at the level of practice. This has to do with the structure of the programme as the practice is concentrated in the second year and students have little or almost no experience of direct contact with the context. This has implications for the difficulties of implementation in real contexts. I mean, difficulty of transposition [from theory to practice]. But the overall assessment is positive. (PC6)

There may be the aspect of us facilitating, but students are not devoted to study. We have students who have the right profile and will be good teachers and good

professionals. However, there is the feeling that something is left behind and that could have been further explored. I speak in terms of training, in fact there is dedication, but they are less prepared for practice. (PC4)

TEP coordinators also point to a deficit in terms of training, general culture, and mastery of the English language.

In terms of the challenges, our students who enter the programme have some deficit in terms of training, as well as culture. Another challenge relates to the students' skills in the English language (PC6)

5.2.2. Challenges in TEP and student assessment

Regarding the main challenges in terms of programme assessment, institutional problems stand out, such as workload, difficulties in articulation among university teachers and individualistic culture, largely promoted by the university:

In practice, we don't have time, even if we wanted to, but we don't have time (...) And the type of tasks we are called to do... we are very disorganized, we have a very fluid organisation, that is, it is only disorganisation by default. (PC1)

The internal constraints that have to do with the difficulties in creating the trainers that reflect and work in an articulated way, taking into account the professional profiles that one intends to educate. (PC3)

In addition, the participants spoke of the lack of teaching staff in certain areas in teacher education and a difficulty in promoting programme's change and updating to meet current needs:

It's the university's doldrums. It's people not realizing that things evolve and for example people who 20 or 30 years ago created highly functional and positive models, nowadays, persist in defending this model because they created it and sometimes, they are 6 years to go away (leave the university career) and insist on a model that is obviously not resulting. So, this reflects the doldrums not only of our university, but in the country in general. We are in a moment of crisis. We need students, we have students, why not investigate. It's the biggest hurdle, convincing people that there are no noble areas. (PC5)

University teachers must respond to the various dimensions of their work, for example, teaching, assessment, administrative tasks, external commitments, research, and publication (Pedrosa-de-Jesus,

Guerra, & Watts, 2019). Hence, this represents an important challenge for the development of teachers' work:

I feel that there is a lot of resistance. The programme has a lot of students, but they don't hire for this programme, but, if necessary, they come to the technology subject and divide into 2 shifts to hire technology teachers for the same programmes. I don't believe a technology teacher needs to have fewer students than me. (PC5)

The assessment of the performance of the centers means that there is a very individualistic work process in this university: It makes an attempt at specialization of each of the teacher in terms of academic production and that makes the work of the team very difficult. In addition to the excessive work where all of us have not only me as coordinator, but all the teachers, which leads us to a very wide dispersion... This ends up making it very difficult for this work to take place, which in my perspective would have to be well articulated. Also, the fact that we are divided into departments creates this environment and then the issues of assigning teaching time to each department, in short, the university organisation itself here does not facilitate the articulation. These aspects, in the context of teacher training, are worrying, but I'm also already in the mood to think that I do what I can, with almost certainty that we haven't achieved what we wanted (PC3)

Regarding the challenges in assessment of student learning, the coordinators highlighted the lack of articulation between subjects:

I think that this training model still persists a lot. Some subjects clearly work well and then there are other subjects that have a more distant relationship, but still existing. There are those subjects that I don't think have any connection with practice. I think that, on the one hand, there are teaching traditions, and, on the other hand, the fact that the teaching teams are in two different schools, which also makes dialogue and coordination and the change of practices a bit more difficult and complicated. It could improve the articulation between subjects, namely at the level of assessment work, because I think that a subject in an isolated field of action has to have a methodology, a more controlled assessment of the work. (PC2)

And the workload in terms of assessment and, finally, the need to stabilize the cooperating teachers' staff:

The intensity of the condensed work that students benefit from that is, developing work related to the internship and making sense of learning. (PC4)

The workload is also often excessive in terms of assessment, but above all it allows the articulation of knowledge, a greater connection between formal curricula and practices that exist in some curricular units. (PC2)

Construction of materials for activities to be implemented in practice, rigorously, responsibly, that is, working on issues of autonomy, for example, teaching them how to do worksheets, how to organize the materials. Then we see that they manage to appropriate them and mobilise the knowledge they acquired throughout the classes. get students to work in practice by developing their knowledge. (PC6)

Grade inflation, already mentioned in the previous category “student’s assessment”, also appears as a challenge, because everyone involved in the assessment process knows the justifications for this fact and recognises its validity. However, the truth is that one experiences a fallacious issue about assessment, namely the grades given to students, the performance of teachers and the quality of universities

I think there is a problem with the inflation of grades I think there is an exaggeration. I know there is a justification, I think it is an argument that is fair or, at least, we should not reject it. On the other hand, that these people will run later. They won't be harmed, this argument is fallacious, but it has a lot of force. (PC1)

Students have to do their own assessment, self-assessment, and be aware of their work, because they lack to understand the difference and there must be a difference in assessments. At the moment, it is inflated, and some teachers have been working in a relaxed way, many people can understand why and the students themselves recognise this, sometimes, even if it falls into exaggeration. (PC6)

The coordinators draw attention to the fact that, nowadays, many of the students are workers and students at the same time, and this influences the organisation of the programme and the dedication to the study:

Some students do not show up for classes, because they are working: This should happen in other masters, it makes it more complicated. (PC1)

I think it's a type of student that we don't like to have at this point, especially since this economic crisis began when we have many more students who are working students and

take a teacher education programme. At these levels, it is very difficult because it requires a great deal of dedication and then the students are working. (PC3)

5.2.3. Improvements in learning, assessment and TEP

Regarding the aspects that need improvement the programme, the participants talk about an adjustment of training needs, for example, the integration of the special educational needs subject in the curriculum as mandatory:

A certain mismatch between training needs and the training system we have I think the system is lagged. Given the training of students, I think that training should be structured around their needs, it is not adjusted to the needs of each one. The fact that we give the same answer to everyone makes those who need something else that is not mentioned to be without it and those who need something that is not foreseen also be without it. There is an impoverishment (PC1)

There is another complaint that students say is related to the subject, which at this moment is still optional, which is special educational needs and that there is a limit. At this time, it is optional, but it is needed for training, and it is certainly a matter to be rethought in the organisation of the programme. There has to be monitoring with the reforms that are being introduced in the education system itself and the university itself has to keep up with this clear that we have a period of validity for the programme and only when the revision takes place can we change the structure of programme, but this is something that we have to predict. (PC6)

Not forgetting a more articulated teaching work, increasing the teaching staff and increased importance of feedback provided to students:

The team of teachers, the conditions of the teachers to be able to work in a more articulated way. (PC3)

There is a pressing need to increase the teaching staff. There is a huge need to be able to better monitor the internships and to fit this with classes, meetings are very difficult, so we are playing with internships. I think we should even have people more specialized in supervision given specific area, for example, to eventually make a career in supervision, but this is a dream (PC5)

Despite saying it is missing, feedback is one of the aspects in which teachers normally, despite assuming that it is a training methodology, do not attach importance. (PC6)

Concerning to the last category of analysis related to improvements in the assessment of student learning, the improvement of the articulation and coordination between subjects:

I think one of the challenges is exactly how to make this articulation between subjects in the assessment. I think that this would eventually oblige teachers to reformulate their programmes. Although I consider that the model is globally well done and that the assessment takes into account various dimensions of training and there are instruments to support the assessment, therefore, it is not an assessment without any reference, there is a framework, there are criteria for practice, for the report, I mean, everything was being built. (PC2)

It has to do with the coordination between subjects, which is not easy. It is not easy because we are always overloaded, so the intentions that we have were never able to be achieved and we keep on trying. (PC4)

Also, the internship in terms of monitoring the assessment process and a better preparation of students for practice are identified:

There is a set of competences to be developed, a set of works that should demonstrate these skills. I don't say that the assessment is easy, but I think it's not that complicated and, therefore, where I see the greatest challenge is in the dimension of the internship, not only because of the complexity of the tasks that the internship presupposes, as for the duration itself, with several assessment moments. (PC2)

Conditions especially for students to dedicate themselves to the internship. (PC3)

Especially the assessment of the internship part because there is the difficulty of going to the contexts. We have the portfolio that introduced a change compared to other programmes because the portfolio was made with a kind of revolution to get the essentials of what is done and then we have the internship report, in other programmes in the country it is not like that. (PC5)

Start to direct students to a more practical dimension, when they enter the internship, supervision, they are already more comfortable in the organisation of materials, in the

selection, because sometimes they don't even have the competences to get to know how to select the materials well, they still have a lot to do which is why it's important to try to work hard on this dynamic. (PC6)

Introduce more orality (PC5)

5.3. Polish programme coordinators' views on assessment in higher education

5.3.1. Students' learning and assessment

The programme coordinators in the Polish context, regarding students' learning and academic results, only mentioned that they are neither good nor bad. It is also stated that students participate only when invited to do so: *The results show students who are neither good nor bad. Students answer questions, most are willing to participate and answer our questions. (PCPL6)*. A rather passive attitude on the part of the student teachers regarding their own learning is identified.

Regarding the assessment, particularly the most used assessment methods to assess student learning, Polish teachers prioritise assessment methods such as the exam or test (with various question and answer options), group and individual project, essays, and team projects:

Exam, statement, project (PCPL1)

Written exam, project, lecture, presentation of the subject. (PCPL2)

Individual project, group project, participation in the discussion, oral exam, written exam. (PCPL3)

In test: multiple choice, sentence completion, writing definitions, free writing on a given topic, description of a given issue (a theory, an approach, a technique), explaining selected teaching problems in a written form. (PCPL4)

Proficiency tests, colloquium, paper (e.g., essay), individual or team projects (university, school, kindergarten), assessment of teaching practices, final examination. (PCPL5)

The portfolio is valued as it allows for the monitoring of individual student's progress:

For me, the portfolio is a good method to monitor individual student progress, it reflects the different stages, but it needs to be done. The test is good for a given time and moment; it does not assess the progression process. I don't really like the tests because of that aspect. I propose the answer to a few topics, but not as a traditional test. I don't

put a paper with blank spaces to be filled in, I prefer it in the form of a description, I can understand the way students think. (PCPL7)

Polish programme coordinators state that there is traditional assessment in the context of teacher education also a result of the country's own culture: *Assessment is very traditional. We should also look at Polish culture which is very traditionalist (PCPL6)*. But they choose these methods because they are more comfortable and because they give information about the student in a more correct and accurate way, although no evidence is shown about the competence of the students:

The aim is simply to develop this kind of methods (traditional methods). Maybe we perceive these methods more objective and also comfortable. These methods show the information about the students know but no the competence and the knowledge. It is simply easier to use these methods. It depends on the teacher because some of the teachers develop students' methods like portfolios. The teacher has doubts about the objectivity of the alternative methods. The teachers need the correct and look at the exact opinion about the students. There is also the problem that in group work as one person does everything, and the others do nothing. Tests and exams help to avoid these problems. (PCPL6)

5.3.2. Challenges in TEP and student assessment

A challenge identified by the Polish participants is the ability to link theory and practice and a large number of students who are unmotivated, causing them not to dedicate themselves to the programme. This aspect is verified, in the opinion of the participants, due to the characteristic massification and heterogeneity of higher education.

Different attitudes of students towards learning, some of them work hard, want to be teachers, and get the best grades. But it's not a large group of students. Then we have a group of very unmotivated students. In Poland we have a very mass education, and we meet people with different ages and different profiles. (PCPL6)

A challenge regarding assessment has to do with the preparation of models and assessment processes taking into account the learning outcomes, mainly through portfolio. First, because it is more difficult to monitor and, second, because it requires more individual time with the student.

First of all, the preparation of models and assessment process taking into account the learning outcomes. Preparing the elements to assess each student's individual progress,

we seek to monitor progress. It is a challenge to prepare assessment methods and skills. The portfolio is an element that we try to implement to monitor students, but it is a little difficult. The portfolio needs individual contact with the student, and we need time for that. It is a problem for us, when we have a large class, to monitor this individual process. (PCPL7)

Due to the subjectivity and flexibility that the portfolio contains, as it is a training method, it requires a deeper understanding of this method and its goals: *The portfolio is a good method, but it took a long time to understand what figure out with it, what the objectives are (PCPL8).*

Furthermore, it is an assessment method that requires students to have more autonomy and responsibility for their learning, and Polish students are used to receiving accurate guidance on what they are expected to do and how they should do it:

We have to realise if we've covered all the important issues, what we are looking for. The portfolio for us is a problem because students do not know how to work independently, students look for very prescribed directions. And the portfolio is an autonomous task. On the one hand, we have to create concrete criteria for the assessment, the type of task and what we intend to do with it and also guide students to realise these criteria. Despite this, students do not like it very much because it requires more work and students are used to the typical exam. When we propose such a task to them, the students feel lost. (PCPL8)

Students are used to being assessed through tests. are not able to have work together and have responsibility at work. (PCPL6)

In the case of the portfolio, at the beginning, it is difficult for students, they need details, and all the steps are well detailed, they are not very autonomous.

In the case of projects, as an assessment method, since students are developed throughout the semester, they like it more, but the problem is on the teachers' side because they find it difficult to assess the theory mobilised for the construction of the project.

In the case of projects, they have a semester to prepare, the students like it more. They manage to transpose knowledge into practice. It is more difficult to assess students' theoretical knowledge, sometimes it is a problem to identify theory. It is necessary to

encourage students to practice, but in a more reflective, more theoretical way. Explaining the theoretical basis for the construction of the project. (PCPL7)

However, teachers also understand that an exam is not enough to prove the knowledge acquired by students and that there is:

As teachers, we think that an exam is not enough to prove students' knowledge with the test we never have enough evidence. If you have something more assertive, it's better, because it's either black or white. If we, as teachers, want to know some of the students' competence, we cannot take tests or exams. (PCPL8)

Polish programme coordinators also highlighted the issue of lack of knowledge about the structuring subjects that future teachers will teach and their proficiency in the English language:

The main problem is a need to include two aspects in the assessment: subject-based knowledge and the level of proficiency in English. In the subject in which our students are expected to deal with teaching English to young learners the most important is the level of their knowledge and skills concerning their ability to work with kids and teach them well. But, when the level of the language itself is poor, the students cannot show what they really know and are able to do in their own classroom. (PCPL4)

As a positive aspect, it was highlighted by the Polish program coordinators that the way of thinking about teacher education is changing, as well as the attitude towards learning:

Right now, in our country, the way of thinking about teacher education is changing. Policies and institutions are realising what the area needs, its needs, there are institutional obstacles. We cannot do what we think is best in terms of teaching teachers, because there are barriers, a very narrow way how the institution perceives the programme. (PCPL8)

The attitude towards learning is changing a little bit (...). Universities are changing, becoming more modern. (PCPL6)

As a negative aspect, the high number of students per class was mentioned, which makes a more active participation by the students impossible, as well as the development of certain fundamental competences in the teaching profession:

Due to the number of students in the same class it is impossible to encourage students to participate, to get involved, to develop their skills. And as future teachers they have to develop certain skills. The problem is in learning and assessment. I don't remember my students' names, just faces. This massive attempt to bring students into higher education is against quality. (PCPL6)

One of the greatest challenges in assessing students' learning is their own attitude to learning, so tests prove to be the most suitable method to assess, because students have not yet realised that the university is a space for discussion:

Some students perceive studies as a continuation of secondary education, where we have to tell them everything they have to do. It is supposed to be different and that they learn for themselves what, how and when they want to learn. Students are not prepared for autonomy, it is very difficult to prepare them for this and, many times, it is impossible. The attitude to learning about responsibility, belongs to the students. Maybe because they are very young and want to do other activities or rest. (PCPL6)

Students only come to classes if there is a requirement, otherwise only five or six students show up who take photos of the teachers' presentations and put them online (e.g., Facebook) for everyone to see. That's why the assessment is through tests is good. If we had more time maybe, we could do it another way. But right now, it's fine. For the attitude students have, it works! (PCPL6)

We have a group of students, but not a very large one, who are interested. I invite students to discuss and participate more in class, but it is a difficult process. The class cannot have only one direction, I try to get students to participate more, to ask questions. But very often it is very difficult to activate students. The reason for this reaction, a very important element, has to do with our very traditional education system. There is a teacher, a promoter of ideas and students are just recipients of these ideas. We have to encourage students to realise that the university is a space for discussion. One of the elements introduced were workshops to promote more discussion. (PCPL7)

5.3.3. Improvements in learning, assessment and TEP

Asked about what could be improved in the assessment of learning in the programme, the Polish programme coordinators refer to the need to improve coordination and communication between teachers and understand together with students what needs to be changed:

Assessment is the result. It's information about students. When we assess, we can change our programme. Improve what we teach. In terms of coordination and communication between teachers. Communicate what needs to be done, decide what's important. Get together with all the people at the college. Connect the program with the needs. What we must get to. Discuss with students, have surveys to understand what needs to change in the programmes, the way to assess, the teaching and learning process (PCPL8)

Another aspect to be improved has to do with assessing students through methods that prepare students for teaching practice and that do not focus only on learning outcomes:

In the process of teaching and of future teachers it is necessary to implement different assessment methods, because tests are not the best way to assess them. It's not good. We look for methods that only focus on results. We have to look for methods that prepare people for work, for practice, for responsibility, for working in groups. These competences are very important for the future of the teaching profession. (PCPL7)

When asked to write what education is, students know how to respond. But when we ask them what they learned about education, they don't know how to answer, they look at me and the mobile phones and the internet, they get confused. Using alternative assessment methods is a risk because students will not know how to respond. This is not good, but it seems to me that we will continue to use these methods. (PCPL6)

Concerning the assessment as an aspect to be improved, the need to increase the requirement of the TEP was identified, namely in the capacity to articulate theory and practice.

The most important challenges of assessment in our teaching programme are to increase requirements regarding ability of connecting psychological, pedagogical, sociological etc. theory with teaching and upbringing methodology and practice. (PCPL5)

Finally, another aspect has to do with the recruitment of candidates for teacher education programme, which should be more demanding, with mandatory specific competences tests as elements of candidate recruitment:

The assessment of skills and social competences is more difficult. This aspect of assessment of teachers-to-be should be improved. The next case - that recruitment for teachers' studies should be more demanding. Secondary school certificate is not enough. Tests of specific skills should be obligatory elements of recruitment. (PCPL5)

5.4. Summary: similarities and differences

Concerning the data collected from coordinators of teacher education programmes, in Portugal and Poland, it was possible to conclude that the Portuguese coordinators hold a more positive view of the students' learning, academic results and assessment methods used than the Polish ones. The Portuguese coordinators consider that the program has good teachers and good interaction between teachers and students. However, academic results are related to grade inflation. Although there is little empirical evidence for grade inflation in higher education in Portugal, there is interest in the phenomenon internationally – including UK, Australia, Canada, Israel, and Italy (Bachan 2018; Jephcote, Medland, & Lygo-Baker, 2021). This issue has been widely researched in a US context, in the most different areas, for example, law, science, engineering, medicine, among others (Rojstaczer & Healy 2010; Bachan, 2018). Hence, the importance of our study that addresses this issue in teacher education as institutions engage in grade inflation (Chowdhury, 2018) and compete among them. Academic institutions are enrollment-driven and every semester they face enormous pressure to enroll more students. Today greater competition for student enrollment between and within institutions is a prime factor for inflation. An increase in grade point averages was also reported by the American Academy of Arts and Sciences summarised the findings of several studies involving 180 universities and surveys of over 50,000 students (Rosovsky & Hartley, 2002). On the other hand, there is the influence of the labor market on student grades, because the higher grades achieved at the end of the program increase the chances of getting a job faster, better paid and with better conditions.

Polish programme coordinators show the students' passive attitude in relation to their own learning, which also ends up leading to the predominance of more traditional assessment methods than those used by Portuguese teachers. The Portuguese coordinators go further on the issue of student learning and report

that there are difficulties in transposing learning into pedagogical practice and the lack of transversal competencies (such as the mastery of the English language or a more comprehensive general culture).

In regard to the challenges, the Portuguese identify the dimensions of teaching work, teaching and the condition of students as workers. These factors influence the organisation of the programme, classes, and the assessment itself. While the Polish address issues related to students' lack of motivation and inability to establish a link between theory and practice as well as the high number of students per class and students' attitude towards learning. In other words, the Portuguese participants pose most of the challenges on the side of the size of the teachers' work, while the Polish invoke challenges linked to the students. Lastly, in the dimension of the improvements in TEP, specifically in Portugal, the coordinators highlighted the need for adjustment of training needs and better preparation of students for practice. Poland's programme coordinators spoke of the need to increase the requirement and the recruitment of candidates for TEP.

CHAPTER VI

BEING A UNIVERSITY TEACHER: VIEWS OF THE PROFESSION AND ASSESSMENT IN HIGHER EDUCATION

Chapter VI – Being a university teacher: views of the profession and assessment in higher education

6.1. Focus group with university teachers in Portugal

This section looks at university teachers' perceptions of what they view as the key characteristics of their profession, in general, and of the assessment process in particular. Data were collected through focus groups conducted with university teachers from the scientific areas of social sciences, namely in Teacher Education Programme (TEP) and medical and health sciences, specifically from the nursing programme.

Findings are presented according to the emerging themes arising from the data analysis: a) being a university teacher; b) conceptions of teaching; c) student participation; d) assessment and e) feedback (cf. Figure 26).

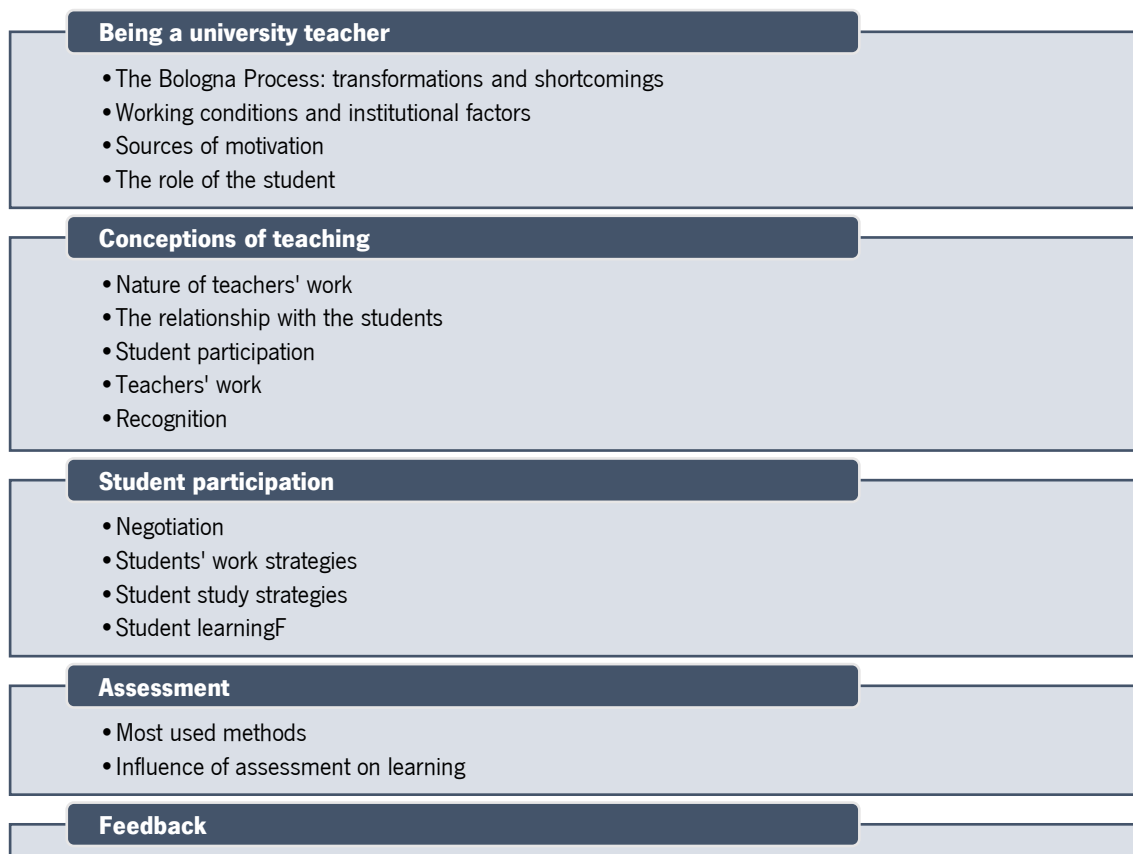


Figure 26: Categories emerging from university teachers' accounts (Source: Author)

6.2. Findings

6.2.1. Being a university teacher

The Bologna Process: transformations and shortcomings

With the implementation of the "new educational paradigm" due to the Bologna process (Pereira & Flores 2013), there was a profound reorganisation in terms of the curriculum and the teaching and student work, involving the promotion of flexibility in tutorial support and the renewal of assessment and feedback methods regarded as essential elements for learning (Pereira & Flores 2013; Pereira, Flores, Veiga Simão & Barros, 2016; Fernandes, 2020). The Bologna Process has changed teaching-learning practices, with a focus on student-centred pedagogies, problem-solving initiatives and innovative assessment practices (Almeida & Castro, 2017). Consequently, being a teacher before or after Bologna is different. The Bologna Process is considered an important milestone for higher education. In this way, university teachers reported that before Bologna teaching was a passive process in terms of the student's attitude and in the attitude of the teacher.

What I feel is that it has changed a lot (...). Before Bologna, the university teacher kept the line of any teacher, worked his classes, exposed the contents, it was up to the students afterwards to answer and prove that they knew and that it was supported by theoretical knowledge. So, everything was very passive (...) we had a lot more time with the students, the subjects were for a whole year. (UT1)

I am not the same teacher today that I was twenty years ago when I started to work systematically in higher education (...). I see that I have changed my being, my performance, and my practice for different reasons. (UT4)

In relation to what it is to be a teacher in higher education today, in relation to what it was, especially with my experience of more than twenty years, it is very different from when I started my activity, because entered in higher education other assessment mechanisms of comparison measure, which already existed, but it was healthier. (UT9)

With Bologna, some of the teachers stated that there is a need to change the teaching model to something different from what existed: The first of the changes start with us creating a different teaching model. I, at least, try to do that and try to make the students even more responsible for their learning. (UT2)

In the teachers' opinion, after Bologna, there were changes in the profile and attitude of students:

I think that this new system, I think it fits the profile of a different student, it is not a student who depends on the teacher's explanation, having the teacher present, in front of him. It is such autonomy. The profile of the programmes has changed, the profile of our practices has changed, but also the profile of the student who will attend. For students who are more dependent, less autonomous, this is very violent, because they are always asking the teacher for help. (UT2)

Envisioning a more autonomous student due to the change in the duration of the programmes that went on from annual to semi-annual: *Over the years I have become more aware of the many structural limitations to work in the subjects, in the change of processes, regarding training, we have gone from a four, five-year degree to a new two-stage structure. (UT5)*

As well as in the view that the teacher became a mediator of student learning:

I also feel differences with Bologna, because we have less time to teach, to help students learn, because that's what I do. Right now, I feel like a mediator of greater learning for my students, because I think that's a lot of what I do. I guide their learning, whether in the use of materials, or suggesting materials for them to look for and consult, therefore, I feel increasingly a mediator. Less teacher, more mediator. This also requires students with a different profile than those students I thought I was going to have when I chose to be a teacher. (UT2)

Today I feel like a mediator, I have a series of contents to teach, I do gymnastics to teach them all, because many of the subjects I used to teach as annual are now semi-annual (...) we must give everything, because everything is important in a semester. (UT2)

Working conditions and institutional factors

Some teachers express a negative idea regarding the implementation of the Bologna Process, considering that the idea was well developed, but in practice it has not worked given the assumptions:

Bologna came, I thought: "We're not going for the better!" There were many people full of expectations: "now teaching will be linked to assessment, the student will be more autonomous". The students will be the same, the teachers will be the same, I don't

believe that anything will change (laughs). Very fragmented. In design, yes. But in practice, no. My expectation was very low. (UT9).

Currently, according to teachers' testimonies, the negative perspective on Bologna comes from the overload of tasks and bureaucratic requirements that are imposed on teachers' work, in addition to the teaching and monitoring of related students, verifying an unbalanced relationship between these aspects. Obtaining standards of excellence and quality, which ensure competitiveness on a global scale, has brought crucial changes to Higher Education (Bahia et al, 2017):

I think this idea of having four aspects to a career as a teacher has become a kind of horse race and that if people don't take the gang well, they're not good professionals. I think there is a forgetting that there is a horse that is more important, which is teaching, because even research is done to improve what you leave for others, because we die, it is fallible. Research must be at the service of teaching. Management for them is, for things to run smoothly. I think this technocratic centralisation of teachers has created the illusion that there are four equal sides, but they are not. And the way of teaching begins to devalue, students are numbers, in the assessment it is: "how many students do you have in your class? how many classes? How many, how much?" is worth what it is worth, but it marks our way of being. (UT11)

It's in these Bologna assumptions that I notice a decrease in this commitment, these factors that have to do with autonomy, time management. Hence my appreciation of an unbalanced relationship. (UT5)

With the transition to Bologna, there was a substantial reduction in formal contact hours, because as for the informal ones, therefore, we feel that we have to spend more time with the student and these extra hours are not accounted for, then there is work that we take it home and therefore this clearly interferes with our daily life. So, we ended up not having weekends (laughs). Nights correcting work. (UT3E)

Bologna is still presented as something that only led higher education to the need for measurement and that in the end only came to put teaching and learning in the background.

This, assessed in a few years' time, is a mess. You don't notice a big difference, well, in some projects of some teachers, very concrete things to see if that happens, besides, the difference is not that big. Other aspects would have been much worse, the time, the

reduction in the programme load, it's a kind of dry cleaning, leaving very quickly, there's no time to consolidate knowledge, it brought incredible care in the selection of students, when there are to be selected, because there are programmes in which there are no students, there is nothing to select. It's like the hairdressers, bring them, but it's heads there, we want numbers. I think higher education stayed in the niche. The university teachers have to build their careers, but if the students don't bring a very solid base from behind, they won't get it at the university, in two semester programmes of I don't know... in any area. (UT11)

In this regard, the spirit of Bologna is not really lived, because, on the one hand, mentoring is not done as Bologna predicts: *mentoring like the one that Bologna provides is lacking. What we do is not mentoring, nor the spirit of Bologna. We do not work with this monitoring of students, as provided for in Bologna, and this is noticeable, this departure from the fact that students do not even want to know has to do with it. (UT1)*. And, on the other hand, there are negative changes that the increase in the class brought with it:

Even because there is a variable here, we had classes of thirty-five students, when I came to school in 2001, go from a class of thirty-five students to a class of a hundred, we had to make a very big adaptation here. (...) There are very large losses, we feel it. (UT1E)

Right from the start, the issues of proximity and even assessment methodologies. For now, the processes of teaching methodologies, there has been a substantive change and we are very frustrated about this. (UT2)

When we started teaching, our classes consisted of forty students, with forty students we knew the names of all of them and it was much easier for us to work. In fact, many times, we have to divide them and when we divide them it requires more teachers, more spaces and which we don't always manage. (UT4E)

The loss of content taught due to lack of time with students also stands out as a negative aspect:

There was a big change with Bologna, because there is simply lost content. It is assumed that the student is somehow autonomous in his/her study, but not everything is in the books, or rather, things come in the books, but they are not effectively gathered in the same book or in the same manual. Hence the need for contact to convey the basic principles of certain contents, but which were reduced or simply disappeared with

Bologna. This later in practical terms ends up making itself felt a little bit. I feel that there were aspects that were also lost a little due to lack of time. (UT3E)

Therefore, being a university teacher today, in this context, is a challenge with the concern to meet deadlines, the pressure of the research component, the constant need for time management, the teaching component allied to the need to have a personal life:

I would say that it is being in a constant challenge, always under pressure and feeling the guilt for not being able to meet the deadlines and as we don't just have the teaching aspect, perhaps, we are more pressured by the research component, because this is the one that is always bombarding us with new deadlines and that makes us find it difficult to manage time and anxieties, because if being a teacher were only teaching, the teaching aspect, we had our schedule made and we coordinated our daily routines much better, in this way, and with all the other components that forces us to have schedules during the night and during the holidays. (UT10)

Being a university teacher today is not having my own life, with a healthy routine, is my perspective, but I feel that this has been getting more complicated, because as we progress in our professional career, more responsibilities will go away. Being assigned. So, it is all this accumulation of tasks that puts us under greater pressure and then there is that feeling of guilt of bad managers of our time, because then we are indebted to friends, to family, to everything else that is part of it. Of our personal life. (UT10)

Furthermore, it is still necessary for the teacher to do personal development work:

There is a great investment on our part, not only in terms of knowledge, in scientific terms, but there is also a development, in our part, in relational terms and in terms of interaction with students, who, obviously, over time also change their pattern of behaviour. So, it is essentially a work of personal development and sharing that personal development in theoretical and practical terms. (UT3E)

Sources of motivation

Disenchantment and lack of motivation are part of the feelings highlighted by university teachers due, in large part, to the path that the university is taking:

The disenchantment that is, at times, being ashamed of the way the university is evolving, of what it is becoming. (UT9)

I'm one of those who contribute to empty corridors. I only come when I have tasks that have to be done here. I'm part of the disenchanted group. I am quite disenchanted. Because I often see myself doing things that I'm not suited for, nor prepared for. I try to adjust, I always try to take advantage, because despite that I am very optimistic. So, I am able to adjust. This here goes through an adjustment process, I actually don't feel bad, but to say that I'm very motivated, no. I was! But this demotivates. (UT10)

For me, the institution is the place where I develop my professional activity, either there is no motivation, or it is negative. There are many reasons. What makes me do what I do and get to the end of the year and I'm so tired. (UT4)

Thus, a certain wear that contributes to the despondency caused by the institution is also mentioned:

In terms of organisation, it could be better, I agree that there are aspects to change. It's even a democratic opinion that this wears out because there are meaningless tasks, superfluous things that eventually we wouldn't even be doing as teachers, it causes terrible wear. This is surreal. [The institution] is a heavy machine and asks for tasks that waste a lot of pointless time. The system is very bureaucratic and therefore does not give teachers the necessary tools to be able to streamline what is really important. (UT2E)

The reports related to demotivation linked to bureaucratisation are diverse, serve as an example the following statement:

You know that there are many factors that contribute to motivation, this university is a source of bureaucracy, both for research and for teaching. The bureaucracy is such that I despair. This university discourages some development, in research and even in teaching, now put paper here, now put paper there, doc-forward, doc-backwards, now go there... we wasted a lot of time... now it's platform, now it's blackboard, we have the summaries, this is crazy. If you look around, there is no motivation (UT1E)

Still a source of low motivation and the feeling of frustration and fatigue comes from work overload:

We are asked so much that we are assessed on tasks and on things that are very important to us, what we cannot have been the work overload, between classes, tutoring, internships. (UT1)

I feel frustration, I feel a lot of frustration. It's because? Maybe, it also has to do with the way each one of us faces things, some more optimistic, others less optimistic, where we set the bar, but I feel frustration, first, the classes are huge, this turns out to be the first point of frustration, then we have a lot of activities to respond to. (UT1E)

The same feelings are also associated with the excessive requests that teachers receive, and the pressure exerted to respond to all the obligations that are imposed even leading to the possibility of giving up on the teaching career. The production of knowledge becomes the main source of wealth at the service of innovation and development, feeding the performativity of organisations (Bahia et al., 2017). Higher Education institutions are part of a competitive and managerial world. However, there are pressures related to publication and other indicators of accountability and performativity:

I feel that the work is, at times, excessive. And when I say excessive, it's not just physically, there are times when I feel like I'm stuck, maybe it's my fault, because somehow, I try to reach everyone, I feel that there are many programmes, many students and I'm glad that be it. But trying to maintain some level of quality in what we do it requires a very big effort, which in the end is less recognised in our career. (UT2)

Looks like we don't have students. It's research, university extension, management, meeting here, meeting there, and then I have students. This is very frustrating, because the university lives for the students and the teachers should live for the students, but the university's demands and indicators of productivity, quality, internationalization, this is an enormous pressure. A huge pressure! I think the idea that the university exists for students is sometimes underestimated. It seems that we don't give the necessary attention, and yet we give everything, we reply to emails all the time. (UT1E)

If I could leave my university career right now, if I had another means of livelihood, I would resign tomorrow. (UT6)

The lack of recognition by the institution and colleagues is also evident, as well as the weak relationship between university teachers:

Estimate by the institution or peers is no longer so visible, often, quite the opposite. In terms of career progression, we don't even talk (laughs), we've been stuck for a long time, regardless of the effort and demands that are increasing. Then in terms of remuneration, which is another dimension of the reward, not even mentioned, because with all the cuts we, in fact, even to mentor students, we have to travel, most of the time, in our own car. (UT3E)

I also have another factor that can help me with motivation, which is feeling that some colleagues are willing to help me, some, a little, two or three. Because this relationship between us is not easy and this also influences motivation, as you can see. (UT1E)

I continue to be highly motivated. Motivated, either for research or for teaching, where I am less motivated, in numerical terms, is to manage interdepartmental and intrapersonal conflicts, and this is what creates a great lack of motivation, and which is very present in our lives. For this I am not motivated for this. But in terms of the profession itself, what I investigate, guidance, monitoring of students, continuing education, I'm motivated. (UT7)

Throughout the speeches of the interviewed teachers, the intrinsic motivation was a very strong aspect:

There is an intrinsic motivation that has to do with what professional duties are, what I should do, I try to maintain this motivation. In terms of practical effects, it decreased a lot, but I don't know how to quantify it. From this point of view, it has not evolved positively. (UT5)

The motivation is this, I think I have an intrinsic motivation, now when I see that I can't do what I want due to external factors, despair, crying. Last week I had two days of total despair, believe me, because of the investigation. I'm not traumatized. I'm saying exactly what I feel. (UT1E)

I think there are two important dimensions here in this issue of motivation as a teacher, one is the personal issue and the other is the organisational one, in the personal dimension I like and feel motivated by nature. I also say, many times, that motivation has to come a lot from within us, and not always waiting for others to motivate us doesn't make much sense either. Mine is an intrinsic motivation because I like what I do but then, of course, it's influenced by organisational issues. (UT2E)

From the so-called intrinsic motivation referred to, the capacity for resilience in the face of all the changes that have been experiencing as university teachers is also highlighted:

I'm very motivated, strangely. Thank God! I feel that the university teacher today is a resistant. I'm always waiting for the wave to pass, I'm always waiting for it to pass, even with the water over my head. I'm waiting for the wave to pass, and some will die (laughs). That's why I think we should have a marathon vision and not a hundred meters, relay, we don't own this. Because no matter how bad you are running right now, what matters is keeping the flame burning to pass it on to someone. That's what I usually say to students: "I don't want to die without going through the flame, do it there. (UT11)

Recognition and motivation come largely from students and the relationship that is established:

We have to hold on to what is important, are the students and their relationship with them and feel that we are important to them, because if we don't feel that we are important to them then we are not doing anything here either. I think we have to get the motivation there, right now. I'll get it from the students. (UT1E)

So, in the morning we can even come with a bad night's sleep, but I get to a class, and I think I mobilise all the energy there and that's quite satisfactory (...) a whole relationship of closeness is established and that's very good and in fact we see the direct, immediate effect of our work. I am satisfied! (UT10)

I think I find it very easy to reach students. Even those who are more reserved, shyer, I think I can establish a good relationship with them and also a relationship in order to help them and to understand what their barriers are and their difficulties in order to help them overcome them. It's a relationship, obviously, it's not a relationship of friendship, it's a relationship of help as a teacher, it's a relationship of respect in which I feel respected, clearly. I never felt disrespected. I think I can have a good relationship with students. This, somehow, is also one of the factors that gives me some motivation. (UT3E)

The role of the student

Most interviewed teachers highlight the good relationship with students, which, for some, is an exigency relationship:

I assume I'm very picky, but I'm very close to them. I recognize that students have some difficulty at the beginning. I don't give answers to anything. This knowledge building thing... I once had a student who told me it's so hard to think. And I thought that student was verbalizing what everyone feels. It's hard to think! I have a good relationship with them, but I recognise that this requirement becomes complicated. When I stop getting involved and demanding, they notice the difference, when I don't object, I just listen, they have to find strategies to be able to go on with mentoring. (UT1)

The pedagogical relationship, I know I'm labelled as being demanding and, in fact, I am, but I'm demanding, because it's my way of being, it's not just in terms of pedagogy, when we must work it's to work, then when we have to tell a joke too. I think I have a good relationship with students for that very reason, because they know that when it's for work, it's for work. Always on the basis of respect, no student has ever disrespected me, just as I do not disrespect them. (UT4E)

For others, a learning relationship, but it is in fact a good relationship:

I try to make it a learning relationship, a process of active participation, of construction. I prepare the classes, each one of them, the set of contents that seem relevant to me, but I try to make the process during the class a process of collaborative construction. I hope and like to find myself a mediator and a challenger. I also have a very close relationship with them. I'm trying to involve them, but they are not easy processes, which needed some more consistency. (UT3)

I think I have a good relationship with the students, in general, a great proximity, whether any degree, cycle, even with those who are younger, I have a great relationship with them, I get angry, sometimes, for cause of those who come here not to do any, just to say they are present (laughs), but, in general, it is very common between us to have a good relationship, an almost informal relationship with the students, which is very formative too, that they look for us a lot beyond the end of the programmes. (UT8)

For me, what is most important is to consider that it is an interesting profession in the relationship with students, the pedagogical relationship. There are several constraints, but looking realistically at the time we have, what we can do and planning... then what is most important is established relationship. It creates a very interesting relationship. (UT9)

Through the interviews it was possible to realise, sometimes, the relationship established between teachers and students is not so positive even, so it does not stand out as a source of demotivation, which, on the one hand, comes from an imbalance in the relationship between teachers and students, attributing a position to the student that should not have:

I think I've had a much more open, frank, more genuine relationship with students and I see myself taking some precautions today. I happened to have one or another less pleasant situation. But I always cultivated proximity. And I see myself, lately, having a little more defensive position to create some reserves, defences. I thought there was a relationship that was more balanced, after all, it seems that the student assumed a proportion and a dimension in which we [teachers] have to submit. It's a perception that I have. The idea of imbalance in the pedagogical relationship, in the relationship between teacher and students. I didn't want to invoke the teacher's authority, but from roles that necessarily sound different, with different competences and responsibilities. I can be influenced by some less good experience. I've noticed that they have a behaviour that is inappropriate during class, but then they don't shy away from making completely inappropriate criticisms of their behaviour. (UT5)

The construction of a pedagogical relationship with students is demanding because students end up having a power they don't know how to deal with. (UT4)

On the other hand, having to deal with students who do not value their learning and only attend higher education to obtain a certificate:

If there are any [students] who come here just to meet the schedule, it's very difficult to work with them, because they don't come here, it's already difficult to work with people who don't want to be here, then they want the least, then they have the problem of assessments, because they don't work to learn, they work to get a grade, deep down, they are here to get a certificate and they are not here to learn, because after learning, there is assertiveness in action. (UT7)

I think some aspects are not going to be controllable. Students don't have filters. They say whatever comes to mind. Things that don't even have a clue. I have a student who doesn't like the subject, he was there with a cool air, I don't know what he went there to do. I'm not jumping rope for that student and teaching the others. Don't like it, don't like

it! It could be that in two years, things will change and mature. These are punctual things, if this happened many times, I think it was a case for us to think that there was a problem. They are human beings themselves and have their moments. (UT11)

And from this lack of interest on the part of students comes the need to deal with inappropriate behaviours for the classroom:

Afterwards, even in the relationship with students, there can also be some growing complications, I have noticed this in terms of behaviour, commitment, this forces us to another task, sometimes fewer teachers, and more educators, we often have to take care of, to understand what is beyond the behaviour, we have to stay about five minutes after class to give some attention. (UT10)

There is another issue... kids of today are not kids of yesterday. They eat in the classes, they go out anytime, this, to us, makes us a lot of trouble! It still makes me confused! (UT1E)

6.2.2. Conceptions of teaching

Nature of teachers' work

Another dimension of analysis is intended with the question of the nature of teachers' work and challenges that university teachers must face every day of academic life. It is necessary to rethink the way of teaching and being in the profession, because today's students already have the information, the teacher must play the role of assisting in the selection of this available information:

I think that in higher education in the past, the teachers' authority was recognised and that a lot resulted from the possession of knowledge, teacher was the guardian of knowledge, was seen as an encyclopaedia, as a traveling library, knew everything, therefore recognized. Teachers today have to rethink their profession, because they cannot be informers, because students can have more information than they do and access information more quickly. I always thought, but even more, our role is to help, to encourage critical thinking. Although this is often difficult, it is necessary to work with the students. Helping to select the information, to understand the information, in a creative way, not just being a technical knowledge. But that is what motivates us to be able to do

it, this autonomy is very important. Put into practice our convictions, our pedagogical knowledge. (UT9)

The teacher must adjust in order not to neglect the emotional component of exercising the profession:

At the beginning of my career, I defended that a good professional had to be a good professional according to the class plan and everything right. Today, I think that a good professional has to be a good person, has to be a person sensitive to the needs of those around him and has to use different language and different rhythms because people are all different. And, more and more, I try to be aware of this, but of course, sometimes I have my disappointments, because what was expected is what I learned at the beginning of my career. (UT10)

When I'm mentoring internship students, I always think that I don't want to do what they did to me. Because what they did to me caused me a lot of anxiety, physiologically. At those times I suffered immensely. Not out of insecurity, but because of the environment we were going to live in that day, we could hear the monitor breathing next to us. (UT1E)

In this way, the need to understand a broader profile of competences that goes beyond the transmission of knowledge becomes evident:

The way we experience the programme and then the profession greatly influences anyone, then the way we look at things and the value we attribute to it, what we understand should be from the students' point of view, but there is a common thread here. It influences our own competence profile development, from our qualifications to our most specialized areas. Then the requirements of the university. (UT2E)

The relationship with students

The cooperation aspect emerged but which has been deteriorating since research came to occupy a prominent place in the life of the teachers' work: *There are conflicts that there was no need, between teachers, and that wear out and that, many times, could be avoided and in terms of the general climate could be improved. And the bureaucracy part could also be improved because it takes a lot of time. (UT7)* causing even more rifts in the relationship between teachers:

It's a wicked thing! Keep working blindly! I don't want to be taught how to do things, but more sharing. A sharing that was more part of a mechanism that the institution could

build. One of the biggest difficulties I've had is swimming to keep myself above the water with my head sticking out. (UT4)

The lack of solidarity, sharing and conflict was highlighted:

I remember at a meeting at the research centre, when they started talking about the investigation and that we had to investigate and I remember asking them to help me try to understand that the articles, and nobody paid attention... I had to get out of the way. There is no solidarity among colleagues, the institution does not manage the resources it has as it should or could. (UT4)

Besides the fact that there was no spirit of mutual help among teachers, there was also no preparation for teachers to become researchers. Add to that the batch of difficulties they have been dealing with:

A huge challenge I have had in these years was learning to be a researcher, because nobody taught me how to be a researcher and nobody has ever done anything to become one, on the contrary, they would demand and continue to demand. This research is a little house, then we have another little house which is teaching, another which is interaction with society and yet another little house which is management. In fact, with the four domains that are required of us, it is very difficult. (UT4)

Thus, it is emphasised the change of conception in the teaching process:

I have, over time, changed my conception of the teaching process. Students by no means retain everything we want to teach them. Students learn what they want to learn. And being a university teacher also implies recognizing that we are supervisors of subjects, of themes, because nobody teaches the other what he doesn't want to learn (...) now, the way knowledge is presented is different, before it was in books at library and continue to be. But we have to adjust. This is also a challenge for university teachers today, which is having to adjust to the resources that arise in order to be in tune with the students in this teaching and learning process. (UT10)

On the other hand, university teachers referred to the challenge of teaching today:

If you asked me what profession I wanted to have, if I could choose now, it was this one, so it's a challenge, but it's gratifying, it's a permanent challenge, but it's gratifying, even though it's an overload to have these dimensions. The teaching aspect is as gratifying for

me as the research aspect, this aspect because I am curious by nature, I always want new things and, therefore, this component allows me to have this expression of myself, the teaching aspect never I would dismiss her because investigative work is lonely and being with a group is fantastic. (UT10)

There is no doubt that more and more students demand more from us. Personally, as a teacher I also feel like an educator. Effectively, this has been one of the great challenges, because, increasingly, the values that students have is such a pattern that is somehow changing, there is an effort and a challenge on our part to teach them to be people, to be "to be" and to be with the other, which is fundamental. (UT3E)

I feel one of the biggest challenges is how less time I have now to be with students. In fact, there is so much demand, for example, in terms of research that, in fact, I would like to have more time to spend with the students. For me, it has to do with too many functions that we have. (UT4E)

Teachers' work

Teachers emphasise the multiplicity of tasks that need to be addressed. Not feeling prepared for it:

In this view of the complexity of competences, of the demands they make on us. In an aspect that was quite comfortable, which was teaching, suddenly, other demands began to appear, cumulatively, for which I didn't feel properly prepared, or I hadn't been warned. I have great difficulty dealing with this multiplicity of responses and demands that are sometimes placed on us in very basic dimensions. I'm not prepared, and I think there is a critical mass at the university, at the institution that could be better prepared, and it isn't. And I don't understand the logic of how they work. (UT5)

The uncertainty that characterises working with young people was mentioned:

In a message with meaningful content that is useful to students. I'm more and more uncertain about what I'm doing, I'm not absolutely sure, because of the reach I have with the students, it's a concern that has been with me a lot lately. There are moments of doubt, of uncertainty. The word that most characterises what it means to be a teacher today is uncertainty, this doubt, this concern. I seem to see myself returning to perspectives, to very traditional ways, we are back to doing things that we haven't done

for many years, which is testing and going back to testing and these are the doubts I have, what movement. (UT5)

As well as the responsiveness and challenge for teachers to be up to date caused by the generation gap:

In my case, it's always having to keep myself updated, because I feel that things pass. This seems like a ridiculous thing. The big challenge is to be aware of what is being done differently, here, and internationally. Sometimes I fear I'm falling behind, then this creates some anxiety in trying to catch up, which is important for students. (UT6)

For me, the big challenge is also this issue of updating. Also, this awareness that our age is advancing and there is increasingly greater distance with the young people who come to study, especially degrees and master's in teaching and I must always be doing this exercise, for these people what I have already experienced with throughout my entire career, for them, they were born in the middle of my career. Therefore, everything that goes before that, for me, is very natural, I know it very well, for them it is something that doesn't exist. This is to understand and try to follow what these new people know and what they want and without making these value judgments. These are the young people of today and it is from here that we have to work. (UT8)

To have the ability to work with students from different ethnic and linguistic backgrounds:

It's being able to give adequate answers to young people, because we don't have a young person, each one is different, in fact we have courses, only in one of the subjects there were six nationalities, there was Portugal, Spain, Brazil, a country I don't know about. where I only spoke English, two from Timor, I mean, what does one person do?!, in fact, it's complicated, because you need to be able to interact with young people from different backgrounds, even with a very diversified previous education, and, therefore, it's not easy, a person has to be creative, it's just work. (UT7)

And to keep up to date in terms of technology. It is important to realise that teaching today is closely related to better technological literacy (Georgina & Olsen, 2008):

And being up to date, it's not just in terms of content, it's updating with technology, and we can't go back, we must go ahead. In fact, that is, from a demand to be added to a demand from the roles of the university teacher, this has to be done, we cannot escape. (UT7)

Regarding the university teachers' work, the interviewed teachers also spoke in overload:

I think it's being a teacher and a researcher; research is not dissociated from university teaching and always in this very strong relationship with society. In my case, which is teacher training, what is it like to see the fundamental role we have in the society we live in and how our work can have repercussions in helping to analyse and intervene in this society. Even though I agree that it turns out to be an overload, we end up having too many knits to weave and that it makes it difficult for us to fulfil all these central areas - teaching, research, interaction, and management - without being on the basis of disease, exhaustion. (UT8)

Bureaucracy associated with platforms, highlighting the fact that universities are managed by teachers:

The bureaucracy and the number of positions. The diversity of roles and the pressure in terms of time is so great. If people have a reading that we, university teachers, have a nice time, a nice life, it's a lie! Just this weekend, I spent my time working for the university. I manage my time, but this then has repercussions on my personal and family time. (UT6)

Furthermore, the big turning point was when this started to enter the platforms here, to be regulated evenly by a system that does not help us to improve practices. That was strong. Then, for me, this question of the general climate. Especially this addition of task time, this accumulation. We are asked for this and that and we go, we are always overlapping. We create an image, we create a job, we are public people, we are expected to know, to be able to fulfil the expectations that exist for us, we become more guests, more requested and, all of this has positive aspects, but it is a too great pressure. Managing all this is what is very difficult. It's a huge backlog of work. (UT8)

Another dimension of the teaching work that proves to be a challenge concerns the many requests, which brings more dispersion:

Another issue is to respond to all the requests that are many, internal and international requests and people come to us because they want our help, it is because they actually think we are able to give it, sometimes a person realises that they are no longer he doesn't even have a little more to contribute, sometimes they ask us for help in areas far

from ours and it is necessary to make an effort. In fact, this is how a very wide world appears and it is not easy. (UT7)

There is a substantial part of the teaching work that is not really a teaching activity, there is wear and tear, waste of time, that time that is being channelled there, could eventually be used for other things. (UT2E)

Part of the challenges that teachers feel is caused by the institution that imposes unmeasured administrative tasks, related to the need to become increasingly competitive and efficient. And everything that is done in the context of the work of higher education must be documented and duly justified in order to serve as evidence:

One of the great causes of the problems I feel is the institution that causes them. (UT4)

For me, it implies, in addition to teaching, as being the main factor. In terms of profession, it entails a set of other administrative tasks in which the university is managed by teachers, the positions that are shared by everyone characterise being a university teacher. And right now, it's a very heavy thing for many of us. The pressure is too much. There are many things to be done, with very tight times, a number of things are required of us. Being a university teacher, more than this in terms of teaching, is managing a set of administrative tasks, complicated, laborious, in this case. (UT6)

At this moment, in fact, the biggest difficulty is because I am completely "schizophrenic", I am not divided, I am multiplied. I have requirements that were not contracted in advance. These were demands that took shape and that the university began to impose. (UT4)

Hence the interviewees emphasise the fact that they feel less teachers in the exercise of their profession and that they are not properly rewarded for their work:

They are difficult to enumerate (challenges) due to the countless answers that we have to give... I believed, at an early stage of my training, perhaps out of naivety, innocence... I made a contract with the university to be a teacher and I am much beyond that and most of the time very little teacher. Maybe, because it's the end of the year, I find myself having to knock on the students' doors reminding them that they have to do this and that, and it doesn't seem to me that it makes much sense. (UT5)

They don't pay me for the work I do. (UT2)

Participants also highlighted the issue of valuing research for money:

There are many constraints. Another constraint has to do with research, which in terms of percentage is equivalent [to teaching], in fact it is given more importance in financial terms, funding is valued more, teaching is guaranteed through tuition fees, research is not it is guaranteed it has to be encouraged more, and people have to produce, and there are many ways to force and pressure and we know that, there are many ways to put pressure, careers, it has to be a curriculum, there are many factors. (UT9)

The aspect of research being worth money causes individualism among teachers:

There is more isolated work, individualism settled, each one in his office, what some authors have called competitive individualism, there is, therefore, no collaboration between teachers. At this point it's clearly different because it's very difficult to cooperate. (UT10)

Recognition

In an approach to understanding the recognition that university teachers most highlight, on the one hand, the positive recognition made by students.

We are only recognised in fact by our students, nor does the institution recognise it because it has difficulty, it has an assessment system that does not do justice to the work we do, in terms of remuneration we are not paid at a time when we are, we are not. We are left with the love of the cause. I really like being a teacher, I really like it and I can't imagine doing anything else. (UT2)

On the other hand, the lack of recognition and devaluation on the part of the institution, which should have a more aggregating role. Adding to these aspects the negative side that the teacher performance assessment represents:

This issue of intrinsic motivation, silence, incomprehension, of a person making an effort and not being understood, in fact I think that's what happens a lot today. In fact, the institution could be an aggregating factor and I don't feel it as such either. It's a job because of a need that exists, and I try to be as professional as possible. There could be

a factor that was more aggregating, it would be more for a common project, a common idea, with the appreciation of this work, with the understanding of it and I don't know if it was lost or if it ever existed, I think it existed with its defects. Due to the size of the institution, the changes, the structuring of training. (UT5)

I continue to say, on top of that, in this moment of the teachers, in this university and in others, I think that the teachers are still not valued in relation to what they should be, I continue, and I have already said. All the indicators of this university have to do with the work of the teachers, period. It is a university that is in the ranking, I don't know what, it has to do with the work of the teachers, and I don't feel this appreciation on the part of the rector. (UT1E)

6.2.3. Student participation

Negotiation

In terms of student participation, it was found that negotiation with students is not an adopted practice, first, because students are not trusted:

I don't allow. This is the ceiling; they choose the instruments they want. We define methodology and instrument. What I don't accept is that what is done in a group can be worth more than 50% because I know that in groups of four, I don't have four students who are the same, their honesty is great, but their solidarity is much greater. I was also a student. I know how it is [laughs]. (UT2)

Then because the institution does not allow it:

They are presented to the student, but not traded. Percentages and so, no. When the programme starts, the pedagogical coordinator presents the entire program, talks about goals, learning outcomes, methodologies, bibliographies. We have a document, which appeared with Bologna, it belongs to the university, it is not ours. We use it and show it to the student. But that of negotiation, no! (UT2E)

We only give alternatives, prefer this or that. (UT1E)

It is considered that there is no responsibility on the part of the student to participate in a negotiation process:

It is also difficult for us to negotiate this, as the student also does not have the knowledge to negotiate. I am one of the teachers who receive the students on the first day, in the first year, we present the program and now the assessment is going to be, they are just arriving. (UT2E)

They lack responsibility. (UT7)

For negotiation, they [students] are clueless. (UT8)

In turn, from the university teachers' interviews, few statements go in the direction of some negotiation, but which still have limitations:

I soon establish criteria for the goals I want for the semester. There are two elements of assessment. There is always individual work and group work and from this point of view, if it can be called negotiation, it has to do with the content of these works, in terms of percentages that each one can have. I no longer see where the negotiation can enter. (UT5)

In the practical component I give them the possibility of choice. (UT10)

But in terms of principle, an assessment that is democratic, negotiated and participated, as far as possible, and with some openness, sometimes we decide together how much this is worth and what that is worth, and it remains open for them to see that there is more work in an element than another and I allow flexibility. (UT9)

In my first class of each subject, I will negotiate everything with my students, I have a program to give, the goals are these. The methodology used in the class is agreed, the methods are also mutually agreed, I just don't let them cheat. It's all possible, negotiated. It is the best way to make them co-responsible, so they already know from the first class what they have to do and what awaits them in that course. This has worked. (UT2)

Students' work strategies

With respect to the students' work strategies, students ask for more dynamic classes to feel more involved in the teaching and learning process:

There are students who say they could be more dynamic classes. Implementing other types of classes, but this implies that students present the module and I work with them

outside of the programme unit and there is no time for more. But I don't know if students have the ability to be as mature interlocutors as they should be. (UT4)

The students reveal that they don't know how to manage their time and have some difficulties:

When you ask for a more active, proactive work with a certain number of competences that you must demonstrate, orality, at the level of argumentation, at the level of respect for certain assumptions, but I see that they are not worked and are deficient. I correlate based on these competences and with that kind of attitude. There is a contradictory discourse, that the practices that must be experienced in training must be close to reality, this is an idealisation of training to face challenges. There are huge obstacles in pursuing these assumptions. (UT5)

In the work of practical classes, we either accompany or the two hours of classes students are to share the week, the weekend. You must work hard. It takes a lot of work. And the teacher can only help with the work they have to do they have all the guides; we can only help if they are working. (UT1)

And same students show a lack of maturity in the acquisition of concepts that may be needed in the future in the exercise of the profession:

It is an inglorious effort in what I try to work with them. There have been conditions for better training, but the opposite has happened. Being a teacher is a noble and extremely demanding job. I don't know if these people have the maturity to face this professional activity. (UT5)

At some point, two or three years ago, I began to notice that students did not bring material to class. (UT10)

Student study strategies

It was noted by the teachers interviewed, on the one hand, students' study less, maybe because some are student workers:

Students are studying less and less. I may eventually have, in my part, some responsibility. The texts are on the platform, they want to know more, go read the texts. Another factor for students to study less is because they are student-workers, sometimes

they must leave because they are going to work. I think it's very commendable, respect.
(UT4)

But, on the other hand, if teachers require them meet the goals and there are some who are very dedicated.

I have those [students] who are "on top of me", who won't let go of me and others who won't. They don't all walk on the same level. At the master's level, we have interested students, who study, who invest, who are concerned, who participate, but I have others who are there and are leaning on. I have both extremes. Excellent students and then others who are at the very least. In the degree, this is also noticeable. We have very good students. With incredible dynamics. It's a little complicated. I think it has a lot to do with characteristics than with most students, whether they are good, committed, we actually have at any level of education. (UT7)

Student learning

Regarding student learning, it was mentioned by the university teachers interviewed that there is more difficulty with theoretical content on the part of the students: *What is least captivating and what is most difficult to make them pay attention, even discuss it, is the theoretical part.* (UT6). and preference is given to contact with the practice in different ways, for example, by exchanging experiences with other people already practicing the profession:

I think this practical component is very motivating for them, to get in touch, when they see someone talking about their concrete experiences, that's what they say, it was worth several classes, direct contact, if they are from the bachelor's or master's degrees, that's a lot, in real work contacts, being mediated here in class is very motivating for them. There are very different profiles in the degree, some of them get motivated over time. If it's just theoretical classes, I don't think it motivates them, they really need concrete.
(UT8)

However, it was also mentioned that students lack the ability to filter the information available to them, mixing the essential with the dispensable for learning:

What happens is that, many times, students see authors as being all the same, Mr. Silva from plastics is the same as Descartes because he is on the internet, sometimes they

look for things, it was on the internet is very important, the technologies here do not favour what teaching has been doing behind. (UT11)

It is also important for the teacher to get to know how to take advantage of existing resources, such as the internet to help in learning:

The university is confronted with everything, it must plug all the holes, those behind, those in front, time, it's everything. It really isn't very easy, and it turns into something very volatile, aggravated, in my opinion, by the issue of technologies, which have taken on a place of knowing, when they should be a place of vehicle, the disciplines when they take over a curricular place become a knowledge to be achieved, which is why they are vehicles. (UT11)

If we are technicians to transmit information, it is not producing knowledge, it is information that is already available there, we cannot compete with the internet, we must take advantage of that information and it is, above all, the fact that we have to be knowledge workers, that is what we must assume in the relationship. (UT9)

The traditional expository class also holds an important place for some students because that is the way that know how to learn.

There are students for whom, if the teacher does not enter class on time, starts giving an expository class, debiting knowledge without getting carried away by discussions, he is not a good teacher. That's what people are waiting for, come in, sit down. (UT10)

6.2.4. Assessment

The use of assessment methods

Regarding the subject of assessment, the fact that there is a need to use non-traditional methods, such as the written test or the exam, stands out as a way of developing essential competences for professional practice. Therefore, a change in practices is reinforced considering several factors such as the study cycle, the nature of the subjects, the content to be taught and the number of students per class:

I started to create a different assessment methodology. With master's students, something is needed for their career, in the degree I have the test combined with another assessment component, because I think it's important for them to do something else,

it's usually research work. (...) I think that a totally different practice is designed and that is different from the traditional one. (UT2)

I use the test system for the degree, and I don't see myself able to do it any other way, even due to inability to manage the process in general. It's a lot of people and it joins other things. And in masters it is different. In the professional master's degree, they make a portfolio of activities. (...) And at the beginning I ask for a reflection on expectations, at the end of the 1st part, they take stock again and at the end of the semester again. And that they reflect on what they will be like as teachers. (UT4)

Teachers devise assessment strategies that involve students in their own learning to develop critical thinking:

What I do is use various strategies, besides everything, I use videos, they have two minutes, three minutes, other times they must build questionnaires about what colleagues think about a certain subject. I don't always do it the same way; I like to involve them in a different way. (UT1)

Reflections from the reading of texts and through practical examples that they brought to the classes, and it was from there that I worked, portfolios. (UT5)

Even in theoretical subjects, I always look for a basis for reflection on the part of the students, right from the start, with the preparation of materials, texts that I send for previous readings, so that later the class can be more dialogued and what they do is already mobilised. they read and helped them, especially in the undergraduate programmes, to build a critical sense about things, because what I notice is that students come with little sense of criticism and analysis. (UT8)

There is a concern to adapt the assessment methods to the student profile that is currently found at the university:

If there has been a change in practices and in the student's profile, it doesn't make sense, the traditional written tests and exams still must be a part because we have to comply. These are assessment methods that do not or may not translate the real value of students in terms of preparation for that Curricular Unit, this is the reason why I will look for other instruments, other methods. (UT2)

Looking to bring students closer to professional practice through the experience of other professionals:

I work a lot based on the reflection that students do critically, also another strategy, because we work on teacher training and in our course there is not much time for practices, to go to observation, so I think it is very important for them to know the reality and knowing what is the reality in which they will develop their professional action and then often invite people who are in the institutions to tell about their practices or study visits, with many supports, documentaries, which we have today, which serve to bring out a dialogue, a debate, in the end with identification and systematisation of concepts. (UT8)

Through the speeches of the interviewed teachers, the intention of promoting a more formative than summative assessment is perceived:

In terms of methodologies, one of them is group work and presentation, a large component of research and they always must make an oral presentation, but they also have to make a report on which to base this presentation. I have a lot of case analysis and they reflect, individual reflections in person (...). In the degree, I also have a subject where they have a more practical component, but then they also have a reflection. I have a programme in which they will do observation in context, make the report, present, and base it on a set of theoretical references that we have and then must reflect on the learning they have built. (UT8)

There's a practical component, there's the script they developed throughout the classes, there's a certain number of classes in which I allow and I'm giving this individual guidance, by groups, and they train too. They perform a peer assessment, the group assesses each of the elements in terms of their participation and contribution, this enters into their work grade, in this aspect it already begins to be individual. In addition, I ask them for an individual written reflection on their own work and on what their performance was, it is a sustained critical reflection, they have to demonstrate to me that they have learned and with reasoning, showing whether they have mastery or not as well. (UT3E)

Teachers also seek to create assessment opportunities that are different from what students are used to:

In one of the subjects, I introduced it a few years ago, because we have very shortly time to monetise, they have to do the work in the form of an article, and I created the template,

they have to go there and fill it in, because before, jobs appeared that looked like books, now it's in article form to limit it a bit. (UT11)

I honestly think that the logbooks and the reflections in the context of practice and the case study they do are good, because in this way they are oriented towards mobilising knowledge of the dimensions that are intended, they are stimulated in this sense, that's it that they can apply what they have learned and see the importance and relevance of content that has been taught and see its relevance in terms of practice. Clearly, I think this type of strategy is an asset because it ends up helping. (UT3E)

However, teachers also do not detract from the so-called traditional methods, seeking to combine them with alternative ways and methods of assessing:

There is a great diversity of assessment methodologies, in the theoretical part, whenever possible the assessment has more than one moment and the very traditional moment, such as group work, the presentation of group work, serve as an element of assessment, it allows a lot of reflection on the part of the student in relation to the themes that are covered, it is not exactly the traditional test, multiple choice or descriptive. This monitoring of students during group work happens a lot. (UT2E)

If I think there are more interactive strategies and I use a lot of case studies, simulation, role-play, this necessarily implies that there are smaller groups, even to implement PBL it implies that there are smaller groups. Must be! This is also very much the Bologna philosophy, which is self-learning (...). (UT3E)

It is perceived by teachers that tests expose what students do not know and assessment does not have this objective:

It's important not to export what they don't know, but what they know, what they've learned. The tests expose what they don't know. I also have to supplement in class with some individual work, so that we can understand what each student has learned. What we want is for them to build things and from that construction we will assess what they learned. (UT7)

Therefore, teachers are also concerned about the need for fairness in the assessment process:

I must have two assessment elements, I always try to have only two assessment elements, one of them individual, the other of a group, because I think pedagogically it makes sense, in group work there can always be someone who doesn't do much and it's the group who works, two or one who works for all. I think it's fair to the extent that there is an individual element and a group element, reconciling the two will be the fairest way to have an assessment closer to the reality of each student. (UT6)

From a film they had the opportunity to see, I make just one question, it is not a summary, but a commentary, just a script, a script, indicating how much they should write a quarter of a page, a half page, I give them an orientation. I give you an example of two or three concepts, the work is structured and to allow for a fairer assessment, because if not, they will finally debit and then we get the idea in the air. (UT9)

In the observation itself, they are being assessed. There is another very important moment, the reflection in action, they are doing and there is a moment of reflection on what they are doing. There is a space of privacy with students there, where they reflect on what happened today, significant, positive, negative aspects, difficulties, motivations, and this is a moment of assessment. It's a conversation. (UT2E)

Influence of assessment on learning

Within the scope of the assessment process, about the influence of assessment on learning, teachers consider that students are influenced from the start by the assessment methods and instruments defined at the beginning of each semester for the different subjects.

We even found that if we change strategy, the results change right away. For me, the first evidence is that it influences. Afterwards, the fact that they know the moment of assessment is also very classic, there is a tendency, a need to intensify the study to obtain results, in order not to fail. So, I think so! (UT10)

According to the interviewed teacher, students still establish a close connection between the concepts of assessment and classification, due to the experience they have of their entire academic career so far:

I think it influences. And I think the very diversity of methodologies, of instruments, I think is a good learning experience for them. See it right away. Each assessment, if it has consequences, if not just to classify, which is an expectation they have... when the

program is presented, until the assessment is reached, they are not reassured. See different possibilities, in which the assessment, being them in a course to be teachers, is very important, see different forms, styles. Therefore, the assessment has a lot of influence. (UT9)

Also, when students are interested in understanding what kind of feedback, I give to colleagues so that they can improve their own work, it means that assessment influences learning, even if it aims to improve grades:

I think there is a lot. I know of several of my students who go to review from colleagues to see what kind of feedback I give to prepare themselves for their work, regarding these written feedbacks. There is this interest in assessment feedback. This is to say that assessment means something. (UT11)

6.2.5. Feedback

In the dimension related to feedback, it was avowed that there is no strict criterion and/or commitment to give feedback to the student:

I confess that I don't always do it [give feedback to students] because the work is not done in class and in that aspect I fail. Sometimes I don't give the feedback I should give, but by coming to talk to me I give feedback. Maybe I don't organise myself so well about that. If the class asks to work for a few minutes at the end, then it's easy because they call and then I'll give feedback. Generically and in all circumstances, I confess that I don't do it as I should. We do not manage the assessment process as we had planned. Even acknowledging the relevance of the feedback. (UT3)

It was revealed by some teachers who simply do not give feedback or do it in a very general way to the class among several justifications, one of them is for lack of time:

In this regard I am very self-critical. In these testing processes I do not give feedback, it is after the classes, there would be a lot of resources to be dealt with, but in fact the way the semester is structured is not possible. (UT5)

There are some teachers who give individual feedback, but there are difficulties because there are many students and finally others who do if the student requests it:

I also give feedback... in very practical subjects, I give general feedback, because they know what corresponds to each level. In the subjects where they do a written assignment, I have the job of providing individual written feedback for each one, in a paragraph. But it's to die for, it takes me eight hours a day, sometimes three days to give feedback. I'm starting to not have time for that, but I think it's terrible because I don't see how I can give the feedback any other way and it's very complicated, because we're starting to run out of time. I already give them feedback in a practical part, orally, because they are all. In writing it is very complicated. (UT11)

It is stated that an effort is made to provide feedback on the practical component of the programmes:

In the practical component, I usually give feedback. I had the opportunity in terms of time to be able to fit the presentations of the work in the classroom context, have a discussion and see each other's work, in that sense, I gave feedback right away, this is the best way. As for the tests, normally, and with regard to the exams, there is a moment when it is defined by the team to receive the students who personally want to do a test consultation and have this feedback, those who do. (UT3E)

Teachers also emphasised the fact that there is no specific time to give feedback and that, most of the time, teachers give feedback when the student has a question or there is some aspect to be clarified in the class.

In my case, as part of the work is done in class, I give feedback in class, they ask me right away in class, if the component is ok, if not. (UT2)

I usually give joint feedback [in class]. (UT6)

In presentation assignments, feedback is given immediately, this is immediately assessed. Positive and negative points. (UT7)

Content aspects that can be commented on. (UT8)

It is in the moment; it is more effective. Sometimes, when it comes to behaviour, it's best to ignore it. (UT7)

It depends, in the first reports I say in general, that everyone has to do it, if there is a more problematic situation, I call that student aside, they do the reports in pairs, because the work in the laboratories is in pairs, I call both people, but this is rare to happen. I will

give them feedback as they ask me. They ask themselves. If I have already corrected the reports. And I'm doing a macroscopic reading and giving them feedback throughout the semester. (UT10)

However, it is important to point out that there are teachers who still associate feedback to student grades and in this way the feedback that students need is given.

I only do it if they want to see it and I challenge them to see it to see the difference in grades. (UT1)

The feedback I give is that when I release the grades, I leave them free to go to the office. This has to do with the student's profile, more and more students who come to see the exam are those who thought they had an eighteen and have a sixteen. It's the good students and not so much the students who have a lower grade. The students who come to visit me are not always the ones who need it. (UT2)

It is also important to highlight the fact that some teachers consider that the student receiving feedback is an integral part of the teaching and learning process:

I always give feedback, depending on my schedule, but I always do they are entitled, and they must understand what they did well and what they did less well. I don't just focus on what they didn't do so well, but I also always give positive reinforcement to what they did well. (UT4E)

6.3. Summary

The voices of the university teachers showed that being a teacher in higher education is a constant challenge with increased workload and permanent bureaucratic requirements. In the Bologna context, according to the testimonies collected, the teacher is nowadays seen as a mediator of learning, and it presupposes greater autonomy on the part of the student. The Bologna Process has not only initiated an immense process of reforms within the European educational landscape, but also created options and opportunities for institutions to firmly implement an international strategy, transnational mobility and redefine the profile of their programmes in terms of learning outcomes and competences related to an overarching framework (Werner, 2008). However, the participants' accounts point towards a greater demotivation and disenchantment caused by the path that the university as an institution has been taking, the excessive bureaucratisation, the work overload and the lack of recognition perceived, leading to

weariness, fatigue, and frustration. Teachers must meet the standards of quality and performativity that are globally recommended (Bahia et al., 2017). Recognition comes mainly from students and motivation is intrinsic. Teachers consider having mostly, a good relationship with students.

Regarding the challenges as university teachers, the bureaucracy linked to the platforms was highlighted, the work overload related to the management that needs to be done, hence they feel less teachers and low rewarded and recognised by the institution. As well as the valuation of the research dimension in the teaching career and the assessment of teaching performance created greater cleavages in the relationship between teachers. Cooperation between teachers has turned negative since research began to play a prominent role in the work of higher education, highlighting the lack of solidarity, sharing and greater conflict between teachers.

In the context of assessment, the teachers' accounts highlight the changes in assessment practices, considering the study cycles, the nature of the subjects, the contents to be covered and the number of students per class. Emphasis given to quality, assessment, accountability, and excellence underlie the implementation of changes and become a major concern in the definition of policies (Bahia et al., 2017). It was revealed by teachers that currently use more diversified assessment methods beyond test and exams, such as individual reflection, portfolio, diaries, observation in the context of practice, among other examples.

The participation of students in negotiation as an assessment practice is not valued by teachers. Most teachers do not include students in this process, on the one hand, due to institutional impossibility and, on the other, because they recognise the students' lack of responsibility. As student work strategies, teachers reveal that greater involvement in the teaching and learning process is required by students through more dynamic classes. However, students have some difficulties, do not take the necessary material to classes and lack of maturity in the acquisition of concepts necessary for the exercise of the profession. As for student study strategies, teachers point out that there are students who study less, but others are quite dedicated. Regarding student learning, it is mentioned that sometimes they do not know how to select information, some prefer contact with experience, but there are other students who prefer more expository classes.

As for feedback, according to the speeches of the interviewed teachers, it was noticed that there is no criterion, but most do not give feedback to students or do it in general for the class. There are teachers who give individual feedback and others who give feedback only if requested by students. At last, the

interviewed teachers consider that students are conditioned by the assessment methods and instruments suggested/defined at the beginning of the semester.

CHAPTER VII

BEING A UNIVERSITY STUDENT: VIEWS ON TEACHING, LEARNING AND ASSESSMENT IN HIGHER EDUCATION

Chapter VII – Being a university student: views on teaching, learning and assessment in higher education

7.1. Focus group with university students in Portugal (nursing and TEP)

This chapter looks at university students' perceptions about what it is to be a student in higher education, what is perceived in the teaching and learning process, the assessment process and, finally, the assessment/learning relationship.

Findings are presented according to the emerging themes arising from the data analysis: a) perceived challenges; b) pedagogical practices; c) factors influencing learning and; d) assessment (see Figure 27).

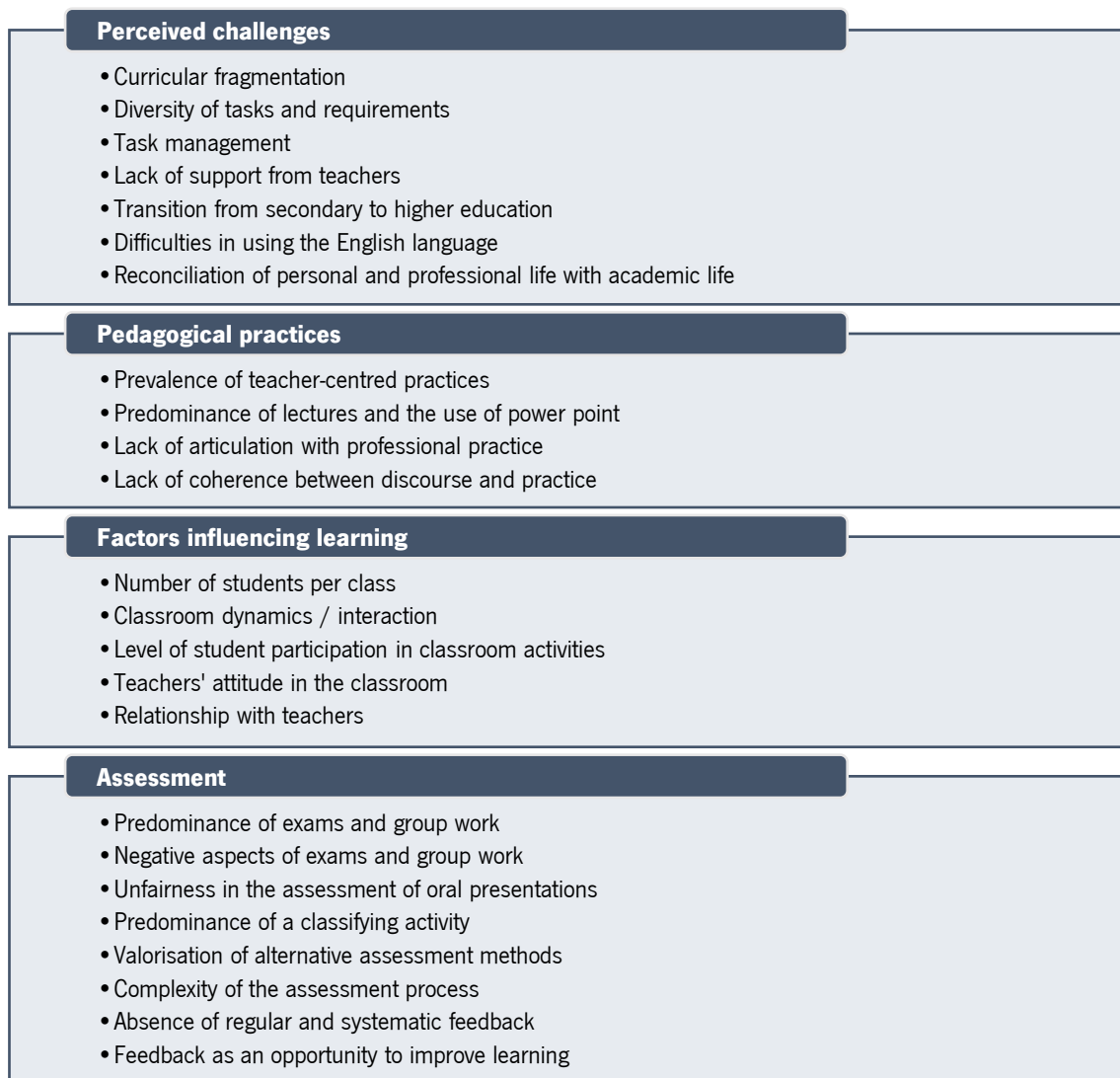


Figure 27: Analysis categories of students' accounts (Pinheiro, Flores, & Cristóvão, 2022)

In this section the data derived from the analysis of the focus groups carried out with students. The referenced data follow the emergent categorisation identified in Figure 27.

7.2. Perceived challenges

Challenges that higher education students report are associated with several factors, which are directly related to the teaching and learning process, but also to the increasing workload and lack of support from teachers.

Curricular fragmentation

Curricular fragmentation in TEP was mentioned by the interview's students, which is also discussed in other contexts (Flores, 2016). This aspect derives from the lack of articulation between the different curricular units and contents throughout the programme, referring to the increase in the workload: *The last two semesters were very exhausting in terms of work to deliver, with very tight deadlines. It was difficult to manage that (S9).*

Diversity of tasks and requirements

Learning in higher education must presuppose greater autonomy, teachers only provide the tools and guidelines for students to carry out their learning. That's why one of the emerging themes has to do with diversity of tasks and demands they must face: *We had many and very different subjects, each discipline required exhaustive work, we had homework, exams, we had homework every week (S8).*

Task management

Another challenge pointed by students it was the management of the activities, linked with the diversity of tasks and requirements also mentioned. The students stressed out that they have to deal with different activities that are derived from the volume of work, but also from the nature of the tasks to be carried out, specifically regarding the assessment moments:

When we talk about having more work, there are teachers who ask for a job, an exam, then it is a lot of work. The work requires commitment, but if it is an individual and group work, that's fine! Sometimes there are more than two assignments per subject, and we don't have time. (S6)

Lack of support from teachers

The lack of support from teachers and the absence of more explicit and evident clarifications regarding access to higher education is highlighted. This aspect may be associated with the specificity of the secondary school model in the Portuguese context with regard, to assessment issues and the nature of pedagogical work:

In the tasks that are proposed and, in the exams, when we enter here [in the university], all are very different, perhaps we need more clarifications from the teachers to know us better. (S5)

We have other things to do. They [the teachers] put the things on the same day on the platform and our others we cannot, we have other things to do. (S13)

Transition from secondary to higher education

This issue is corroborated by masters' and undergraduate students, who emphasise the difference that is felt from the secondary to higher education teaching, and that is something that is still very present due to the proximity of the time, especially when it is refer to the lack of follow-up by teachers and the way to organise the information and contents of the study plan:

Do not have so much help from the teacher. At the institute of secondary education, we have empathy with the teachers, there is a relationship. Here, in the higher education, we do not have so much... also because we are better students, because the group has more students. Because there are more [students] within the class. (S2)

Whereas other years we had a manual, when we got here we have to organize the content in our other terms and achieve it on our own initiative. (...) It's a huge load. (S12)

Difficulties in using the English language

The difficulties in using English was pointed by the students, whereas even though students across their school department attend the English signing, difficulties were identified associated with their level of competence:

Especially when teachers give us tasks to read and understand the language, which is complex. (S13)

The problem is when it is in another language. Everyone thinks we know English, but there are many people who do not know it and reading in English is very difficult. (S15)

Reconciliation of personal and professional life with academic life

In recent years, due to the changes that have occurred in the forms of access to higher education, creating opportunities and conditions so that those who had left education a few years ago could also enter to obtain higher academic education, such as of the access of those over 23 years of age, or even due to the emerging economic need with greater expression in recent years, more students are workers, hence the talk of the reconciliation of personal and professional life with the academic. There is also a reflection on the motivation to learn and study:

The biggest challenge was time and then being a student-worker; it was also difficult to reconcile, but I think the teachers also take into account our opinion in terms of assessment. (S10)

In my case, it is difficult to reconcile work and university, it is exhausting. They have been very exhausting weeks. (S29)

7.2.2. Pedagogical practices

Prevalence of teacher-centred practices

In the case of students' future teachers, in addition to paying attention to the content that they are taught, they also value the way in which knowledge is transmitted to them, because they expect to be taught to teach. In this way, the predominance of teacher-centred practices stands out, which they associate with a certain incoherence between speech and practice and the assumption of a passive role by students:

We are told that we should not follow traditional teaching, but the practices [teachers] adopt are traditional teaching. Students end up having a passive attitude. (S5)

Then we also have the problem of not interrupting, of questioning. There is not so much openness. We become more withdrawn. (S3)

Passively, we end up accepting. There is dialogue, it is participatory, but also as students, we always depend on something that is proposed to us, and from there we will express ourselves. (S9)

Predominance of lectures and the use of power point

In both programmes, teacher education and nursing, the predominance of lectures and the use of power point, which ends up being repetitive and not very stimulating, was highlighted. It leads to a more passive attitude of some of the students. This aspect refers to the role of teacher educators, whose pedagogical practices decisively influence the education process of future teachers, especially in terms of making pedagogy explicit and clarifying the purposes and actions such as strategy that promotes the co-construction of professional knowledge:

Reading in power point. Most use power point, but they read what there is, they do not explain it in other words, we know how to read power point. (S2)

In my opinion, the programme should be more practical ... I speak in general, but get to class, open power point, and start reading, talk about all the theory ... the class is over. Some classes are like this. There are classes that should not be so theoretical. (S11)

Listen to the teacher [laughs] and small discussions. I think I speak for everyone when I say that we have many lectures. (S24)

Lack of articulation with professional practice

One of the fundamental aspects in teacher education is learning through practice. Therefore, students expected a greater articulation with professional practice, explaining that students are not taught to teach:

Our classes should be more practical. The programme has to be more practical because we finish and if we go into a classroom with students, we don't know what to do. (S11)

Our profession is very practical, and I go to the context without knowing how to act, how to do, we have these theoretical issues and therefore less practical (S6)

We do not know how to go from theory to practice, we need to rely on theory, but we lack a lot of practice. (S4)

We do not learn to teach (...). For example, I don't know how I teach to learn to read. That theory is necessary, but how do they learn to write, how do they learn to read. (S6)

Lack of coherence between discourse and practice

The lack of coherence between discourse and practice was identified by students, especially in teacher education, even pointing out the dissonance between the pedagogy defended at the discursive level and its contradiction in classroom practice:

We say that the student learns through action, but we know that this is the way it works with all human beings. (S5)

We are told that we should use a more didactic method to teach the students, but then they [the teachers] do the opposite with us. (S36)

Those who teach pedagogy are the ones who least apply these things in practice, they give more lectures lessons. (S32)

7.2.3. Factors influencing learning

Number of students per class

The number of students per class emerged as one of the factors that influence learning. A class with too many students can condition learning. On the one hand, in the type of lessons that will be taught, in the organisation of the classroom and teaching times and, on the other hand, in the intervention that the student who will be more conditioned to a shorter time, to give the opportunity for everyone to participate and express their doubts and perspectives. Nevertheless, there is no diversity of opinions and perspectives that could enrich learning:

The fact that there are few students on this master's degree has been beneficial for us. The orientations, the focus is more on us. On the other hand, there is less sharing, opinions, perspectives, but in some subjects in which we have already been sharing classes with fellow students of other master's degrees, the classroom had a greater number of students, it was a little more difficult to manage assessment dates, to do the work, because it was difficult to manage that part, because we were wasting a lot of time. (S8)

Classroom dynamics/interaction

The dynamics/interaction in the classroom and the dialogic approach appear as factors that influence learning, marking the classroom environment and the degree of involvement of students in classroom activities:

The dynamics we have with the teachers is also important, to facilitate our learning and to understand our part, which throughout the semester we always had that understanding from the teachers. (S10)

We have to get involved in the subject rather than make it very expository. (S17)

Having interaction with the teacher and with the content, that is very good. We have to fight against the most expository classes. Learn to teach so that the student can create knowledge and build her own reasoning. (S25)

Level of student participation in classroom activities

Once again, the participants pointed out the discrepancy between what the teacher does and what stands for: *Teachers stand for one thing and when it comes to applying it to us, they don't. (...) the teacher did not apply what she defended (S31)*, especially regarding communication and performance issues in the classroom: *A complex language, I get lost in ideas. The teacher talks about what should be done and does the opposite (S11)*

Teachers' attitude in the classroom

The teachers' attitude in the classroom emerged as a factor that also influences learning, since it can affect students' interest in the subject, the content, or even the students themselves. Again, the allusion to the role of university teacher is highlighted and how can shape the teaching practice in the sense that teacher education is much more than education competencies, referring to "an educational process that allows the development of critical, informed and highly competent professionals" (Loughran, Keast & Cooper, 2016, p. 416):

The behaviour of teachers towards us in the classroom. There are four hours of class devaluing [the Bachelor/Master] and the students. What is the motivation to work? (S14)

There are classes in which I want to come here [to the university], even if I'm sleepy, I know I'm going to wake up, others, in which I think: "Why am I going to get out of bed?" (S13)

I am much more interested in the subject when the teacher shows passion for what he does, which I notice, because we are going to be teachers. I don't know if there are teachers who don't like to teach, but there are clear differences between teachers. (S31)

Relationship with teachers

Finally, the relationship with teachers is also identified by students as a factor that influences their learning because, in their opinion, it is a decisive factor for the quality of teaching and the success of learning:

I think we always had a good relationship with our teachers. (S10)

Then there are others with whom our relationship is so troublesome that it makes us forget the good guys. (S11)

7.2.4. Assessment

Predominance of exams and group work

In the assessment dimension, the prevalence of exams and group work was highlighted by students, tending to value the latter for the opportunities it offers in terms of interaction and learning:

Exams. We have had portfolios, reflections, but above all it is an assignment and an exam or two exams. In my opinion, I really like doing group work, because I think it enriches us more to listen to the opinion of our colleagues (...) with our colleagues we investigate more, we distribute the work, and it is also less burdensome for us. So, at the classroom level, I also think that group work is positive, because other groups can question us and we see if the work is well done, what we can do better. (S6)

I work mostly in a group, with presentation. (S33)

Negative aspects of exams and group work

Despite recognising the negative aspects of the exam, especially with regard to the quality of learning and its importance, students attested to being the method most used by teachers. Students also question the type of learning acquired through the exam, its effectiveness and suitability.

The exam is the result of that moment. The exam limits us a lot. (S4)

I think that exams limit us a lot, because it can be done on a difficult day. Not having studied very well, not understanding the questions. We end up being assessed, let's imagine there are two tests, it goes wrong, we are assessed for it. (S3)

In a test, you can know how to copy better than others. (S14)

It does not assess the knowledge, but the interpretation we make of the question. He does not ask things objectively. (S18)

On the exam, there is more pressure. It does not show the knowledge that the student has or does not have. We don't learn much if the assessment is limited to one exam, because if we learn throughout the semester, we learn better! (S26)

When it comes to exams, it's just what you get, nothing more. What you do there [on the exam], what you write is what is assessed. (S14)

Stressful situations associated to the exams it was also mentioned. Moreover, the students also highlighted the negative aspects of group work, as it does not work well when there is a lack of time and task management:

Group work works very well when everyone wants to work, but there are always two or three who are not interested, I am tired of dragging people. (S14)

The work always ends up being done, but there are people who know that they are in that group and already know that others are going to work, and they don't care (S11)

Unfairness in the assessment of oral presentations

Still within the scope of group work, the rating and justice (or injustice) when the contribution of the different members of the group is not equivalent and when oral presentations of the works are produced it is a problem. This aspect may be associated with difficulties in time and task management, referring to

the importance of self-regulation competences, but also to strategies for monitoring and assessing the work performed:

Since the work grade is the same, then there is a presentation to differentiate the students. (...) Because there are people who do not work or do not want to know. (S6)

But that's a bit unfair [differentiating the grade from the presentation], because sometimes people who don't do the work do better in the presentation than those who are more knowledgeable on the subject. That has to do with the personality of the person. That is why it is even logical that group work is not the only assessment method. (S5)

We have to know how to work with all kinds of people, at different times, but the problem is our assessment. In group work, one person keeps all the work and the other receives the same grade as the one who has done it all. (S11)

Predominance of a classifying activity

Still in the assessment dimension, the grades/results were mentioned by the students. Because, in most cases, grades do not reflect the knowledge that the student knows or has learned. The predominance of summative assessment takes students to a critical position, questioning the pertinence and adequacy of assessment methods and criteria:

The ratings say nothing of what we know. (S13)

The results do not show what we know. I don't know anything about what I've already studied, but it's already done. (S11)

I think it is relative. I don't know what I'm capable of. I don't know if the grade I have reflects what I know. (S28)

Sometimes I know more than there is, but sometimes the opposite happens. (S24)

As for the grades I get, maybe I didn't even work and I see that my classmates got good grades too, maybe they think like me. (S24)

As the training is very theoretical, having an average of 18 at the end of the master's degree does not mean that I know how to teach. (S32)

The concept of assessment as classification emerged from the data collected: *Assessment is very focused on classification. They do not care about quality, but about quantity. (S26)*. Students would opt for a more quantitative and results-focused logic. Which also results from the prevalence of summative assessment methods and more teacher-centred learning.

Valorisation of alternative assessment methods

Despite their residual use, the students valued the alternative assessment methods, admitting that they allowed a greater involvement of the students, the application of what they had learned and made possible the construction of knowledge based on learning and continuous work, with self-reflection and self-assessment:

With these [alternative] methods, we get more involved. (S11)

What is learned is unconsciously activated, without having to memorize it. (S14)

When assessed in each class, you can see who is working or not, and it is a way for the teacher to understand what has been done there. It was done in class, we presented in class, we worked in class, we are all required to work in that class. (S11)

The portfolio is somewhat freer and we can express our knowledge, our opinion, in the exam we cannot. It is more rigorous. It adapts more to what the teacher demands and not so much to self-reflection. We don't have that freedom. In many exams, we were not the ones who thought, but the ones who memorized. In the exam we prepare for that moment, from there we pass, we disconnect, we put it in a box and that's it. At work, I always think about what could be improved or if it was okay. (S24)

We learn more if it is a task or a portfolio because we build things. (S27)

Group work requires more research, more reflection, preparation. We are also building our knowledge. (S7)

Complexity of the assessment act

The participants in the study also recognised the complexity of the act of assessment, suggesting that: *The assessment is really very complex, I don't know if it is worse to assess or to be assessed, many factors influence, other methods are needed. (S26)*.

Therefore, it is necessary to situate the assessment in its breadth and complexity, including its political and ethical dimension.

Absence of regular and systematic feedback

Also in the assessment dimension, the students mentioned the aspect related to the absence of systematic and regular feedback from the different teachers, stating that they only have feedback through the marks they receive for the exams, works or even at the end of the semester:

There was a colleague who asked the teacher for his opinion, and he did not even reply. (S10)

We do not receive information, only at the end of the semester. (S11)

In an exam, we receive the grade, and we don't know what to do to improve. (S24)

So, we also feel intimidated, because if the teacher does not give us the feedback, the final grade has not yet come out and we are going to ask for justifications, we do not know how he interprets it. He might take offense and lower my grade. (S33)

We do not always receive information on time, I am not sure if I am doing things right or not. There's no answer. (S14)

Feedback as an opportunity to improve learning

Despite not receiving information regularly and systematically, the study participants recognised the feedback as an opportunity to improve learning, which again points to questions of monitoring and balancing the strategies used, referring the assessment only to the moment to award the qualifications:

Yes, definitely, yes! To know where we went wrong, to understand, to be better in the future. (S6)

Even so that we can reflect on what we do. We also need to have that competence to be better teachers and educators. (S7)

Figure 28 summarises the analysis of the qualitative data collected from the participants. While the challenges facing higher education are related to the increased workload and lack of support from teachers, they also provoke reflection on broader issues of academic life, such as the transition from teaching secondary to higher, on personal issues (reconciling personal life with higher education studies)

and on pedagogical issues, specifically teaching and assessment methods and how students learn to be teachers and nurses. This reflection on how it is taught and how it is believed to be taught is fundamental in the process of becoming a teacher, allowing to reveal and question implicit beliefs and theories or to reinforce them, as well as to develop a more sustained and critical perspective on the training process, especially when it comes to pedagogy and assessment.

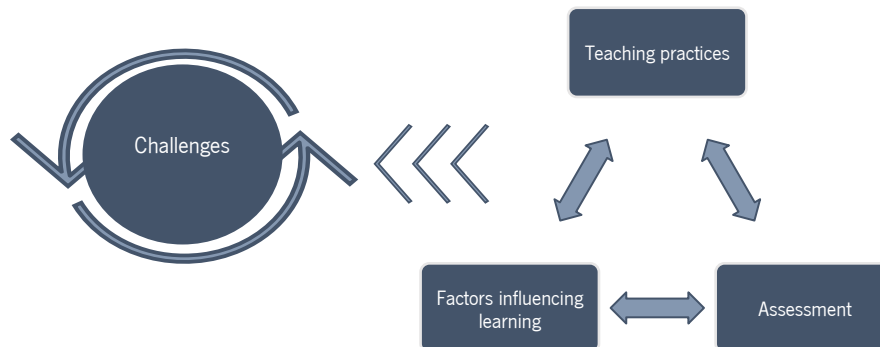


Figure 28: Summary of qualitative data arising from participants' accounts (Pinheiro, Flores, & Cristóvão, 2022)

7.3. Summary

The first dimension, relating to the challenges faced by university students, brings interesting aspects that allow us to understand the entry of students' future teachers and nurses, given the gradual and complex transition that both have to make. Challenges and difficulties experienced are mentioned, due to the demands imposed on the changing society, to the need to respond to several demands simultaneously and in a short time, to having a specialised training, performing all the tasks with maximum efficiency and efficiency. This aspect can create a huge pressure in personal, professional, and academic life. Because the different situations and environments that students experience at the entrance to higher education can have implications for decisions to stay and drop out of programmes (Nunes & Garcia, 2010; Almeida & Cruz, 2010) or in managing expectations regarding the programme, influencing their motivation and/or interest in the programme.

Regarding pedagogical practices, was mentioned being more centred on the teacher, observing a paradigm of direct instruction, setting a limit to which the student can be reached, as advocated by Barr & Tagg (1995) instead of a learning paradigm, in which success marks its limit (Barr & Tagg, 1995), adopting more student-centred practices (Flores et al., 2019; Myers & Myers, 2015; Webber, 2012). There is also a predominance of teaching practices based on the transmission matrix – based on the transmission of knowledge (Roldão, 2009) and a pedagogical paradigm of education – based on the

narrow connection between the teacher and the knowledge, centrality of the teacher and the passivated of the student, and the memorization and methodologies aimed at the acquisition of contents (Trindade & Cosme, 2010). Is referred to the lack of articulation with professional practice, even though international discourses indicate the importance of this practice in teacher education programmes (Mayer et al., 2015; Tang, Wong, & Cheng, 2012;) without neglecting the relevance of the theory in the daily context of work in the classroom (Wæge & Haugaløkken, 2013; Tang, Wong, & Cheng, 2016).

As for the factors that influence learning, these are mainly a source of restriction for the construction of knowledge on the part of the student, conditioning their way of being inside the class and their intervention/participation. The circumstances in which the student learns are fundamental for significant learning to take place, but for this to occur, the assessment must move from the traditional "assessment of learning", observed in the speeches of the students, to the "assessment for learning" (Torrance 2007, p. 281), and students should participate in the assessment process (Orsmond, Merry & Reiling 2002).

The feedback emerged in the participants' discourses as something that is not shown to be adequate and timely (Gibbs, 1999), even though it is recognised as a learning opportunity (Pope, 2001; Li & Gao, 2016). These students show that assessment must be seen like feedback and reflection (Lutovac & Flores, 2021), even though, in practice, that doesn't happen, therefore, in order to produce a significant learning, there must be a guided assessment (López-Pastor & Sicilia-Camacho, 2017). Another important aspect is that feedback is a critical dimension in the development of a teaching of quality and effective learning in all educational environments (Black & William, 1998; Carless et al., 2011; Tee & Ahmed, 2014). However, it still has an unsatisfactory aspect of the teaching and learning experience (Tee & Ahmed, 2014) which is also highlighted in this study.

CHAPTER VII

EXPERIENCES OF ASSESSMENT DURING THE COVID-19 PANDEMIC: STUDENTS' VIEWS

Chapter VIII – Experiences of assessment during the COVID-19 pandemic: students' views

In this chapter data collected with students during the COVID-19 pandemic in semester two 2020.

Data were collected only in Portugal through an online questionnaire administered to students in one nursing and one teacher education programme (TEP) who were willing to participate, even under special conditions such as those experienced in 2020. The questionnaire was also an opportunity to get to know students' views on online learning as a result of the forced closure of the institutions. It was also carried out a practice of intervention and monitoring of the assessment process during pandemic lockdown in one curricular unit of the Nursing Degree "Community Health II" and in one curricular unit of the Master in Teaching (Teacher Education Programme in History) "History Teaching Methodology II".

In this chapter the following themes are presented: 1. Students' views of online teaching, learning and assessment with the sub-themes: a) Students views of online assessment; b) Assessment methods used by teachers; c) Online feedback; d) Means of providing feedback used by the teachers; e) The experience of online teaching and learning; f) Time devoted to learn in an online environment; g) Conditions for teaching and learning online; h) Pedagogical strategies used by teachers in an online context that promote effective learning; i) Students' online learning experience (an episode/situation that has marked). 2. Intervention and monitoring of the assessment process during pandemic lockdown with the sub-themes: a) Student experience of peer assessment exercise in "Community Health II" (Nursing Degree); b) Teaching and learning experience in "History Teaching Methodology II" (TEP); c) Feedback experience in "History Teaching Methodology II" (TEP); d) Assessment process in "History Teaching Methodology II" (TEP).

8.1. Students' views of online teaching, learning and assessment

8.1.1. Students' views of online assessment

Most nursing students agree or completely agree (46.9%) that the assessment of online learning was performed asynchronously. They also claim that they participated in the assessment of learning either through peer-assessment (56.1%) or through self-assessment (57.6%). In addition, students from the teacher education programme have mixed feelings 50.0% agree/completely agree (50.0%) and 50.0%

neither agree nor disagree (50.0%) in relation to “The assessment of learning in the online context was continuous (it took place throughout the semester)”. Students from both programmes agree or completely agree (nursing – 59.9% and student teachers – 87.5%) that the assessment of online learning included oral presentation of group and/or individual work (synchronous assessment – in real time). With regard to the assessment of online learning, nursing students disagree that attendance to class was used in their assessment process (81.8%) disagree, while the majority of the student teachers (ST) (75.0%) agree or completely agree. Finally, students from both programmes felt satisfied with the assessment of online learning: agree or completely agree (nursing – 40.9% and ST – 50.0%). Student teachers also claim that they felt comfortable with online assessment (50.0%) while 39.4% disagree or completely disagree (see Table 20).

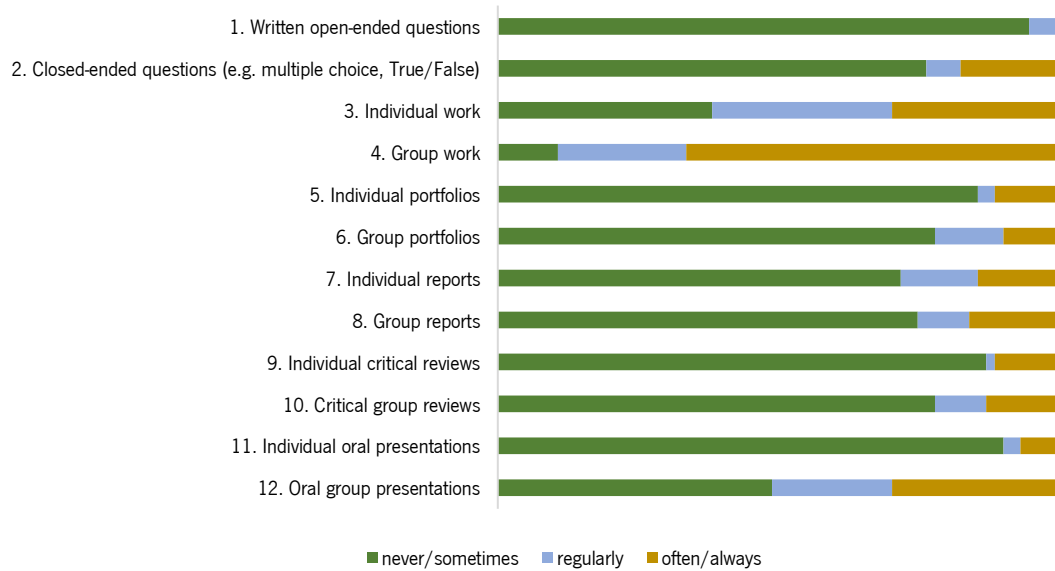
Table 20: Students' views of online assessment

Statement	Disagree / Completely Disagree (%)		Neither agree nor disagree (%)		Agree / completely agree (%)	
	Nursing	Teacher Education	Nursing	Teacher Education	Nursing	Teacher Education
1. The assessment of learning in the online context was continuous (it took place throughout the semester).	19.7	0.0	33.3	50.0	46.9	50.0
2. The assessment of learning in the online context was held at the end of the semester.	16.7	37.5	21.2	37.5	62.1	25.0
3. The assessment of online learning was performed synchronously (in real time).	28.8	12.5	39.4	37.5	31.8	50.0
4. The assessment of online learning was performed asynchronously.	18.1	25.0	27.3	37.5	54.5	37.5
5. The assessment of online learning included group oral presentations and/or individual work via video (asynchronous assessment).	74.3	62.5	10.6	12.5	15.1	25.0
6. The assessment of online learning included group oral presentations and/or individual work (synchronous assessment –in real time).	16.6	0.0	24.2	12.5	59.9	87.5
7. The assessment of online learning took into account attendance to class.	81.8	0.0	7.6	25.0	10.6	75.0
8. I participated in the assessment of my colleagues' learning (peer-assessment).	25.8	12.5	18.2	37.5	56.1	50.0
9. I participated in my assessment of learning (self-assessment).	30.3	25.0	12.1	37.5	57.6	37.5
10. I feel satisfied with the assessment of online learning.	31.8	37.5	27.3	12.5	40.9	50.0
11. I am comfortable with the online assessment.	39.4	37.5	33.3	37.5	27.3	25.0

(Source: Author)

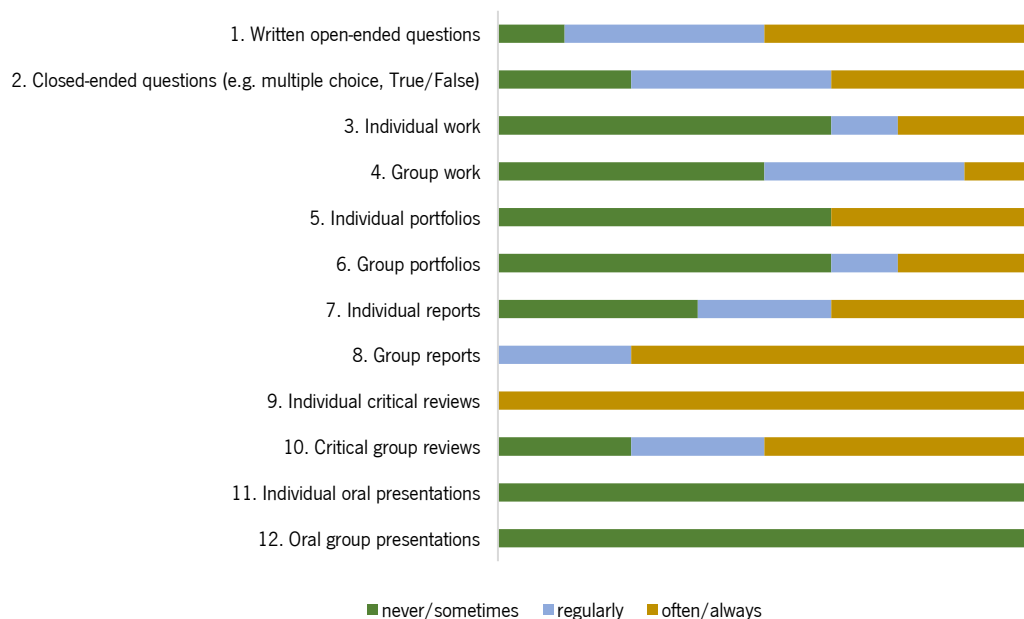
8.1.2. Assessment methods used by teachers

When asked about the assessment methods most used, 66.7% of nursing students state that are assessed through group work (see Graph 1).



Graph 1: Most used assessment methods during the pandemic in nursing students' views (Source: Author)

Student teachers attest to be assessed through individual critical reviews (100%), group reports (75.0%) and written open-ended questions (50.0%) (see Graph 2).



Graph 2: Most used assessment methods during the pandemic in students' teachers' views (Source: Author)

8.1.3. Online Feedback

Nursing students agree or completely agree that feedback increased during online teaching (34.9%), that teachers were always available to provide them with feedback on the activities/tasks performed (59.1%), and that feedback was received from colleagues on the work performed (e.g. oral presentations) (46.9%). Students from both programmes agree or completely agree that the feedback received helped them to improve their performance (nursing – 68.1% and ST – 62.5%), that the feedback received contributed positively to their learning (nursing – 66.7% and ST – 62.5%), and that feedback received was important to improve their learning (nursing – 92.4% and TEP – 75.0%) (see Table 21).

Table 21: Students' views of online feedback

Statement	Disagree / Completely Disagree (%)		Neither agree nor disagree (%)		Agree / completely agree (%)	
	Nursing	Teacher Education	Nursing	Teacher Education	Nursing	Teacher Education
1. Feedback increased during online teaching	33.4	37.5	31.8	37.5	34.9	25.0
2. Teachers were always available to provide me with online feedback on the activities/tasks performed	15.2	37.5	25.8	37.5	59.1	25.0
3. The feedback received helped me to improve my performance	16.6	12.5	15.2	32.5	68.1	62.5
4. The feedback received contributed positively to my learning	15.1	25.0	18.2	12.5	66.7	62.5
5. In online teaching, feedback was received from colleagues about the work performed (e.g. oral presentations)	33.3	12.5	19.7	62.5	46.9	25.0
6. The feedback received from the part of the teachers was important to improve my learning	3.0	12.5	4.5	12.5	92.4	75.0

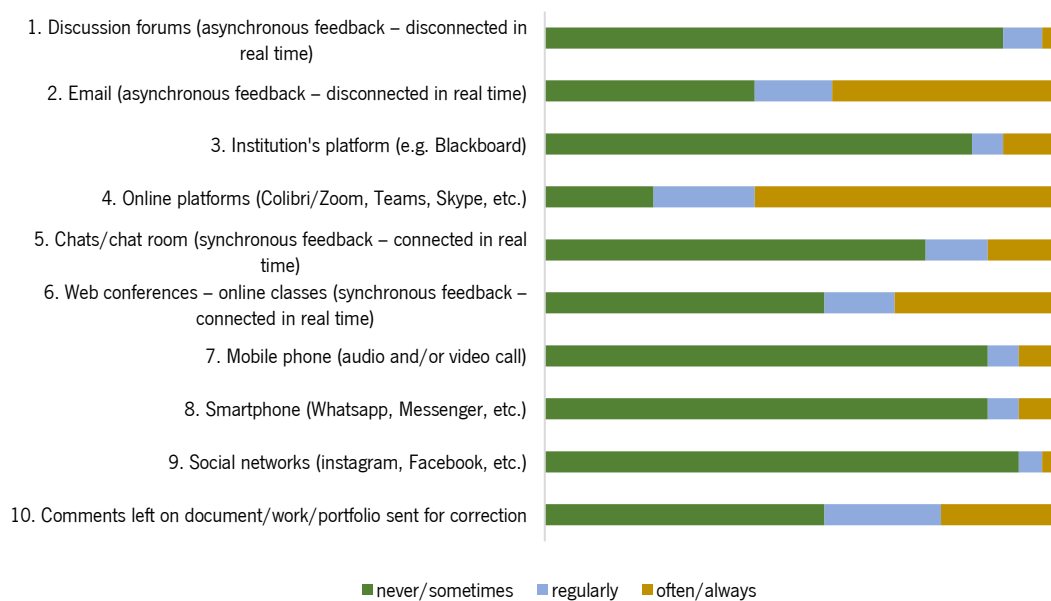
(Source: Author)

8.1.4. Means of providing feedback used by the teachers

Regarding the most used strategies to give feedback to students, students from both programmes report that teachers never give them feedback through discussion forums (asynchronous feedback) (nursing – 89.4% and ST – 87.5%), institution's platform (e.g. Blackboard) (nursing – 83.4% and ST – 75.0%), chats/chat room (synchronous feedback –in real time) (nursing – 74.2% and ST –

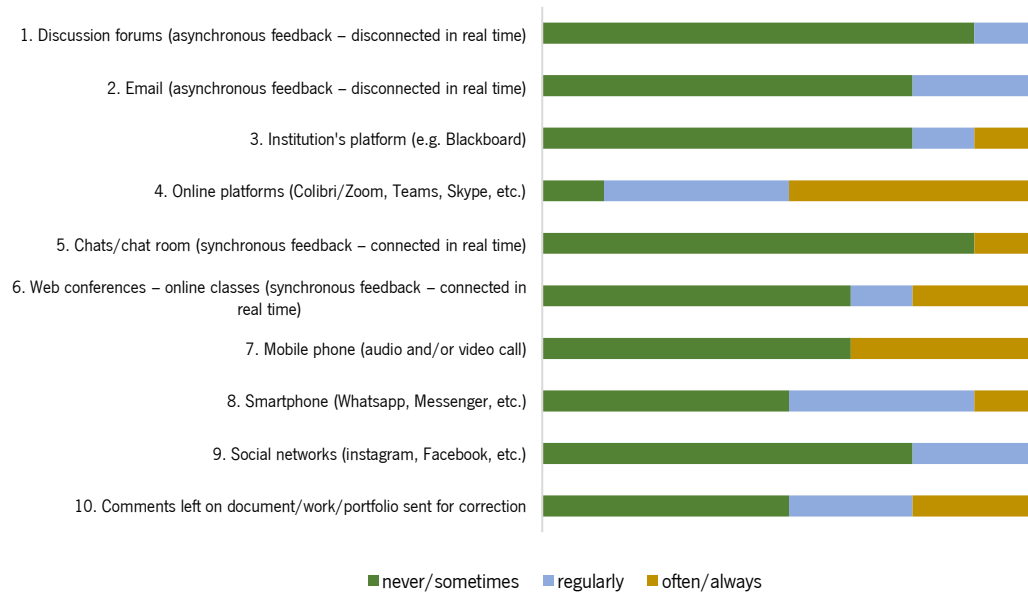
87.5%) or social networks (instagram, Facebook, etc.) (nursing – 92.4% and ST – 75.0%) (see Graphs 3 and 4).

Nursing students highlighted that teachers also never give feedback through web conferences – online classes (synchronous feedback –in real time) (nursing – 54.6%), mobile phone (audio and/or video call) (nursing – 86.4%), smartphone (Whatsapp, Messenger, etc.) (nursing – 86.4%) or comments on document/work/portfolio sent for correction (nursing – 54.6%). Nursing students stated that they received feedback often through email (asynchronous feedback) (nursing – 44.0%) and online platforms (Colibri/Zoom, Teams, Skype, etc.) (nursing – 59.1%) (see Graph 3).



Graph 3: Means of providing feedback used by teachers in Nursing programme (Source: Author)

In turn, student teachers claim that regularly receive feedback through online platforms (Colibri/Zoom, Teams, Skype, etc.) (ST – 50.0%) (see Graph 4).



Graph 4: Means of providing feedback used by teachers in TEP (Source: Author)

8.1.5. The experience of online teaching and learning

Nursing students and ST disagree or completely disagree that in online teaching, students interact more with each other than in face-to-face teaching (nursing – 75.8% and ST – 87.5%). In addition, competitiveness among students inhibits/hinder learning dynamics (nursing – 56.0% and ST – 87.5%) and sharing between students is facilitated (nursing – 57.5% and ST – 62.5%). Also disagree or completely disagree that online classes are more dynamic (nursing – 87.9% and ST – 100%) and more interesting (nursing – 80.3% and ST – 87.5%) than face-to-face classes. The same students still disagree or completely disagree that in online teaching, students interact more with the teacher than in face-to-face teaching (nursing – 68.2% and ST – 50.0%) and teachers use more diversified activities than in face-to-face teaching (nursing – 60.6% and ST – 50.0%).

Nursing students agree or completely agree that online classes require more concentration than face-to-face classes (nursing – 77.2%), the resources available were sufficient to keep up with online classes (nursing – 54.6%), complementary study materials were provided by teachers (nursing – 74.3%) and felt satisfied with my performance during online classes (nursing – 48.5%) (see Table 22).

Table 22: Students' views of their experience of online teaching and learning (continue in Table 23)

Statement	Disagree / Completely Disagree (%)		Neither agree nor Disagree (%)		Agree / Completely agree (%)	
	Nursing	Teacher Education	Nursing	Teacher Education	Nursing	Teacher Education
	1. I easily adapted to online teaching.	28.8	75.0	28.8	12.5	42.5
2. Online teaching increased my motivation.	57.6	87.5	30.3	12.5	12.1	0.0
3. Online teaching allows me to better manage my study time.	43.9	75.0	28.8	0.0	27.3	25.0
4. In online teaching, teachers are more available to the students.	33.3	25.0	43.9	75.0	22.8	0.0
5. In online teaching, students interact more with the teacher than in face-to-face teaching.	68.2	50.0	21.2	50.0	10.6	0.0
6. In online teaching, students interact more with each other than in face-to-face teaching.	75.8	87.5	9.1	12.5	15.2	0.0
7. In online teaching, teachers deliver content to students more than in face-to-face teaching.	39.0	50.0	27.3	25.0	33.4	25.0
8. In online teaching, competitiveness among students inhibits learning dynamics.	56.0	87.5	25.8	12.5	18.2	0.0
9. In online teaching sharing among students is facilitated.	57.5	62.5	27.3	37.5	15.1	0.0
10. Online classes are more dynamic than face-to-face classes.	87.9	100.0	7.6	0.0	4.5	0.0
11. Online classes are more interesting than face-to-face classes.	80.3	87.5	12.1	12.5	7.5	0.0
12. Online classes require more concentration on my part than face-to-face classes.	13.7	0.0	9.1	50.0	77.2	50.0
13. In online teaching, teachers use more diversified activities than in face-to-face teaching.	60.6	50.0	34.8	50.0	4.5	0.0
14. The pedagogical strategies used by teachers in an online context promote effective learning.	39.4	62.5	34.8	37.5	25.7	0.0
15. The resources available were sufficient to keep up with online classes.	16.6	37.5	28.8	50.0	54.6	12.5
16. Complementary study materials were provided by the teachers.	7.6	25.0	18.2	37.5	74.3	37.5

(Source: Author)

Students from both programmes disagree or completely disagree that allows to better manage the study time (nursing – 43.9% and ST – 75.0%). Likewise, also disagree or completely disagree that online teaching increased motivation (nursing – 57.6 and ST – 87.5%), felt more motivated to learn in online contexts (nursing – 59.1% and ST – 87.5%) and more confident to participate during an online class (nursing – 62.1% and ST – 62.5%). Also disagree or completely disagree those pedagogical strategies used by teachers in an online context promote effective learning (nursing – 39.4% and ST – 2.5%).

Students of both programmes do not feel more anxious due to online classes (nursing – 45.5% and ST – 50.0%) but agree or completely agree that felt more tired due to online classes (nursing – 75.8% and ST – 75.0%) and found it difficult to focus on the online learning context (nursing – 66.6% and ST – 50.0%).

Nursing students clearly diverge from the student teachers, wherein first of them, agree or completely agree that an easy adaptation to online teaching was made (nursing – 42.5%), there was active participation in online learning activities (nursing – 37.8%), passively attend classes/activities in an online context (nursing – 54.6%), found it difficult to participate in discussions of the content covered in an online context (Nursing – 40.9%). In addition, Nursing students agree or completely agree (nursing – 48.5%) that spend more hours studying when learning in an online context.

Although the student teachers do not take a stand, nursing students disagree or completely disagree, on having felt free to express doubts and difficulties during online classes (Nursing – 53.0%) and that learning outcomes in an online context did not live up to the expectations at the beginning of the semester (nursing – 42.4%). Student teachers disagree or completely disagree (ST – 62.5%) that teachers know how to develop online teaching, while nursing students neither agree nor disagree (nursing – 42.2%). Finally, students from both programmes do not take a position on the proper use of digital resources necessary for online teaching by teachers (see Table 23).

Table 23: Students' views of their experience of online teaching and learning (continuation of Table 22)

Statement	Disagree / Completely Disagree (%)		Neither agree nor disagree (%)		Agree / Completely agree (%)	
	Nursing	Teacher Education	Nursing	Teacher Education	Nursing	Teacher Education
17. I spend more hours studying when learning is done in an online context.	27.3	50.0	24.2	12.5	48.5	37.5
18. I actively participate in online learning activities.	30.3	50.0	31.8	37.5	37.8	12.5
19. I passively attend classes/activities in an online context.	9.1	37.5	36.4	25.0	54.6	37.5
20. I found it difficult to participate in discussions of the content covered in an online context.	25.8	25.0	33.3	62.5	40.9	12.5
21. I feel satisfied with my performance during online classes.	17.7	50.0	34.8	50.0	48.5	0.0
22. I feel more motivated to learn in online contexts.	59.1	87.5	30.3	12.5	10.6	0.0
23. I found it difficult to focus on the online learning context.	18.2	37.5	15.2	12.5	66.6	50.0
24. I felt free to express my doubts and difficulties during online classes.	53.0	37.5	25.8	50.0	21.2	12.5
25. I felt more confident to participate during an online class.	62.1	62.5	31.8	37.5	6.0	0.0
26. I felt more anxious due to online classes.	45.5	50.0	21.2	12.5	33.4	37.5
27. I felt more tired due to online classes.	16.7	25.0	7.6	0.0	75.8	75.0
28. Learning outcomes in an online context did not live up to my expectations at the beginning of the semester.	42.4	25.0	24.2	62.5	33.4	12.5
29. My teachers knew how to develop online teaching.	24.2	62.5	42.4	12.5	33.4	25.0
30. My teachers properly used the digital resources needed for online teaching.	22.7	37.5	42.4	37.5	34.8	25.0

(Source: Author)

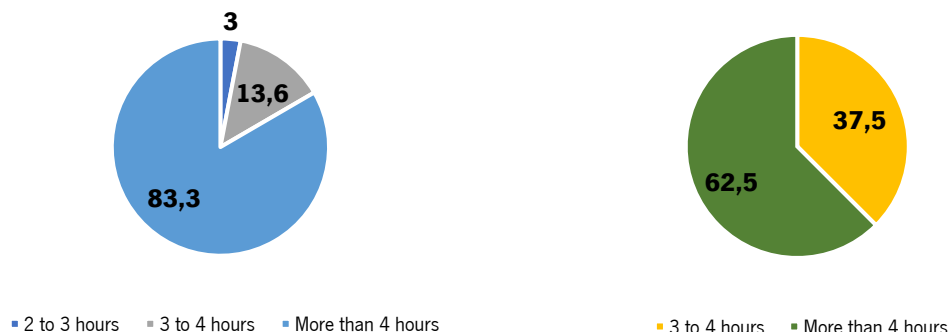
8.1.6. Time devoted to learn in an online environment

Both nursing students and ST report having spent more than 4 hours on online lessons, recorded or in other formats at a distance (see Graph 5).



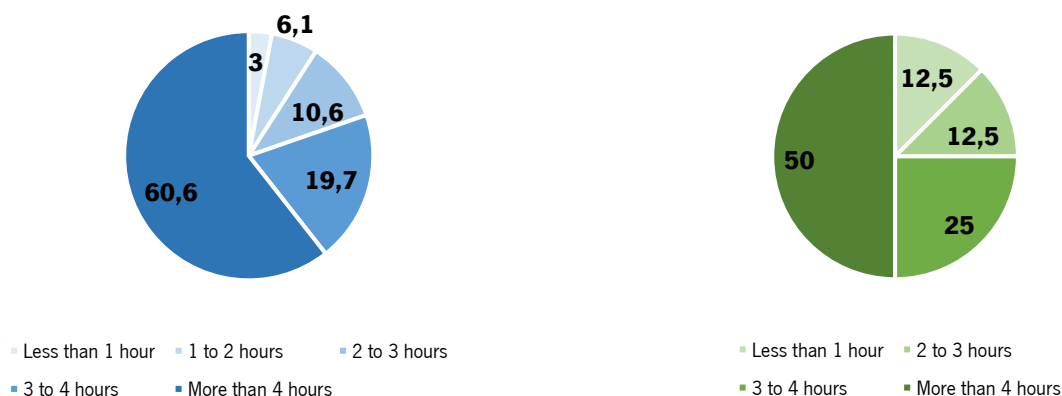
Graph 5: Nursing and ST views of time spent on online lessons, recorded or in other formats at a distance (Source: Author)

Students of both programmes claim having spent more than 4 hours, per week, on the proposed tasks (tasks requested by the teachers) (Nursing – 83.3% and ST – 62.5%) (see Graph 6).



Graph 6: Nursing and ST views of spent hours per week on the proposed tasks (tasks requested by teachers) (Source: Author)

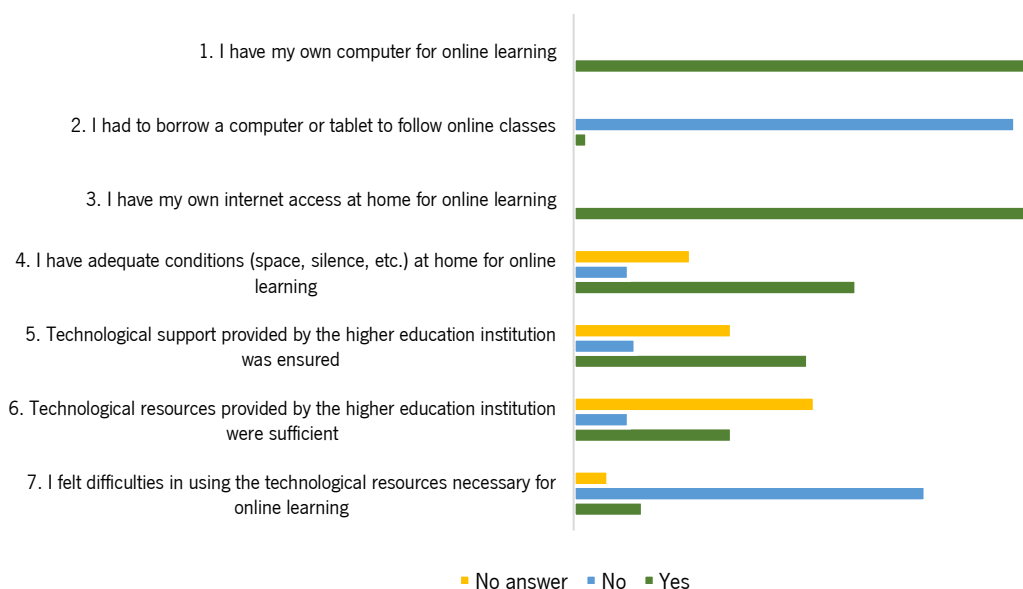
More than half of the nursing students (60.6%) reported having spent more than 4 hours a week studying while ST claimed that only half of the students (50.0%) reported studying more than 4 hours a week, a quarter of them (25.0%) study 3 to 4 hours and the other quarter of students divide between 2-3 (12.5%) hours or 1 2 hours (12.5%) of study (see Graph 7).



Graph 7: Nursing and ST views of spent hours per week studying (except for classes and assignments) (Source: Author)

8.1.7. Conditions for teaching and learning online

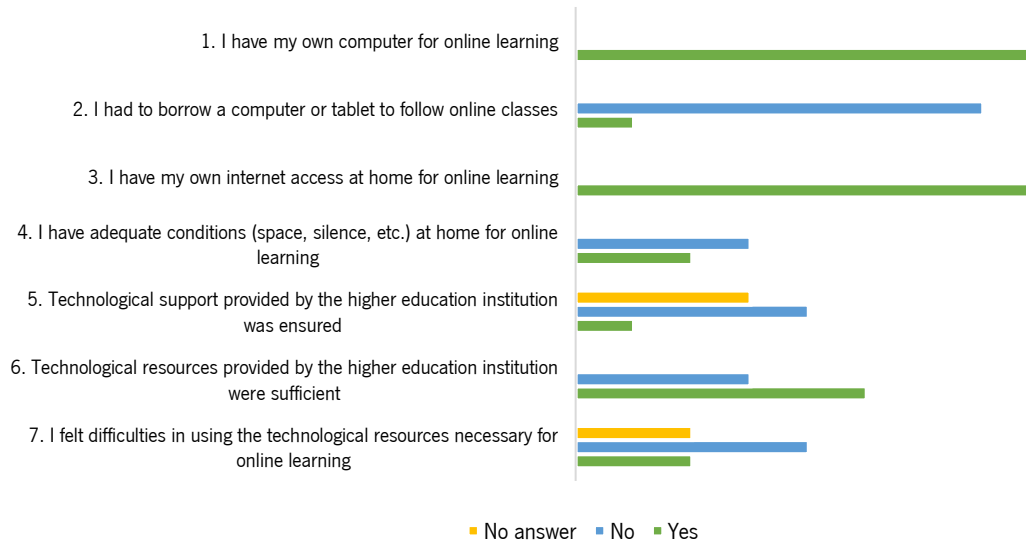
In online teaching and learning conditions the majority of nursing students stated having their own computer and internet access at home; Nursing students reported to have adequate conditions at home for online learning (62.1%). Students also stated that technological support provided by the higher education institution was ensured (51.5%). Already about technological resources provided by the higher education institution having been sufficient students preferred not to answer. Was stated by 77.3% of the students to have no difficulties in the use of technological resources necessary for online learning (see Graph 8).



Graph 8: Online teaching and learning conditions in nursing programme (Source: Author)

In online teaching and learning conditions all of ST attested to have a computer and internet access. ST (62.5%) agree that technological resources provided by the higher education institution were sufficient. And

reveal to have adequate conditions at home for online learning (ST – 37.5%). Lastly, expressed that no felt difficulties inusing the tecnologies resources necessary for online learning (ST – 50.0%) (see Graph 9).



Graph 9: Online teaching and learning conditions in TEP (Source: Author)

8.1.8. Pedagogical strategies used by teachers in an online context that promote effective learning

As for the possibility of recording the classes and the students being able to view them when, where and how often they were intended, they say it is a positive aspect:

The transfer of classes in video format allows a better organisation of the study, in part because it is less exhausting and we take breaks at our own pace and also because this way we avoid losing parts of classes due to internet breaks, among other things (NS6)

Provision of recorded asynchronous classes so that we could watch them later and as often as we wanted (NS62)

Students consider that, although teachers have used power point as a resource for teaching, this was done in a more interesting and dynamic way, because other complementary tools were introduced:

PowerPoints with more information and pertinent “tips”, and having provided them in advance of classes. (NS63)

Use of simple and clear PowerPoints; Use of didactic platforms; Viewing videos. (NS53)

Viewing videos about the subject taught. (NS4)

The use of software that allowed and facilitated the dynamics of classes (NS22)

Use of dynamic online platforms. (E.g.: Poll Everywhere) (NS42)

Provision of study materials complementary to online classes; Availability to clarify doubts via email or video conference. (NS37)

The concern and dedication to accompany and help us. Use strategies to streamline classes and not just show power points. (NS35)

Students considered the classes as having a more expository trend, however a more active participation by students was recognized with more possibility to clarify doubts:

More expository presentations, with space to clarify doubts and active participation by students. (NS39)

The classes were very similar to what they would be in a face-to-face context. The teachers, perhaps for lack of preparation, because they were taken by surprise. They limited themselves to giving purely expository classes and sometimes even asked that if doubts arose, they could speak through the chat or ask the class delegate to intervene. However, some assignments were an excellent way of learning and teachers were always available to clarify doubts and actively followed the entire process. (NS19)

The existence of meetings was also mentioned as a complementary way to help students in their learning:

Individual meetings with each group in addition to asynchronous and synchronous classes. (NS3)

Group meetings for learning sharing. (NS1)

Meetings to clarify doubts. (NS24)

Individual group meetings; individual and group work; correction and suggestions written in the documents delivered; discussion of doubts in group and strategies to be used to achieve the objectives. (NS15)

In addition, the students highlighted the teachers' concern to manage class time so as not to become too exhausting:

Choosing to take short breaks when there were long classes of, for example, 3 hours (NS50)

Temporarily shorter classes and increased frequency of breaks (NS17)

The fact that during online classes they take breaks more often and try to cut down on the class time, so that it doesn't become too tiring and exhausting. (NS21)

Figure 29 summarises the trend of student responses regarding pedagogical strategies used by teachers in an online context that promote effective learning.

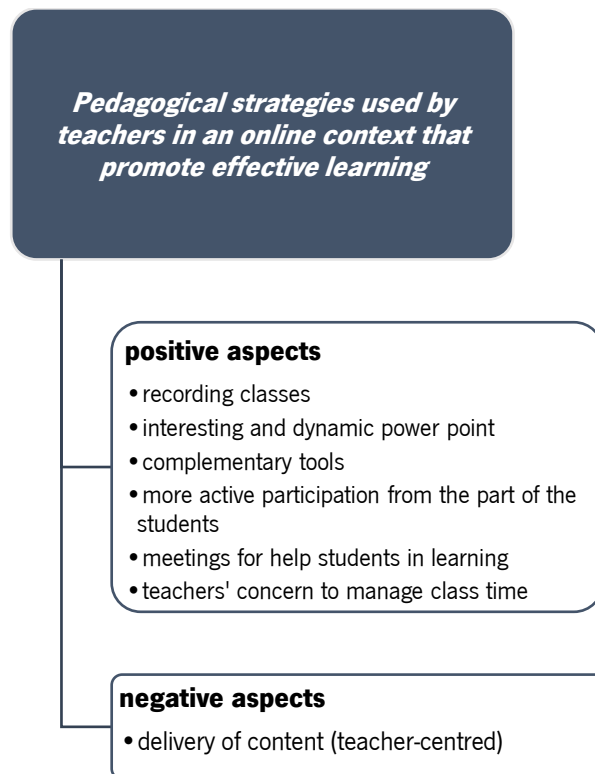


Figure 29: Students views of pedagogical strategies used by teachers in an online context that promote effective learning (Source: Author)

8.1.9. Students' online learning experience (an episode/situation that has marked)

Figure 30 summarises the trend of student responses regarding the students' online learning experience in which students only highlighted negative aspects such as those observed.

Students' online learning experience	poor management of the teaching and learning process (due to the online reality of the students)
	difficulties with internet connection
	spend many hours in front of the computer
	increased workload
	tiredness
	anxiety (due to being permanently isolated in their homes)

Figure 30: Students' online learning experience (Source: Author)

Students were asked to describe an episode/situation that marked them in their online learning experience. Students point to the poor management of the teaching-learning process, not adapting to online teaching and adapting to the reality of all students. There was no real adaptation to the context of online teaching. University teacher only taught online as if they were in classroom (in person). Which leads us to realise that the teachers were not prepared for online teaching, despite dealing with an aspect already considered fundamental as a competence for the exercise of the teaching profession.

At the beginning of E@D, some teachers were not, it seems to me, aware that the paradigm had been changed and, with that, the classes and the management of the teaching-learning process would necessarily have to be changed as well. There was, I believe, very little capacity and willingness to articulate with the reality that we were all living. (TES1)

The amount of time spent on group work in front of the computer made the experience far more tiring than studying for a test or attending in-person classes. (NS30/31)

Online classes have increased existing weaknesses. I don't see a better future on the horizon. (NS54)

The fact that I spend so much time in front of the computer, I emphasise that not in classes. Not everyone understands the overload and tiredness that being at home always in front of the computer doing group work entails. Having to sleep less because I had a lot of work to do. (NS35)

The aspect frequently mentioned by the students was the difficulty with the internet connection that made it difficult to attend synchronous classes:

When classes went down repetitively due to the colibri (NS16)

As my internet network is unstable, sometimes I couldn't keep up with the synchronous format classes, as there was a transmission failure. This involved breaking my reasoning and limiting my concentration, intensifying anxiety and stress levels. (NS17)

Every time the Internet failed in synchronous classes and lost part of the class that is important for my professional training. (NS19)

The fact that the internet often fails, and I can't connect properly to allow me to listen and watch classes online, ending up wasting useful class time. (NS21)

The internet failure (NS28)

Having an online test in which I had NET failure and the test went unanswered for a moment thinking I would be unable to do it (NS62)

Many hours in front of the computer and the increased workload were negative aspects highlighted by the students:

Too many groups work scheduled for too little time context. (NS43)

The fact that there is a greater burden in terms of work, especially group work and some teachers are not flexible in changing the delivery date. (NS50)

More than 12 hours a day doing group work and taking online classes. (NS54)

The fact that I spend so much time in front of the computer, I emphasize that not in classes. Not everyone understands the overload and tiredness that being at home always in front of the computer doing group work entails. Having to sleep less because I had a lot of work to do. (NS35)

As it is also perceived, the tiredness and the anxiety that came from being permanently isolated in their homes stood out as negative aspects:

Tiredness due to long online classes which made it difficult, for me, to concentrate (NS24)

Increased tiredness. Increased work required and hours spent. More impersonal method (NS37)

Lectures and long duration classes proved to be very tiring, and it was difficult to maintain concentration. (NS38)

8.2. Intervention and monitoring of the assessment process during pandemic lockdown

In defining the work plan, an intervention project was idealised in a curricular unit of nursing and TEP, in which an intervention would be made to empower teachers and students to adopt more active and alternatives methodologies in the assessment process. However, due to the COVID-19 pandemic, teaching started to be provided remotely and possibilities were analysed in order to proceed with the study. Because we were going through a new situation, totally unknown to everyone involved, we adapted to the circumstances and, taking into account that the teachers and students were going through a time of great stress and anxiety. Everything was done online, we looked for not to interfere too much in the established dynamics and to do what would be possible, taking into account all the constraints.

8.2.1. Peer assessment in a curricular unit of the nursing programme

Thus, in the nursing programme, a situation of peer assessment was developed. After listening to the university teachers of the curricular unit in intervention, it was noticed that the students had never experienced this type of assessment, as well as the teachers.

The practice of intervention and monitoring of the assessment process was carried out in the curricular unit "Community Health II", in the second semester, of the academic year 2019/2020, 4th year students of the Nursing Degree. For the assessment, the carrying out of group work was already defined, in order not to add more work to what the students already had to develop, has just been set that an assessment by peers would be made of the group work that was already agreed upon.

Adherence to the peer assessment experience was voluntary, 14 groups participated, 3 have decided not to participate. Hence, the participants filled out an informed consent statement, in order to comply with the ethical requirements that make up an investigation.

A document was developed on google forms, which contained the guidelines for the exercise. So that there was consistency in the data collected and not leave students with doubts about what was intended, making this experience something positive and that they would like to be able to repeat.

For the writing of the peer assessment of the group work, students should consider the following criteria (see Figure 31):

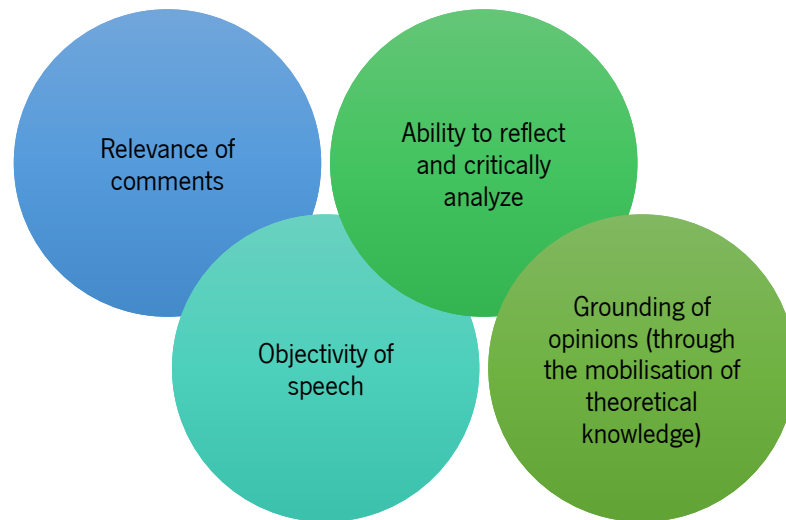


Figure 31: Criteria for peer assessment exercise (Source: Author)

Guidelines were provided for carrying out the exercise. Aspects to consider for the appreciation of the group work were as shown in the Figure 32:

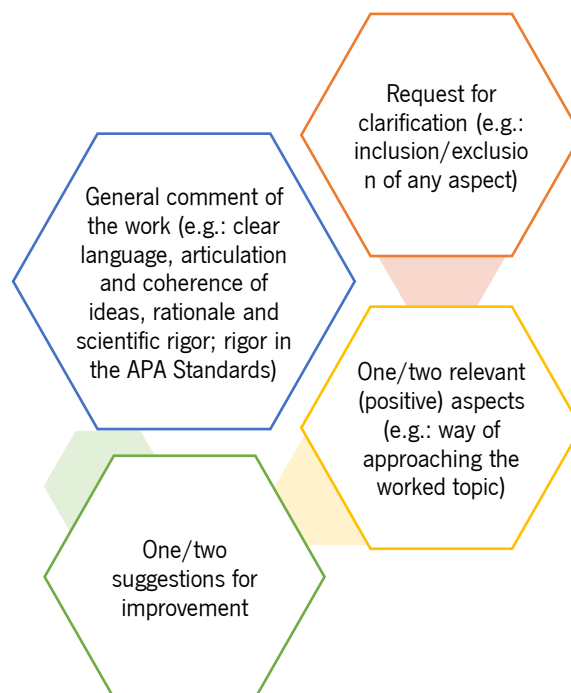


Figure 32: Guidelines for peer assessment exercise (Source: Author)

The groups that participated in the peer assessment exercise responded to all the proposed aspects, fulfilling the defined requirements/criteria.

For a matter of time, because the end of the semester was approaching, and availability was not possible to apply a monitoring and assessment questionnaire of the exercise. The oral feedback received goes towards the total satisfaction in the performance of the exercises by the students and the teachers themselves, because it proved to be interesting, innovative, and created a different and positive dynamic in the learning assessment process in that particular curricular unit.

It was attested by the students that they enjoyed evaluating the group work of their colleagues, because it gave them another perspective on the topics covered. In addition, it was possible to notice flaws that had also been made in their own group work, enabling a deeper reflection, as well as self-assessment.

8.2.2. A curricular unit of the TEP

In the TEP, due to the fact that there is no obligation to attend classes, it was decided that there would be no opportunity to develop a more continuous exercise and that the dedication of students is involved, as most of them, in addition to of students also already exercised the profession of teachers in schools and/or study centers. Also, because in the TEP it is already common practice to do peer assessment in different contexts.

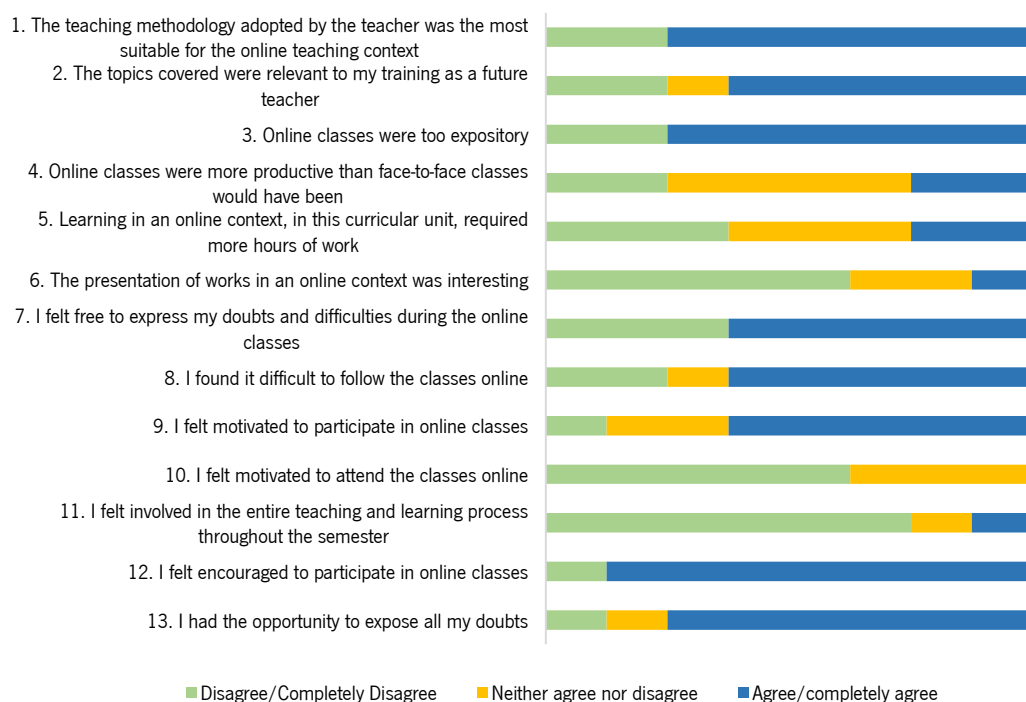
Hence, when applying the questionnaire about online teaching and learning, three more incisive questions were introduced just about the curricular unit in particular. In the TEP, the questions, which were part of the intervention project, were applied in the “History Teaching Methodology II” curricular unit, in the second semester of the 2019/2020 academic year, to students of the 2nd year of the Master's Programme in History Teaching.

About teaching and learning in the History Teaching Methodology II curricular unit, students agree or completely agree that the teaching methodology adopted by the teacher was the most suitable for the online teaching context (75.0%) and the topics covered were relevant to training as a future teacher (62.5%). Yet, students also consider that online classes were too expository (75.0%). And disagree or completely disagree that presentation of works in an online context was interesting (62.5%).

In terms of feeling towards the online teaching and learning experience in this specific curricular unit, students agree or completely agree that felt free to express doubts and difficulties (62.5%), motivated to

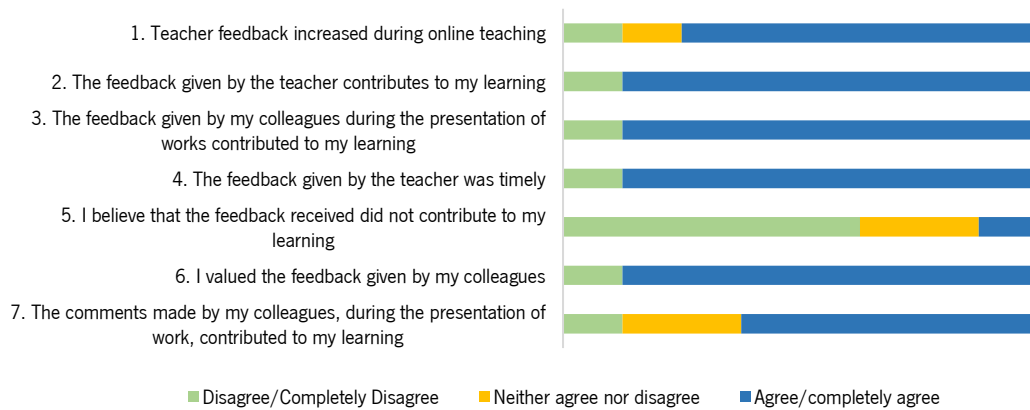
participate (62.5%), encouraged to participate in online classes (87.5%) and found it difficult to follow the classes online (62.5%). But disagree or completely disagree that felt motivated to attend the classes online (62.5%) and involved in the entire teaching and learning process throughout the semester (75.0%).

Student teachers neither agree nor disagree that online classes were more productive than face-to-face classes would have been and that learning in an online context, in this curricular unit, required more hours of work (see Graph 10).



Graph 10: Students' views on teaching and learning in History Teaching Methodology II (Source: Author)

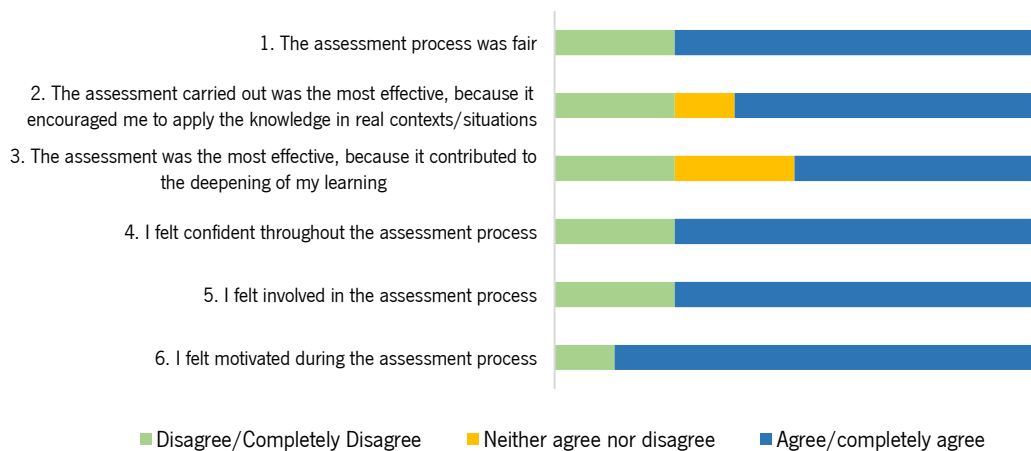
With regard to feedback, students' teachers agree or completely agree that teacher feedback increased during online teaching (75.0%), contributes to learning (87.5%), and was timely (87.5%). Moreover, also valued the feedback given by colleagues and the comments made by colleagues, during the presentation of works contributed to learning (87.5%). The students valued the feedback given by colleagues (87.5%) and agree or completely agree that comments made by colleagues during the presentation of works contributed to learning (62.5%), as shown in the Graph 11.



Graph 11: Students' views on feedback in History Teaching Methodology II (Source: Author)

Lastly, regarding the assessment process, students agree or completely agree that the assessment was fair (75.0%), was the most effective, because it contributed to the deepening of my learning (62.5%), and carried out was the most effective, because it encouraged me to apply the knowledge in real contexts/situations (50.0%). Students felt motivated (87.5%), involved (75.0%), and confident throughout the assessment process (75.0%), as evidenced by the data presented in the Graph 12.

Graph 12: Students' views of assessment process in History Teaching Methodology II (Source: Author)



8.3. Summary

Students' views of online teaching, learning and assessment

Findings from this sub-study corroborate earlier work carried out in Portugal (Flores, 2019a; Pereira, Cadime & Flores, 2021).

COVID-19 had major implications for the academic life of students, teachers and the perception of teaching and learning. There was a quick need to adapt and make everything work out well. Data collected during the first lockdown shows that students were mostly assessed asynchronously and participated in

the assessment process through peer assessment or self-assessment, more explicitly in the nursing programme. Attendance in online classes was not taken into account in the nursing programme, but in the opposite direction is the TEP. This fact can be explained by the high number of students per class in the nursing programme, making attendance control more complex. Students from both programmes are satisfied with the assessment of learning in an online context, however the nursing students showed that they did not feel comfortable with this type of assessment, unlike student teachers. An aspect that can be explained by the fact that they consider it less fair than the face-to-face assessment, as in some cases it facilitates the possibility of consultation during assessments, which are mostly carried out through a test or exam.

In online assessment of learning, nursing students are assessed through traditional methods and less diversified, while student teachers were assessed through methods called alternative, corroborating the existing literature (Flores et al., 2019; Pereira, Flores & Cadime, 2021).

It is also possible to conclude that during online teaching there was an increase in feedback, as well as the availability of teachers to give feedback. And, the same students also agree that the feedback received, either from teachers or from their own colleagues, helped to improve performance and contributed positively to learning. It is understood that assessment feedback is critical scaffolding in the development of quality teaching and effective learning in all educational settings (Black & William, 1998; Carless et al., 2011; Feys, Anseel, & Wille 2011; Price, Handley, & Millar, 2011; Tee & Ahmed, 2014). With this study, it is clear that students teachers receive feedback from teachers in a more diversified way than nursing students, which could be justified by the fact that teachers in TEP, even before the pandemic, use these means to contact students, contrary to what already happened in the nursing. As Evans states (2013), key factor in the efficacy of e-feedback technologies is the nature of the interaction between students and their teachers within the process; E-assessment feedback does not automatically imply a shift in the perception of the student role by the student and teacher. Above all because it was done under difficult conditions as was the lockdown during the pandemic. It is recognised that feedback is both a core aspect of improvement and something which research evidence indicates is difficult to manage effectively (Evans, 2013). During online teaching, students from both programmes do not consider that there were significant positive aspects regarding face-to-face teaching. Classes were no longer dynamic or with space for diversified activities. No better learning was done, just learning done differently. It was evidenced that they felt more tired during online teaching, with a distinct adaptation to online teaching depending on the programme.

It was attested by students to have spent more time on online, recorded or other online classes. Students claim to have technological resources and knowledge necessary for online learning..

Regarding the pedagogical strategies, as positive were highlighted the recorded classes, the introduced complementary tools, the active participation of the students and meetings for help students in learning and teachers' concern to manage class time. While negative highlights the fact of overlapping a more expository trend.

Lastly, as to the students' online learning experience students point to the poor management of the teaching and learning process (due to the online reality of the students), difficulties with internet connection, increased workload, tiredness and the anxiety (due to being permanently isolated in their homes).

Intervention and monitoring of the assessment process during pandemic lockdown

Despite the constraints brought by COVID-19, through this small practice of intervention and monitoring of the assessment process carried out in the curricular unit “Community Health II” in Nursing Degree and “History Teaching Methodology II” in TEP, it was possible to see that nursing students and student teachers are still very much linked to the modes and methods of assessment that have lasted since the beginning of the programme's creation.

It is necessary to deconstruct a little the image that exists about assessment and show the possibilities that exist to promote an effective assessment that is more focused on the needs of the future profession, developing constructive and critical thinking about the contents and the profession itself. There is a widespread idea that assessment approaches focus on promoting and enhancing student learning (Sambell et al., 2013). A key aspect of such approaches is the extent to which assessment tasks are conducive to stimulating appropriate student learning approaches. A key challenge to teacher assessment management, however, is that it has 'double duty' (Boud, 2000), serving varied and, at times, potentially concurrent roles. Assessments must encompass formative assessment for learning and summative assessment for certification; they must focus on the immediate task and equipping students for lifelong learning; and they have to attend to the learning process and the substantive content domain (Boud, 2000; Zacharis, 2010). Many teachers in higher education perceive that they lack individual autonomy and find themselves pulled in different directions by assessment purposes other than facilitating student learning (James, 2014). Effective assessment practice should focus on enhancing student learning processes but needs to be informed by the awareness that assessments do double duty (Zacharis, 2010).

For this, there is a need to empower university teachers for the proper use of assessment methods different from those they are accustomed to using, as this is a comfort zone for both teachers and students.

In the case of the TEP, although they are already familiar with a wide range of assessment modes and methods, it is necessary to increase this knowledge in students so that in the exercise of their profession as teachers they know and want to apply what they have learned with their students in primary and secondary schools, too. There is a need to change the assessment paradigm a little also in these study cycles.

CONCLUSIONS AND IMPLICATIONS

Conclusions and implications

In this section, the main conclusions and implications of this research are presented considering the reflection and the discussion of the findings as well as the theoretical framework. This research intends to respond to the research questions and goals identified initially.

This research set out to explore the learning and teaching approaches, assessment challenges, methods, and practices in higher education after the Bologna process. A mixed methods approach guided this project combining a diversity of methods and techniques, moments for data collection and sources (Flores, 2003; Fernandes, 2020). As such, a research design was defined in order to understand the dynamic nature of aspects from the perspective of different stakeholders in Portugal and Poland in order to present their views of assessment. In a Portuguese public university, aspects related to teaching, learning and assessment process during the pandemic were also considered. The research has also sought to contribute to improving the quality of teaching, learning and assessment processes in higher education. Despite the greater focus on students' perceptions, it was also included teachers and programme coordinators (also teachers) views about assessment in higher education. This holistic approach led to the adoption of a methodology aimed at understanding the dynamic nature and complexity of the assessment, and particularly alternative methods.

This research project was carried out in five Portuguese public universities and four Polish universities in Teacher Education Programmes (TEP) – in both countries – and Nursing programme in Portugal. In order to reach the proposed objectives, a combination of post positivist and interpretivist paradigms was adopted as they were considered the most adequate ones to pursue the intended objectives and purposes.

Sub-study 1 – Student teachers' views of assessment: A study in Poland and Portugal

For the first sub-study questionnaires were applied to Portuguese and Polish students to identify the ideas most associated with assessment in the TEP, to get to know the most used assessment methods in Poland and Portugal; to understand the differences and/or similarities between Poland and Portugal regarding the ideas and methods of assessment; and to analyse the implications of approaches to assessment in both countries. In this sub-study two scales were used to achieve the proposed goals. These scales have already been validated in previous studies in the Portuguese context (Pereira, 2011, 2016; Flores, Pereira, & Fernandes, 2019).

A three-factor structure was presented for the first scale “Ideas associated to assessment” in factor analyses: (1) formative purpose of assessment; (2) summative purpose of assessment; and (3) negative emotions associated to assessment. The results showed only partial invariance of the measurement model. The item related to “learning” was dropped, as it clearly was not associated to the same factor in both samples. The main result that the Portuguese sample depicts is that it associates assessment with a formative purpose much more than the Polish sample.

A three-factor structure was presented for the scale “Assessment methods” in factor analyses: (1) Collective methods of assessment; (2) Individual methods of assessment; and (3) Portfolios. The use of portfolios emerged separated from collective and individual methods, consistent with the literature which suggests that portfolios have a specific nature, because they combine formative and summative purposes (Habib & Wittek, 2007) and support student learning through the active use of feedback (Smith & Tillema, 2003; Steen-Utheim & Hopfenbeck, 2019). Portfolio is a pedagogical tool in the scope of alternative methods or learner-centred methods (Webber, 2012). It is used particularly for the purposes of developing teaching skills and reflective practice for preservice teachers at postgraduate level (Klenowski, Askew, & Carnell, 2006). It is seen as an alternative assessment that takes place during the programme of instruction and offers opportunities for feedback and revision (Pereira, Cadime, Brown, & Flores, 2021). Thus, it implies both the process and the product of learning and an ongoing and gradual construction throughout a given period of time to promote self-regulation and self-assessment as a student-centred method of assessment (Pinheiro, Flores & Madalińska-Michalak, 2020). Through this sub-study, it is concluded that, in terms of cycle of study, different assessment methods are used in the two countries under analysis. Poland focuses on student-centred methods (Huba & Freed, 2000; Webber, 2012) during the programme, such as group essays, project work in teams, group oral presentations in classroom and portfolios. These are assessment methods that enable knowledge construction, skills’ development such as autonomy, reflection, and collaborative work (Sambell & McDowell, 1998; Myers & Myers, 2014), increasing feedback and students’ motivation (Huba & Freed, 2000; Gasiewski, Eagan, Garcia, Hurtado, & Chang, 2012). Meanwhile, in Portugal, emphasis is placed on the use of the portfolio in the master's programme.

To get to know the students' perceptions about the feelings they have about assessment is relevant as they influence students' academic performance. Studies like those of Race (1995) and Craddock and Mathias (2009) evidenced that students feel more confident when being assessed through methods in which they participate actively in the tasks and feel less confident when they are assessed through a test.

These findings may be related to the levels of stress and anxiety that students are exposed to when taking a test. When they are assessed by methods in which they participate actively in the tasks the students do not have the pressure of memorisation, or as limited a time to do the task as when they perform a test.

Sub-study 2 – Assessment in higher education: the views of the coordinators of Teacher Education Programmes

This sub-study was carried out in Portugal and Poland with coordinators of TEP. The sub-study concluded that the Portuguese coordinators hold a more positive view of the students' learning, academic results and assessment methods used than the Polish ones.

In Portugal, coordinators reported higher grade inflation. There is an interesting phenomenon internationally studied in a US context, in different areas, for example, law, science, engineering, medicine, among others (Rojstaczer & Healy, 2010; Bachan, 2018) in the UK, Australia, Canada, Israel and Italy (Jephcote, Medland, & Lygo-Baker, 2021; Bachan, 2018). Although there is little empirical evidence for grade inflation in higher education in Portugal, this issue can be explained by increased competition for student enrollment between and within institutions. On the other hand, the influence of the labor market, and the higher grades achieved at the end of the programme increase the chances of getting a faster and better paid job with better conditions.

Students' passive attitude in relation to their own learning was highlighted by Polish programme coordinators, which also ends up leading to the predominance of more traditional assessment methods than those used by Portuguese teachers. In terms of student learning, Portuguese coordinators reported that there are difficulties in transposing learning into pedagogical practice and the lack of transversal competencies (such as the mastery of the English language or a more comprehensive general culture).

Portuguese coordinators identified mainly the teaching work, and conditions of students as workers as key challenges. Polish participants address issues related to students' lack of motivation and inability to establish a link between theory and practice as well as the high number of students per class and students' attitude towards learning, so Polish coordinators invokes challenges linked to the students. Lastly, in the dimension of the improvements in TEP, specifically in Portugal, the coordinators highlighted the need for adjustment of training needs and better preparation of students for practice. Poland's programme coordinators spoke of the need to increase the requirement and the recruitment of candidates for TEP.

Sub-study 3 – Being a university teacher: views of the profession and assessment in higher education

In this sub-study university teachers from teacher education and nursing programmes in Portugal showed that being a teacher in higher education is a constant challenge with increased workload and permanent bureaucratic requirements. Bologna context changed the role of the teacher bringing opportunities for change through the improvement of learning, based on reflexivity about teaching. A shift from a teacher-centred approach that focuses on teacher and instruction (Kahl & Venette, 2010) and in which students are seen as passive learners (Altay, 2014; Pereira, Flores, & Barros, 2017) to a learner-centred approach focusing on the learner who is seen as an active individual and in which assessment is effective if it enhances motivation and learning (McCombs & Whistler, 1997; Huba & Freed, 2000; Karolich & Ford, 2013) was evident and became a challenge in terms of practices in classroom and in the organisation of work.

An emergence of performative cultures through accountability mechanisms and the imposition of professional standards (Sachs, 2016) of self-assessment procedures and methods, rankings, prescribed curricula and the management and evaluation of teaching staff (Flores, Day, & Viana, 2007; Day & Smethen, 2009; Kelchtermans, 2009), adding to the erosion of professional autonomy and an environment of distrust (Sachs, & Mockler, 2012; Flores, 2019b) was evidenced. It is recurrent the idea that the work of teachers has known a greater fragmentation. The increasing control of teachers' work, performance (Ball, 2003) and accountability mechanisms put even more pressure on teachers in terms of results (Osborn, 2006; Day & Smethen, 2009), in a framework of standardisation and excessive regulation (Hargreaves, 2003), affecting teachers' motivation, achievement, and sense of professionalism (Ávalos, 2013, Flores, 2014, 2017, 2019b).

In this sense, programme coordinators highlighted a greater lack of motivation and disenchantment caused by the path that the university as an institution has been taking, the excessive bureaucratisation (also linked to the platforms), the work overload and the lack of recognition, leading to fatigue, and frustration. Teachers must meet the standards of quality and performativity that are globally recommended (Bahia et al., 2017) as well as the valuation of the research dimension in the teaching career and the assessment of teaching performance created greater cleavages in the relationship between teachers.

Cooperation between teachers has turned negative since research began to play a prominent role in higher education, highlighting the lack of solidarity, sharing and greater conflict between teachers. Recognition and the reward comes mainly from students and the intrinsic motivation. Teachers consider having mostly a good relationship with students. Collaborative practices between teachers are considered a motivating factor within the scope of teaching work. On the other hand, they raise some difficulties, namely due to the diversity of functions associated with the status of the teaching career in HE which, in addition to teaching, includes research, institutional participation and the provision of services to society, with research being the most relevant dimension in terms of career progression (Flores, 2007; Taylor, 2007; Mesquita, 2015). The tension between research and teaching has raised difficulties in the work of higher education teachers, but the literature points to the need for a synergy between research and teaching (Alpay & Verschoor, 2014). This principle presupposes an interaction between peers, considering collaborative contexts in which teachers share ideas about the way students learn, going beyond the way they teach (Sadler, 2012). However, these are still ineffective practices in the context of HE, since teachers “work, reflect, train, innovate, but often each one remains in its corner” (Perrenoud, 2002, p. 31). Teacher collaboration is, therefore, a necessary dimension to the design and development of the curriculum and, possibly, the one that presupposes a greater challenge due to the questions it entails (Mesquita, 2015).

Assessment practices were influenced by the nature of the subjects, the contents to be covered and the number of students per class. Teachers revealed that they currently use more diversified assessment methods beyond test and exams, such as individual reflection, portfolio, diaries, observation in the context of practice, among other examples. Therefore, it is noticed the re-configuration of the understanding of assessment practices, locating AaL as an essential foundation for both assessment *for* learning (traditionally formative assessment) and assessment of learning (traditionally summative assessment) (Earl, 2003).

Negotiation did not appear as an important piece in assessment practice, and not valued by teachers. Students are not included in the assessment process by teachers, because they recognise the students' lack of responsibility. But students perceiving a need to understand the material in order to successfully negotiate the assessment task, they will engage in deep learning (MacLellan, 2001). Teachers revealed that greater involvement in the teaching and learning process is required by students through more dynamic classes. They also point out that there are students who study less, but others are quite

dedicated. It is also shown by teachers that some students prefer teacher-centred learning and teaching approach in the classes.

In terms of feedback, teachers state that there is no frequent and consistent use of feedback as a way of improving teaching and student learning. Feedback is seen as a key element in quality teaching in so far as students learn quicker and in a more effective way when they are aware of what they have to learn and to do to improve their learning (Ramsden, 1996; Tunstall & Gipps, 1996; Hounsell, 2003; Carless, 2006; Pereira, 2016).

Lastly, the programme coordinators considered that instruments and methods influence students' learning, assessment process and learning outcomes. This is because assessment can be strategically used to change the way in which students learn (Gibbs, 1992; Craddock & Mathias, 2009).

Sub-study 4 – Being a university student: views on teaching, learning and assessment in higher education

This sub-study brings interesting aspects that allow us to understand students' future teachers and nurses, given the gradual and complex transition that both have to make. Different situations and environments that students experience at the entry to higher education can have implications for decisions to stay and drop out of programmes (Nunes & Garcia, 2010; Almeida & Cruz, 2010) or in managing expectations regarding the programme, influencing their motivation and/or interest in the programme.

Teacher-centred pedagogical practices were evidenced observing a paradigm of direct instruction, setting a limit to which the student can be reached. There is also a predominance of teaching practices based on the transmission matrix – based on the transmission of knowledge (Roldão, 2009) and a pedagogical paradigm of education – based on the narrow connection between the teacher and the knowledge, centrality of the teacher and the passivity of the student, and the memorisation and methodologies aimed at the acquisition of contents (Trindade & Cosme, 2010). The diversity of understandings about what teaching consists of, and the meaning attributed to it by the teachers themselves, has been portrayed in a vast body of literature published in this area (Rodrigues & Esteves, 2003; Estrela, Eliseu, Amaral, Carvalho & Pereira, 2005; Alarcão & Roldão, 2008).

The lack of articulation with professional practice, even though international discourses indicate the importance of this practice in teacher education programmes (Tang, Wong, & Cheng, 2012; Mayer et al.,

2015) without neglecting the relevance of the theory in the daily context of work in the classroom (Wæge & Haugaløkken, 2013; Tang, Wong, & Cheng, 2016) was highlighted.

The circumstances in which the student learns are fundamental for significant learning to take place, but for this to occur, the assessment must move from the traditional “assessment of learning” to the “assessment for learning” (Torrance, 2007, p. 281), and students should participate in the assessment process (Orsmond, Merry, & Reiling 2002).

Students recognised feedback as a learning opportunity (Li & Gao, 2016; Pope, 2001), if it is adequate and timely (Gibbs, 1999). Students shown that assessment must be seen like feedback and reflection (Lutovac & Flores, 2021), even though, in practice, that does not happen. Therefore, in order to produce a significant learning, there must be a guided assessment (López-Pastor & Sicilia-Camacho, 2017). Another important aspect is that feedback is a critical dimension in the development of quality teaching and effective learning in all educational environments (Black & William, 1998; Carless et al., 2011; Tee & Ahmed, 2014). However, it still has an unsatisfactory aspect of the teaching and learning experience (Tee & Ahmed, 2014) which is also highlighted in this study.

Sub-study 5 – Experiences of assessment during the COVID-19 pandemic: students’ views

This chapter reported on data collected with students during the COVID-19 pandemic in semester two in 2020. An intervention project was idealised in a curricular unit of Nursing Degree “Community Health II” and in one curricular unit of the Master in Teaching (Teacher Education Programme in History) “History Teaching Methodology II”, in which an intervention would be made to empower teachers and students to adopt more active and alternatives methodologies in the assessment process.

Findings from this sub-study corroborate earlier work carried out in Portugal (Flores, 2019b; Pereira, Cadime & Flores, 2021). Data collected during the first lockdown shows that students were mostly assessed asynchronously and participated in the assessment process through peer assessment (Crisp & Lister, 2002) or self-assessment (Crisp & Lister, 2002; Taras, 2002, 2010; Sambell, McDowell, & Montgomery 2013; Mumm, Karm, & Remmik, 2016), more explicitly in the nursing programme. Thus, students are involved in the learning process (Orsmond & Merry, 2013) and develops critical thinking skills (Fitzpatrick, 2006), enables students’ interaction (van den Berg, Admiraal, & Pilot, 2006; Vickerman 2009) and produces formative feedback (Crisp & Lister, 2002; Hughes, 2011; Hernández, 2012; Mumm, Karm, & Remmik 2016; Rakoczy et al., 2019; Ion, Martí, & Morell, 2019). As mentioned earlier, these methods are considered to be new or alternative methods for assessing students in higher education.

Students from both programmes are satisfied with the assessment of learning in an online context, however the nursing students showed that they did not feel comfortable with this type of assessment, unlike student teachers. Nursing students are assessed through traditional methods and less diversified, while student teachers were assessed through methods so called alternative, corroborating existing literature (Flores et al., 2019; Pereira, Flores & Cadime, 2021).

Feedback increased during online teaching. This fact helped to improve performance and contributed positively to learning. It is understood that assessment feedback is critical scaffolding in the development of quality teaching and effective learning in all educational settings (Black & William, 1998; Carless et al., 2011; Feys, Anseel, & Wille 2011; Price, Handley, & Millar, 2011; Tee & Ahmed, 2014). Student teachers receive feedback from teachers in a more diversified way than nursing students, which could be justified by the fact that teachers in TEP, even before the pandemic, use a variety of means to contact students. The interaction between students and their teachers within the process is key in the efficacy of e-feedback.

During online teaching, students from both programmes do not consider that there were significant positive aspects regarding face-to-face teaching. Classes were no longer dynamic or with diversified activities. No better learning was done, just learning done differently. Fatigue was felt during online teaching, with a distinct adaptation to online teaching depending on the programme.

Students spent more time on online, recorded or other online classes. Students claim to have technological resources and knowledge necessary for online learning. Recorded classes were highlighted as positive as well as the introduction of complementary tools, the active participation of the students and meetings for helping students in learning and teachers' concern to manage class time. Negative aspects point to a more transmissive trend.

Students evidenced the poor management of the teaching and learning process (due to the online reality of the students), difficulties with internet connection, increased workload, tiredness and the anxiety (due to being permanently isolated in their homes).

During online classes, a formative assessment was promoted in order to increase the success of learning, through feedback to modify or improve the activities in which students were involved (Black & William, 1998; Flores & Pereira, 2019). Thus, its fundamental characteristic is related to the feedback produced, helping students to improve their performance and the learning process itself (Sadler, 1989; Brown, Bull, & Pendlebury, 1997; Flores & Pereira, 2019).

Nursing students and student teachers are still very much linked to the modes and methods of assessment that have lasted since the beginning of the programme's creation. An effective assessment that is more focused on the needs of the future profession, developing constructive and critical thinking about the contents and the profession itself is necessary. Assessments must encompass formative assessment for learning and summative assessment for certification; they must focus on the immediate task and equipping students for lifelong learning; and they have to attend to the learning process and the substantive content domain (Boud, 2000; Zacharis, 2010).

The perceptions of students and teachers, as key participants in the educational process, have enabled to know the aspects related to the assessment process and its implications for learning and teaching in different knowledge areas.

The teaching process does not mean mere transmission. It requires the mastery and understanding of a wide range of knowledge and skills in the context of education, teaching and training, namely, issues associated with the processes and learning styles through which students learn (Felder & Silverman, 1988), skills and types of interpersonal communication, student motivation factors and a whole set of knowledge in the area of emotional intelligence (Goleman, 1998; Fernandes, 2010).

Although the results obtained in this research project have answered the proposed research questions it would be interesting to broaden the understanding of the complex and multifaceted nature of assessment in terms of methods, conceptions, purposes, and practices. As this research was developed, other questions emerged that also deserve attention for future research such as (i) to relate assessment methods to assessment purposes and teaching methods in the context of the different programmes, (ii) to identify characteristics of assessment practices that promote self-regulated competencies and their underlying conceptions of assessment; (iii) to analyse the relationship between the professional development of university teachers and the use of innovative assessment practices; (iv) to understand the connection between self and peer assessment practices with the academic success of students in general and student teachers in particular as their beliefs and experiences are key to analyse their assessment practices as future teachers.

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Appendix 1: Literature research on assessment in Higher Education from the journal *Assessment and Evaluation in Higher Education* (2017-2022)

Author(s) and year of publication	Title of the paper	Focus	Aim of the study
1. Ashenafi (2017)	Peer-assessment in higher education – twenty-first century practices, challenges, and the way forward	Peer assessment	This review identifies themes of recent research and highlights the challenges that have hampered its advance. Most of these challenges arise from the manual nature of peer assessment practices, which prove intractable as the number of students involved increases. Practitioners of the discipline are urged to forge affiliations with closely related fields and other disciplines, such as computer science, in order to overcome these challenges.
2. Watson, Wilson, Drew, & Thompson (2017)	Small data, online learning, and assessment practices in higher education: a case study of failure?	Online assessment	This paper presents an in-depth case study of a single student who failed an online module which formed part of a master's programme in Professional Education and Leadership.
3. Thondhlana & Belluigi (2017)	Students' reception of peer assessment of group-work contributions: problematics in terms of race and gender emerging from a South African case study	Peer assessment	Considers students' perspectives of peer assessment of group-work contributions at a South African university.
4. Yan & Brown (2017)	A cyclical self-assessment process: towards a model of how students engage in self-assessment	Self-assessment	The present research identified the actions involved in a cyclical self-assessment process. In this qualitative study, 17 undergraduate students from a teacher education institute took part in in-depth interviews focusing on the common actions students normally undertake to self-assess.
5. Cookson (2017)	Voices from the East and West: congruence on the primary purpose of tutor feedback in higher Education	Feedback	Presents both affective and non-affective improvement as the most frequently occurring theme identified in a mixed-methods study conducted at a National Key University in mainland China, which investigated 232 Chinese students' experiences and expectations of feedback from their Chinese tutors.
6. Xu & Carless (2017)	Only true friends could be cruelly honest': cognitive scaffolding and social-affective support in teacher feedback literacy	Feedback	This case study addresses both processes and products of a Chinese university English teacher's feedback enabling practice by involving students in peer feedback on oral presentations. Data from classroom observations and interviews reveal various strategies of cognitive scaffolding and social-affective support in the teacher's feedback enabling processes, as well as skill development of generating peer feedback and awareness enhancement in accepting critical feedback with a positive attitude.
7. Wang (2017)	Using rubrics in student self-assessment: student perceptions in the English as a foreign language writing context	Self-assessment	Reports a classroom-based inquiry into students' perceptions of rubric use in self-assessment in English as a Foreign Language context and the factors moderating its effectiveness. Eighty students at a Chinese university participated in the study. The data collected included their reflective journals and six case study informants' retrospective interviews.
8. Lee (2017)	University students' experience of 'scale-referenced' peer assessment for a consecutive interpreting examination	Peer assessment	This case study aims to explore how undergraduate students feel about their scale-referenced, peer assessment activities in/for an interpreting examination. For this purpose, three Korean undergraduate students' self-reports of what they experienced in a scale-referenced summative peer assessment project were analysed in detail, using Giorgi's descriptive phenomenological method.

9. Adachi, Tai & Dawson (2018)	Academics' perceptions of the benefits and challenges of self and peer assessment in higher education	Self and peer assessment	This paper explores what academics see as the benefits and challenges of implementing self and peer assessment, through the analysis of interviews with 13 Australian academics. Thematic analysis of our qualitative data identified seven themes of benefits and five challenges.
10. Bourke (2018)	Self-assessment to incite learning in higher education: developing ontological awareness	Self-assessment	This paper outlines the introduction of self-assessment over three years in a university postgraduate programme. Using cultural historical activity theory, a framework of analysis that recognises multiple networks of activity, the question 'what constitutes a self-assessment task?' is addressed.
11. Zheng, Cui, Li & Huang (2018)	Synchronous discussion between assessors and assessee in web-based peer assessment: impact on writing performance, feedback quality, meta-cognitive awareness, and self-efficacy	Peer assessment	The present study aimed to examine the impacts of synchronous discussion between assessors and assessee on writing performance, qualitative feedback quality, meta-cognitive awareness and self-efficacy in web-based peer assessment. A total of 64 undergraduate students participated in the study and were randomly assigned into either the experimental or control group. Participants in the experimental group conducted synchronous discussion after the first round of peer assessment, while students in the control group did not conduct any synchronous discussion.
12. Shafi, Hatley, Middleton, Millican, & Templeton (2018)	The role of assessment feedback in developing academic buoyancy	Feedback	This research focuses on the everyday challenge in academic learning of assessment and argues that academic buoyancy is a key factor in academic success. To scaffold students' learning and effectively support academic buoyancy, there is arguably a need for a better understanding of: (i) what students find most and least useful in their assessment feedback; (ii) how students use feedback to approach future assessments; and (iii) how students respond to feedback in terms of what they think, feel and do. Key findings from survey responses of 91 undergraduate students were that students use their feedback more than anticipated and look for specific information to help their future performance.
13. Han & Riazi (2018)	The accuracy of student self-assessments of English Chinese bidirectional interpretation: a longitudinal quantitative study	Self-assessment	This longitudinal study was therefore conducted to investigate to what extent student self-assessments of English Chinese interpretation are accurate and how the accuracy level would change over time.
14. Tait-McCutcheon & Knewstubb (2018)	Evaluating the alignment of self, peer and lecture assessment in an Aotearoa New Zealand pre-service teacher education course	Self and peer assessment	This paper reports a study comparing the alignment of self, peer and lecturer-assessment of 34 pre-service teacher-education students and their lecturer. Students annotated a teaching artefact evidencing their attainment of an Aotearoa New Zealand Graduating Teacher Standard. Peer groups of students and their lecturer also assessed the annotated artefacts using the same collaboratively constructed assessment rubric and feedback sheet.
15. Planas-Lladó, Feliu, Castro, Fraguell, Arbat, Pujol, Suñol, & Daunis-i-Estadella (2018)	Using peer assessment to evaluate teamwork from a multidisciplinary perspective	Peer assessment	This article analyses the use of peer evaluation as a tool for evaluating teamwork and students' perceptions of this type of evaluation. A study was conducted of six subjects included on five-degree courses at the University of Girona. In all of these subjects, students carried out a team activity, evaluated the performance of the team and the involvement of its different members, and responded to a survey on their perceptions of this evaluation system.
16. Pentassuglia (2018)	Inside the 'body box': exploring feedback in higher Education	Feedback	The present study aims to explore lecturers' perceptions and conceptions of feedback and their daily professional practice, with a focus on the use of body movement while providing feedback during the class. Even though educational research has paid a lot of attention to the concepts of practice and performance, there are very few studies that consider the main actor included in the definition of those concepts: the body. Methodologically this exploratory case study uses a mixed methods approach.

17. To & Liu (2018)	Using peer and teacher-student exemplar dialogues to unpack assessment standards: challenges and possibilities	Peer assessment	Dialogic use of exemplars is effective in developing student understanding of assessment standards. However, limited studies have investigated how exemplar dialogues are conducted in the post-secondary context. To fill the gap, this teacher-research explores the characteristics of peer and teacher-student exemplar talk in three post-secondary classrooms and the challenges in the dialogic process. The participants involved 69 first-year post-secondary students, a critical friend, and a teacher-researcher.
18. Usher & Barak (2018)	Peer assessment in a project-based engineering course: comparing between on-campus and online learning environments	Peer assessment	This study was set to examine peer feedback quality and grading accuracy in a project-based course. The study applied a sequential exploratory mixed methods design. It included 339 participants who studied the same engineering course, but in three different modes: on-campus ($n = 77$), small private online course ($n = 110$), and massive open online course (MOOC) ($n = 152$).
19. Denton & McLroy (2018)	Response of students to statement bank feedback: the impact of assessment literacy on performances in summative tasks	Feedback	Efficiency gains arising from the use of electronic marking tools that allow tutors to select comments from a statement bank are well documented, but how students use this type of feedback remains under explored. Natural science students ($N = 161$) were emailed feedback reports on a spreadsheet assessment that included an invitation to reply placed at different positions.
20. Zhang & Zheng (2018)	Feedback as an assessment for learning tool: How useful can it be?	Feedback	This study investigates the feedback practices and perceptions of lecturers and students in a UK university setting. To assess how lecturers give feedback in practice, 47 pieces of lecturer-written feedback were categorised into a total of 571 analytical points. Analysing the feedback from lecturers' perspectives in terms of the value of feedback, the role of feedback and the effectiveness of feedback helps in an understanding of the rationale for and effects of feedback provision.
21. Han (2018)	Latent trait modelling of ratter accuracy in formative peer assessment of English Chinese consecutive interpreting	Peer assessment	The present study demonstrates the use of multifaceted Rasch partial credit modelling to explore the accuracy of peer ratings on English Chinese consecutive interpretation.
22. Alcalá, Picos & Pastor (2019)	The impact of formative and shared or co-assessment on the acquisition of transversal competences in higher Education	Feedback	The use of formative and shared or co-assessment has been shown to improve the motivation, involvement and learning of university students. The aim of this study is to analyse the effect that implementing these processes has on university students' perception of their acquisition of transversal competences. The participants in the study were 1021 students from five Spanish universities taking degree courses in primary education or physical education and sport science.
23. Huisman, Saab, van den Broek, & van Driel (2019)	The impact of formative peer feedback on higher education students' academic writing: a Meta-Analysis	Feedback	The current study conveyed two types of observations. First, regarding the impact of peer feedback on writing performance, this study synthesized the results of 24 quantitative studies reporting on higher education students' academic writing performance after peer feedback. Second, this study shows that the number of well-controlled studies into the effects of peer feedback on writing is still low, indicating the need for more quantitative, methodologically sound research in this field.
24. Steen-Utheim & Hopfenbeck (2019)	To do or not to do with feedback. A study of undergraduate students' engagement and use of feedback within a portfolio assessment design	Feedback	Feedback is important for student learning; however, research shows that students can have a number of difficulties when attempting to learn from feedback. Based on an in-depth analysis of undergraduate students' self-reported reflection logs, we present findings about students' experiences with oral and written feedback and how they act upon this feedback when a portfolio is the main assessment and learning tool.

25. Reimann, Sadler, & Sambell (2019)	What's in a word? Practices associated with 'feedforward' in higher Education	Feed-forward	The term 'feedforward' is increasingly employed in higher education, and this paper focuses on the way in which it fits into contemporary debates about feedback and its impact on practitioners. Semi-structured interviews were used to investigate the practices academics associate with feedforward and the ways in which their intentions and understandings varied.
26. Henderson, Ryan, & Phillips (2019)	The challenges of feedback in higher Education	Feedback	The present study explores feedback challenges identified by 3807 students and 281 educators from two Australian universities. Open-response data were analysed using an inductively derived coding framework and thematic analysis.
27. Bader, Burner, Iversen, & Varga (2019)	Student perspectives on formative feedback as part of writing portfolios	Feedback	Through a qualitative analysis of 128 reflection notes written by student teachers of English, this article investigates the students' perceptions of formative feedback as part of portfolio assessment at two teacher education institutions in Norway. As such, it contributes to bridging the gap between research and practice. Students received peer and teacher feedback on assignments and wrote reflection notes during the semester.
28. Panadero & Alqassab (2019)	An empirical review of anonymity effects in peer assessment, peer feedback, peer review, peer evaluation and peer grading	Peer assessment	Peer assessment has proven to have positive learning outcomes. Importantly, peer assessment is a social process and some claim that the use of anonymity might have advantages. However, the findings have not always been in the same direction. The aims were: (a) to review the effects of using anonymity in peer assessment on performance, peer feedback content, peer grading accuracy, social effects, and students' perspective on peer assessment; and (b) to investigate the effects of four moderating variables (educational level, peer grading, assessment aids, direction of anonymity) in relation to anonymity.
29. Seifert & Feliks (2019)	Online self-assessment and peer-assessment as a tool to enhance student-teachers' assessment skills	Self and peer assessment	Self-assessment and peer-assessment are strategies employed to encourage students to take more responsibility for the learning process. Although the advantages are not obvious, the process has the potential to empower learning and to assist the development of assessment skills, which are so important for future teachers. The research aimed to identify student-teachers' attitudes concerning the contribution of self-assessment and anonymous peer-assessment to the quality of their assignments and improvement of their assessment skills, using both qualitative and quantitative methodologies. The sample included 300 students studying for bachelor's or master's degrees.
30. Sozer, Zeybekoglu, & Kaya (2019)	Using mid-semester course evaluation as a feedback tool for improving learning and teaching in higher Education	Feedback	This study describes how the mid-semester course evaluation process can be used as a feedback tool for improving the quality of teaching and learning at an institutional level. Through a longitudinal analysis of 341 mid-semester course evaluation reports, positive areas, and areas of concern with respect to learning and teaching were identified, and changes in student evaluations over the years were examined meticulously to make an overall evaluation of the quality of learning and teaching at a non-profit Turkish university.
31. Mimirinis (2019)	Qualitative differences in academics' conceptions of e-assessment	Online assessment	The paper reports the results of a phonomyography study on academics' conceptions of e-assessment. A cohort of 21 academics from 17 disciplines participated in semi-structured interviews exploring their experiences of using web-based technologies for formative and summative assessment purposes. Through iterative analysis of the interview transcripts, the study identified four qualitatively different ways in which academic teachers understand e-assessment.
32. Schmulian & Coetzee (2019)	Students' experience of team assessment with immediate feedback in a large accounting class	Feedback	This study reports on the development of, and the students' experience of, a Team Assessment with Immediate Feedback (TAIF), in which immediate formative feedback is provided to the students by their peers and the assessment instrument (the IF-AT [®] form).
33. Sridharan & Boud (2019)	The effects of peer judgements on teamwork and self-	Self and peer assessment	This study seeks to address whether peer feedback leads to enhanced teamwork behaviour and self-assessment ability, two skills highly sought after by employers. Specifically, this study examines the direct effect of formative performance rating and the mediating effect of praise and criticism in peer feedback messages on achievement in teamwork and

	assessment ability in collaborative group work		self-assessment skills. The sample consists of quantitative and qualitative data from 98 students enrolled in business programmes using a particular form of collaborative group work.
34. Leenknecht, Hompus, & van der Schaaf (2019)	Feedback seeking behaviour in higher education: the association with students' goal orientation and deep learning approach	Feedback	To make sure that feedback fulfils its aspirations, students' active role in feedback should be acknowledged in higher education: It is students' uptake of feedback that determines its effectiveness. In this study, feedback seeking behaviour of students is introduced in order to enrich our knowledge about students' active role in feedback. Goal orientation was studied as antecedent of feedback seeking behaviour, and students' deep learning approach as a mediating factor.
35. Jørgensen (2019)	Investigating non-engagement with feedback in higher education as a social practice	Feedback	The purpose of this article is to argue that existing approaches without a theory of the social cannot fully explain non-engagement and that a practice theoretical approach may fill this gap. It introduces Stephen Kemmis' practice ontology and demonstrates how a feedback practice can be analysed to explain a weak engagement. The article's contribution to research in engagement with feedback is a new ontology of practice and its methodological apparatus.
36. Liu, Guo, Gao, Fram, Ling, Zhang, & Wang (2019)	Students' learning outcomes and peer rating accuracy in compulsory and voluntary online peer assessment	Online peer assessment	Peer assessment can be conducted online with rapid development of online learning technology. The current study was conducted empirically to investigate peer rating accuracy and student learning outcomes in online peer assessments, comparing compulsory and voluntary peer assessment. Section 1 ($N=93$) was assigned to the voluntary group and Section 2 ($N=31$) was assigned to the compulsory group.
37. Dawson, Henderson, Mahoney, Phillips, Ryan, Boud, & Molloy (2019)	What makes for effective feedback: staff and student perspectives	Feedback	This paper reports a qualitative investigation of what educators and students think the purpose of feedback is, and what they think makes feedback effective. We administered a survey on feedback that was completed by 406 staff and 4514 students from two Australian universities. Inductive thematic analysis was conducted on data from a sample of 323 staff with assessment responsibilities and 400 students. Staff and students largely thought the purpose of feedback was improvement. With respect to what makes feedback effective, staff mostly discussed feedback design matters like timing, modalities, and connected tasks. In contrast, students mostly wrote that high-quality feedback comments make feedback effective – especially comments that are usable, detailed, considerate of affect and personalised to the student's own work. This study may assist researchers, educators, and academic developers in refocusing their efforts in improving feedback.
38. Dickson, Harvey, & Blackwood (2019)	Feedback, feedforward: evaluating the effectiveness of an oral peer review exercise amongst postgraduate students	Feedback and feedforward	Assessment for learning approaches, such as peer review exercises may improve student performance in summative assessments and increase their satisfaction with assessment practices. We conducted a mixed methods study to evaluate the effectiveness of an oral peer review exercise among post-graduate students.
39. Grainger (2020)	How do pre-service teacher education students respond to assessment feedback?	Feedback	This article reports on the results of an exploratory study, based on an 'intervention', to determine pre-service teacher student responses to new feedback processes in an initial teacher education course.
40. Tormey, Hardebolle, Pinto, & Jermann (2020)	Designing for impact: a conceptual framework for learning analytics as self-assessment tools	Self-assessment	This paper draws on research in self-regulated learning and in the social practices of learning and assessment to clarify a series of design issues which should be considered by those seeking to develop learning analytics tools which are intended to improve student self-evaluation and self-regulation. It presents a case study of how these design issues influenced the development of a particular tool: the Learning Companion.
41. Bong & Park (2020)	Peer assessment of contributions and learning processes in group projects: an analysis of information	Peer assessment	This study examines the peer assessment performance of information technology undergraduate students who completed a semester-long group project. They were asked to provide feedback on their peers' contributions and learning processes using a set of indicators delivered in two different prompt types (closed and open-ended questions).

	technology undergraduate students' performance		The students had the choice to change their marks on each Likert scale item after responding to the open-ended questions. We compared the scores of each indicator between prompt types and explored the content of the responses to the open-ended peer assessment prompt in terms of verification, verification type and elaboration
42. Yan (2020)	Self-assessment in the process of self-regulated learning and its relationship with academic achievement	Self-assessment	The present study aimed to investigate the characteristics of self-assessment practices at different SRL (self-regulated learning) phases and its relationship with academic achievement. Using a course assignment as the learning task, sixty-three students enrolled in a one-year master programme in a teacher education institute responded to an instrument assessing their self-assessment practices (including four self-assessment actions) at the SRL Preparatory, Performance and Appraisal phases of the task.
43. Page, Gardner, & Booth (2020)	Validating written feedback in clinical formative assessment	Feedback	This paper reports on the quality of the written feedback in 2,500 Rad-DOPS online feedback forms in addressing the aims of the new assessment approach. Random samples of 500 were selected from the first three years of the new assessment implementation, 2010–13, and from 2016 to 17. Using an appropriate coding frame, the feedback was analysed across the samples against key trainee attributes including stage of training and level of adjudged competence. Criteria for identifying high quality feedback were derived from the literature and a simplified form of qualitative comparative analysis was used to identify the conditions associated with high quality feedback.
44. Wang & Zhang (2020)	Perceived teacher feedback and academic performance: the mediating effect of learning engagement and moderating effect of assessment characteristics	Feedback	The aim of this study was to determine the mediating effect of learning engagement on the relationship between perceived teacher feedback and college students' academic performance, and the moderating effect of assessment characteristics on the relationship between perceived teacher feedback and learning engagement. A sample of 2,458 students in a university in mainland China was studied.
45. Akimov & Malin (2020)	When old becomes new: a case study of oral examination as an online assessment tool	Online assessment	This study describes the application of an oral examination as a form of assessment in the online context.
46. Zhou, Zheng, & Tai (2020)	Grudges and gratitude: the social-affective impacts of peer assessment	Peer assessment	This study investigates the social-affective impacts of peer assessment by analysing students' appeal letters addressed to their tutors, reflective posts in the online discussion forum and responses to a survey.
47. Li, Xiong, Hunter, Guo, & Tywoniw (2020)	Does peer assessment promote student learning? A meta-analysis	Peer assessment	In this meta-analysis, we synthesised findings based on 134 effect sizes from 58 studies. Compared to students who do not participate in peer assessment.
48. Hill & West (2020)	Improving the student learning experience through dialogic feed-forward assessment	Feedforward	This paper present results from a five-year longitudinal mixed methods enquiry, thematically analysing semi-structured interviews and focus groups with undergraduate students who have experienced dialogic feed-forward on a course in a British university.
49. Zhang, Schunn, Li, & Long (2020)	Changes in the reliability and validity of peer assessment across the college years	Peer assessment	This study examined whether reliability and validity of peer assessment changes over years in a program either for overall scores or specifically for high-level dimensions or language conventions. Participants were 118 English major undergraduates in a comprehensive university in Northeast China.
50. Gaynor (2020)	Peer review in the classroom: student perceptions, peer feedback quality and the role of assessment	Feedback	This study takes place over two years and discusses the implementation of a repeating blind peer review cycle across a single semester for final year chemistry students enrolled on a compulsory employability module. The feedback cycle promotes personal reflection through the use of mini-reflective questionnaires. The process was assessed by academic tutors at the resubmission stage and/or the peer feedback stage where the quality of peer feedback was

			directly assessed. The research investigates the quality of peer feedback, the importance of assessment and student perceptions of what is most useful.
51. Wang, Gao, Guo, & Liu (2020)	Factors associated with students' attitude change in online peer assessment – a mixed methods study in a graduate-level course	Peer assessment	This study was conducted using a mixed methods approach to investigate the underlying factors influencing students' attitude change. Participants were students enrolled in an online graduate-level assessment course in the college of education in a university in the southeast United States in the fall of 2017 ($N=31$).
52. Rico-Juan, Cachero, & Macià (2021)	Influence of individual versus collaborative peer assessment on score accuracy and learning outcomes in higher education: an empirical study	Self and Peer assessment	Maximising the accuracy and learning of self and peer assessment activities in higher education requires instructors to make several design decisions, including whether the assessment process should be individual or collaborative, and, if collaborative, determining the number of members of each peer assessment team. In order to support this decision, a quasi-experiment was carried out in which 82 first-year students used three peer assessment modalities. A total of 1574 assessments were obtained. The accuracy of both the students' self-assessment and their peer assessment was measured.
53. Mannion (2021)	Beyond the grade: the planning, formative and summative (PFS) model of self-assessment for higher Education	Self-assessment	The methods in which self-assessment are facilitated have not been significantly addressed within the literature. Self-assessment is also fraught with concerns around reliability and validity. As a result, a systematic 3-stage plan was developed to embed self-assessment into a module design. The planning, formative and summative (PFS) model of self-assessment was developed by undertaking a thorough analysis of the recent self-assessment literature and from the learning that took place after facilitating a pilot of the model. This learning informed the model's development, with the aim for a structured approach and deeper student inclusion.
54. Buckley (2021)	Crisis? What crisis? Interpreting student feedback on assessment	Feedback	Focusing on the UK's National Student Survey, this paper draws on a range of published empirical research to argue against the idea that relatively low scores for assessment-related survey questions indicate a general problem with assessment.
55. Al Harrasi (2021)	The culture of feedback on second-language writing in a higher education institute	Feedback	This study explores the culture of feedback, i.e. the beliefs, behaviours and other characteristics that are common to the members of a particular group or society, in a higher education institution in Oman. It examines how feedback on second-language writing is interpreted, enacted and developed by learners and teachers, and investigates the influence of a particular social context on the practices of feedback. Using semi-structured interviews, class observations and analysis of students' writing and college documents, the study explores the participants' feedback beliefs and practices in an academic writing course.
56. Yan & Carless (2021)	Self-assessment is about more than self: the enabling role of feedback literacy	Self-assessment	The purpose of this conceptual article is twofold. First, we articulate the interplay between feedback literacy and self-assessment based on a reframing and integration of the two concepts. Secondly, we unfold the self-assessment process into three steps: (1) determining and applying assessment criteria, (2) self-reflection, and (3) self-assessment judgement and calibration. For each step, we propose a pedagogical principle and recommend feedback practices that facilitate meaningful self-assessment. Implications for learning and teaching in both face-to-face and online learning environments are discussed.
57. Yan, Wang, Boud, & Lao (2021)	The effect of self-assessment on academic performance and the role of explicitness: a meta-analysis	Self-assessment	The current meta-analysis aims to synthesise the effects of self-assessment on academic performance. In particular, it examines the difference between situations in which the process of self-assessment is revealed or observable (explicit) or not revealed or unobservable (implicit). A total of 98 effect sizes from 26 studies either reported a comparison

			between a group with self-assessment interventions and a control group ($n=20$, $k=88$) or a pre-post comparison ($n=6$, $k=10$).
58. Hepburn, Borthwick, Kerr, & Vasnev (2021)	A strategic framework for delivering ongoing feedback at scale	Feedback	The authors identified the delivery of meaningful feedback at scale as a critical emerging challenge. Although models of feedback exist within education, there are few discipline-agnostic frameworks for providing feedback that accounts for first-year education in the context of massification. With a focus on feedback within large-scale teaching and the first-year experience, and drawing on the authors' lived experiences, the paper proposes a conceptual non-disciplinary framework to scaffold the delivery of timely feedback in three stages. The proposed 'strategic framework for feedback at scale' promotes deeper first-year undergraduate students' learning and engagement across multiple teaching contexts through the feed-forward assessment design of automated ongoing feedback, peer-led staged feedback, and teacher-led staged feedback.
59. Hauff & Nilsson (2021)	Students' experience of making and receiving peer assessment: the effect of self-assessed knowledge and trust	Peer assessment	The present study contributes with insights into individual characteristics affecting how students will experience the practice of peer assessment. We further provide an analysis of the inherent tasks of making and receiving peer assessment separately. The study specifically focuses on the impact of self-assessed knowledge and trust on making and receiving peer assessment. A survey to 94 students at a Swedish business school generated data on making and receiving peer assessment before and after the assessment task, and on level of students' self-assessed knowledge and trust in fellow classmates.
60. Joughin, Boud, Dawson, & Tai (2021)	What can higher education learn from feedback seeking behaviour in organisations? Implications for feedback literacy	Feedback	This paper addresses the gap between the two fields of feedback literacy and feedback seeking behaviour. Key organisational feedback seeking behaviour concepts including employee intentions in seeking feedback, the practice of weighing costs and benefits before seeking feedback, the qualities sought in potential feedback providers, feedback seeker characteristics that influence feedback seeking behaviour, and a range of feedback seeking methods and outcomes are outlined and their potential implications for feedback literacy are considered. The paper draws on feedback seeking behaviour literature to propose a research agenda for establishing a stronger and more nuanced understanding of feedback literacy in higher education.
61. Adalberon (2021)	Providing assessment feedback to pre-service teachers: a study of examiners' comments	Feedback	This article reports a study of written feedback comments in the context of teacher education. While feedback is believed to have the potential to improve students' learning, the provision will rest upon educators' and examiners' ability and means to convey details about their assessment. In the context reported here, compulsory feedback beyond the regular grade was introduced to strengthen a teacher education programme at a Norwegian university. The interest of this study is thus to investigate how the examiners managed this task and focuses on their written comments during three consecutive years. A content analysis of 411 individual feedback comments reveals that most of them are written in a formulaic fashion closely related to the grade descriptors for the course.
62. Stančić (2021)	Peer assessment as a learning and self-assessment tool: a look inside the black box	Self and peer assessment	This paper presents the findings of a four-year mainly qualitative study of peer and self-assessment in university teaching. Peer and self-assessment activities were introduced with the intention of supporting students' learning, but they also formed part of the formal grading of the course assignment. Thus, the research aimed to explore the students' experiences with these activities in this specific learning situation – which benefits they perceived from these activities, what challenges they faced, and what supported their learning. The students completed the survey after participating in the activities, but before receiving their grades and peer feedback so as to capture their authentic experiences with the activities. A total of 103 students completed the survey.

63. Winstone, Pitt, & Nash (2021)	Educators' perceptions of responsibility-sharing in feedback processes	Feedback	In this study, 216 university educators described the responsibilities of students, and of educators themselves, in the feedback process. We analysed their responses using both content analysis and a novel linguistic analysis of the specific words used.
64. Hoo, Deneen, & Boud (2021)	Developing student feedback literacy through self and peer assessment interventions	Self and peer assessment	This paper therefore examines student feedback capabilities in the context of an undergraduate course intervention based on an empirically based feedback literacy framework. 237 student journals written in response to self and peer feedback information were coded for student feedback literacy features and the effectiveness of pedagogical approaches for building the needed capabilities.
65. Deneen & Hoo (2021)	Connecting teacher and student assessment literacy with self-evaluation and peer feedback	Self-assessment and peer feedback	This paper presents findings from an intervention aimed at developing students' peer feedback and self-evaluation skills in an undergraduate business course. Peer feedback and self-evaluation are increasingly common modes of engaging students as active participants in feedback and evaluation processes. It is therefore worthwhile to understand the ways in which these processes affect and link teacher and student feedback literacy.
66. McCallum & Milner (2021)	The effectiveness of formative assessment: student views and staff reflections	Online assessment	This article reports on the implementation of formative e-assessments in courses taken by first-year students. The central aim is to measure the effectiveness of the formative e-assessments with reference to the student voice and staff reflections. Students engaged with the formative assessments and the evidence gathered via questionnaires show that students perceived that formative e-assessments helped them to monitor their progress; encouraged further study and increased their learning and understanding.
67. Blondeel, Everaert, & Opdecam (2022)	Stimulating higher education students to use online formative assessments: the case of two mid-term take-home tests	Online assessment	This study is a between-subjects quasi-experiment, administered in an undergraduate accounting course. Measures are used to capture both the intensity and the timing of OFA (Online Formative Assessment) use.

(Source: Author)



Universidade do Minho

SECSH

Subcomissão de Ética para as Ciências Sociais e Humanas

Identificação do documento: SECSH 037/2016

Título do projeto: *A Utilização de Métodos Alternativos de Avaliação no Ensino Superior: Um estudo com professores e alunos universitários*

Investigador(a) responsável: Cláudia Manuela da Silva Pinheiro, Instituto de Educação, Universidade do Minho

Outros investigadores: Professora Doutora Maria Assunção Flores Fernandes, Centro de Investigação em Estudos da Criança, Instituto de Educação, Universidade do Minho

Subunidade orgânica: Instituto de Educação, Universidade do Minho

PARECER


A Subcomissão de Ética para as Ciências Sociais e Humanas (SECSH) analisou o processo relativo ao projeto intitulado *“A Utilização de Métodos Alternativos de Avaliação no Ensino Superior: Um estudo com professores e alunos universitários”*.

Os documentos apresentados revelam que o projeto obedece aos requisitos exigidos para as boas práticas na investigação com humanos, em conformidade com as normas nacionais e internacionais que regulam a investigação em Ciências Sociais e Humanas.

Face ao exposto, a SECSH nada tem a opor à realização do projeto.

Braga, 24 de outubro de 2016.

O Presidente

 Digitally signed by
PAULO MANUEL PINTO
PEREIRA ALMEIDA
MACHADO
Date: 2016.10.24
22:39:30 +01'00'

Paulo Manuel Pinto Pereira Almeida Machado

Anexo 2. Exemplos do consentimento informado, de acordo com as diferentes fases de investigação

PROTOCOLO DE INVESTIGAÇÃO

FASE DE INVESTIGAÇÃO 1 – INQUÉRITO POR QUESTIONÁRIO

A Utilização de Métodos Alternativos de Avaliação no Ensino Superior: Um estudo com professores e alunos universitários

O projeto de investigação em curso pretende analisar os métodos alternativos de avaliação do Ensino Superior à luz das mudanças introduzidas pelo Processo de Bolonha, nomeadamente no que se refere ao sentido dessas mudanças, tendo em conta o contexto de exercício da docência universitária e do papel desempenhado pelos alunos. Trata-se de um projeto de investigação no âmbito do Doutoramento em Ciências da Educação, especialidade em Desenvolvimento Curricular, para o período compreendido entre 2016 e 2020, e sob orientação da Professora Doutora Maria Assunção Flores. São participantes neste estudo professores e alunos do Ensino Superior Português das seguintes áreas científicas: Ciências Médicas e da Saúde e Ciências Sociais e Humanas. Mais especificamente, o projeto de investigação tem como objetivos:

- Conhecer as perceções de professores e alunos em relação à avaliação das aprendizagens no Ensino Superior;
- Compreender o modo como professores e alunos relacionam os chamados métodos alternativos de avaliação e o processo de ensino e de aprendizagem;
- Analisar as potencialidades e implicações dos métodos alternativos de avaliação no processo de ensino e de aprendizagem e nos resultados académicos dos estudantes no Ensino Superior;
- Desenvolver um dispositivo de formação e intervenção pedagógica com professores e alunos do Ensino Superior para a aplicação e desenvolvimento de métodos alternativos de avaliação;
- Avaliar o impacto dos métodos alternativos de avaliação ao nível das perceções de avaliação e de aprendizagem dos alunos e professores do Ensino Superior.

Esta investigação inscreve-se num projeto mais amplo intitulado *Assessment in Higher Education: the potential of alternative methods*, financiado pela Fundação para a Ciência e Tecnologia – FCT, com a referência PTDC/MHCCED/2703/2014. Este projeto, marcado por uma forte componente de trabalho empírico tem como finalidade analisar as práticas de avaliação no

Ensino Superior português e o seu contributo para o sucesso académico a partir das perspetivas de professores e alunos de cinco universidades públicas portuguesas.

Trata-se de um estudo que está a ser realizado no âmbito do Centro de Investigação em Estudos da Criança da Universidade do Minho (CIEC). Os dados serão recolhidos ao longo de três fases de investigação, através da aplicação de inquéritos por questionário, através da realização de grupos focais com recurso a guiões de entrevista semidiretiva e, por fim, através da realização de um projeto de intervenção/formação pedagógica com vista ao desenvolvimento de estratégias de interação e análise das potencialidades e limitações de vários métodos de avaliação e suas implicações ao nível dos processos de ensino e de aprendizagem. Os dados obtidos com os inquéritos por questionário serão analisados com recurso ao SPSS (*Statistical Package for Social Sciences*) e os dados obtidos com os grupos focais com recurso à análise de conteúdo.

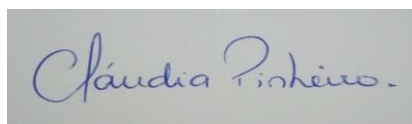
Quanto às questões éticas de investigação, será garantido o anonimato dos participantes e das instituições envolvidas, bem como a confidencialidade dos dados obtidos, sendo os mesmos utilizados apenas para efeitos de investigação. No caso da sua publicação, na íntegra ou de apenas alguns excertos, recorrer-se-á ao uso de nomes fictícios ou códigos para representar os participantes e as instituições públicas de Ensino Superior que integrarão o estudo. Respeitar-se-ão questões como a autorização prévia e o consentimento informado, com especial ênfase na comunicação da natureza, dos objetivos do estudo, do processo investigativo e do papel do investigador. Respeitar-se-ão, ainda, questões como a adesão voluntária ao projeto, o respeito pelos direitos dos participantes, clarificando riscos e benefícios da participação no estudo, podendo os participantes abandonar o estudo a qualquer momento, se assim o desejarem. Aquando da realização dos grupos focais não será esquecida a questão da autorização da gravação e da explicitação das regras de transcrição dos dados.

Os participantes terão a garantia de acesso aos resultados da investigação.

Neste sentido, convidamo-lo(a) a responder a um inquérito por questionário (fase I do estudo), que explora questões sobre as conceções e práticas de avaliação no Ensino Superior após a implementação do processo de Bolonha.

Agradecemos a sua colaboração no estudo, estando disponíveis para esclarecimentos adicionais.

A investigadora



Cláudia Pinheiro
Universidade do Minho

**FORMULÁRIO DE CONSENTIMENTO INFORMADO
ALUNOS****A Utilização de Métodos Alternativos de Avaliação no Ensino Superior:****Um estudo com professores e alunos universitários**

Declaro que aceito participar de livre vontade no grupo focal no âmbito do Doutoramento da aluna Cláudia Manuela da Silva Pinheiro, com ID6368, financiado pela Fundação para a Ciência e da Tecnologia – FCT (SFRH/BD/122094/2016), e orientado pela Professora Doutora Maria Assunção Flores (Professora Associada com Agregação do Instituto de Educação da Universidade do Minho).

Foram-me explicados e compreendi os objetivos principais deste estudo e as questões éticas de investigação. **Neste sentido, entendi e aceito participar nesta fase de investigação, nomeadamente na participação no grupo focal, que tem como objetivo analisar as perspetivas de alunos do Ensino Superior em termos de crenças e práticas de avaliação em particular a relação entre avaliação, ensino e aprendizagem.**

Compreendo que a minha participação neste estudo é voluntária, podendo desistir a qualquer momento, sem que essa decisão se reflita em qualquer prejuízo para mim.

Entendo, ainda, que toda a informação obtida neste estudo será estritamente confidencial e que a minha identidade nunca será revelada em qualquer relatório ou publicação, ou a qualquer pessoa não relacionada diretamente com este estudo.

O/A participante

Responsável pela investigação

Cláudia Manuela da Silva Pinheiro
claudiampinheiro@hotmail.com

Braga, novembro de 2018

FORMULÁRIO DE CONSENTIMENTO INFORMADO
ALUNOS**A Utilização de Métodos Alternativos de Avaliação no Ensino Superior:**
Um estudo com professores e alunos universitários

Declaro que aceito participar de livre vontade no grupo focal no âmbito do Doutoramento da aluna Cláudia Manuela da Silva Pinheiro, com ID6368, financiado pela Fundação para a Ciência e da Tecnologia – FCT (SFRH/BD/122094/2016), e orientado pela Professora Doutora Maria Assunção Flores (Professora Associada com Agregação do Instituto de Educação da Universidade do Minho).

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Compreendo que a minha participação neste estudo é voluntária, podendo desistir a qualquer momento, sem que essa decisão se reflita em qualquer prejuízo para mim.

Entendo, ainda, que toda a informação obtida neste estudo será estritamente confidencial e que a minha identidade nunca será revelada em qualquer relatório ou publicação, ou a qualquer pessoa não relacionada diretamente com este estudo.

O/A participante

Responsável pela investigação

Cláudia Manuela da Silva Pinheiro
claudiampinheiro@hotmail.com

Braga, fevereiro de 2019

FORMULÁRIO DE CONSENTIMENTO INFORMADO COORDENADORES DE CURSO

A Utilização de Métodos Alternativos de Avaliação no Ensino Superior: Um estudo com professores e alunos universitários

Declaro que aceito participar de livre vontade na entrevista estruturada no âmbito do Doutoramento da aluna Cláudia Manuela da Silva Pinheiro, com ID6368, financiado pela Fundação para a Ciência e da Tecnologia – FCT (SFRH/BD/122094/2016), e orientado pela Professora Doutora Maria Assunção Flores (Professora Associada com Agregação do Instituto de Educação da Universidade do Minho).

Foram-me explicados e compreendi os objetivos principais deste estudo e as questões éticas de investigação. **Neste sentido, entendi e aceito participar nesta fase de investigação, nomeadamente na entrevista estruturada, que tem como objetivo conhecer as perceções dos coordenadores de curso das áreas de Ensino e de Enfermagem em termos de metodologias e desafios da avaliação das aprendizagens em particular a relação entre avaliação, ensino e aprendizagem.**

Compreendo que a minha participação neste estudo é voluntária, podendo desistir a qualquer momento, sem que essa decisão se reflita em qualquer prejuízo para mim.

Entendo, ainda, que toda a informação obtida neste estudo será estritamente confidencial e que a minha identidade nunca será revelada em qualquer relatório ou publicação, ou a qualquer pessoa não relacionada diretamente com este estudo.

O/A participante

Responsável pela investigação

Cláudia Manuela da Silva Pinheiro
claudiampinheiro@hotmail.com

Braga, 30 de abril de 2019

FORMULÁRIO DE CONSENTIMENTO INFORMADO COORDENADORES DE CURSO

A Utilização de Métodos Alternativos de Avaliação no Ensino Superior: Um estudo com professores e alunos universitários

Declaro que aceito participar de livre vontade na entrevista estruturada no âmbito do Doutoramento da aluna Cláudia Manuela da Silva Pinheiro, com ID6368, financiado pela Fundação para a Ciência e da Tecnologia – FCT (SFRH/BD/122094/2016), e orientado pela Professora Doutora Maria Assunção Flores (Professora Associada com Agregação do Instituto de Educação da Universidade do Minho).

Foram-me explicados e compreendi os objetivos principais deste estudo e as questões éticas de investigação. **Neste sentido, entendi e aceito participar nesta fase de investigação, nomeadamente na entrevista estruturada, que tem como objetivo conhecer as perceções dos coordenadores de curso das áreas de Ensino e de Enfermagem em termos de metodologias e desafios da avaliação das aprendizagens em particular a relação entre avaliação, ensino e aprendizagem.**

Compreendo que a minha participação neste estudo é voluntária, podendo desistir a qualquer momento, sem que essa decisão se reflita em qualquer prejuízo para mim.

Entendo, ainda, que toda a informação obtida neste estudo será estritamente confidencial e que a minha identidade nunca será revelada em qualquer relatório ou publicação, ou a qualquer pessoa não relacionada diretamente com este estudo.

O/A participante

Responsável pela investigação

Cláudia Manuela da Silva Pinheiro
claudiampinheiro@hotmail.com

Braga, 30 de abril de 2019

QUESTIONÁRIO SOBRE AVALIAÇÃO DAS APRENDIZAGENS

Este questionário insere-se no âmbito do projeto "Assessment in Higher Education: the potential of alternative methods" (financiado pela Fundação para a Ciência e Tecnologia – com a referência PTDC/MHCCED/2703/2014) e tem como finalidade conhecer concepções e práticas de avaliação no Ensino Superior. Trata-se de um inventário de concepções de avaliação, adaptado do original "Students' Conceptions of Assessment (SCoA VI)" (Brown, 2008), da Universidade de Auckland, Nova Zelândia, adaptado e validado no contexto brasileiro por Matos (2010). Este questionário integra ainda uma parte baseada no "Questionário sobre Avaliação das Aprendizagens no Ensino Superior" Pereira (2011, 2016).

A sua participação é voluntária, o anonimato e a confidencialidade são salvaguardados, cabendo-lhe a decisão de participar ou desistir a qualquer momento, sem necessidade de qualquer explicação e sem qualquer consequência.

A sua colaboração é extremamente importante, pois dela depende o sucesso do estudo.

Agradecemos a sua colaboração.

[Este trabalho é financiado por Fundos Nacionais através da FCT (Fundação para a Ciência e a Tecnologia) e cofinanciado pelo Fundo Europeu de Desenvolvimento Regional (FEDER) através do COMPETE 2020 – Programa Operacional Competitividade e Internacionalização (POCI) no âmbito do CIEC (Centro de Investigação em Estudos da Criança da Universidade do Minho) com a referência POCI-01-0145-FEDER-007562 e no âmbito do projeto "Assessment in Higher Education: the potential of alternative methods", com a referência PTDC/MHCCED/2703/2014]]


DADOS BIAGRÁFICOS

1. **Sexo** Masculino Feminino

2. Selecione a opção que corresponde à sua idade

- [Menos de 20]
- [20 - 25]
- [26 - 30]
- [31 - 35]
- [36 - 40]
- [Mais de 40]

3. Curso que frequenta
4. Ano em que está inscrito em 2016/2017

1.º ano 2.º ano 3.º ano 4.º ano 5.º ano 6.º ano

5. Selecione a sua área de estudo atual

- Ciências Médicas e da Saúde
- Ciências Exatas
- Ciência da Engenharia e da Tecnologia
- Ciências Sociais
- Humanidades

6. Selecione o ciclo de estudo em que se encontra atualmente

- Licenciatura
- Mestrado Integrado
- Mestrado (Profissionalizante)
- Mestrado Académico
- Doutoramento
- Pós-Doutoramento
- Outro. Qual?

CONCEÇÕES SOBRE AVALIAÇÃO

Por favor, classifique cada uma das afirmações com base na sua experiência de avaliação no Ensino Superior, indicando o grau de concordância ou discordância em relação a cada uma delas, assinalando uma das opções da seguinte escala:

1 - *Discordo completamente*; 2 - *Discordo*; 3 - *Nem concordo nem discordo*; 4 - *Concordo*; 5 - *Concordo completamente*.

	1 Discordo completamente	2 Discordo	3 Nem concordo nem discordo	4 Concordo	5 Concordo Completamente
1. Eu tenho em atenção os meus resultados de avaliação para me concentrar no que posso melhorar no futuro.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. A avaliação encoraja a minha turma a trabalhar em conjunto e os alunos a ajudarem-se uns aos outros.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. A avaliação é injusta em relação aos alunos.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Os resultados de avaliação mostram o quão inteligente eu sou.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. A avaliação ajuda os professores a acompanhar a minha evolução.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. A avaliação é uma experiência envolvente e agradável para mim.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Eu ignoro as informações de avaliação.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. A avaliação é uma forma de determinar o quanto eu aprendi.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. A avaliação averigua o meu progresso face aos objetivos de aprendizagem.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Eu utilizo o <i>feedback</i> que recebo para melhorar a minha aprendizagem.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. A avaliação disponibiliza informação sobre como as escolas/institutos/universidades funcionam.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. A avaliação motiva-me – a mim e aos meus colegas – a ajudarmo-nos mutuamente.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. A avaliação interfere na minha aprendizagem.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Eu observo o que fiz de errado ou de forma insuficiente para orientar o que deveria aprender a seguir.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Eu uso a avaliação para assumir a responsabilidade pelas minhas próximas etapas de aprendizagem.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Os resultados da avaliação predizem o meu desempenho futuro.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. A nossa turma apoia-se mais quando somos avaliados.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Os professores avaliam de forma exagerada.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Eu uso a avaliação para identificar o que necessito de estudar de seguida.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. A avaliação é importante para a minha carreira ou emprego futuros.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Quando realizamos avaliações existe um bom clima na nossa turma.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Os resultados de avaliação não são muito exatos.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Os meus professores usam a avaliação para me ajudar a melhorar.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. A avaliação mede a qualidade das escolas/institutos/universidades.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. A avaliação faz a nossa turma colaborar mais (entre si).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. A avaliação não tem valor.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. Os professores usam a avaliação para identificar o que necessitam de ensinar de seguida.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. Quando somos avaliados, a nossa turma revela-se mais motivada para a aprendizagem.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. Eu desvalorizo os meus resultados de aprendizagem.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. A avaliação revela se eu posso analisar e pensar de forma crítica sobre um assunto.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. Eu realmente aprecio a aprendizagem quando sou avaliado.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. A avaliação tem um impacto reduzido na minha aprendizagem.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

IDEIAS ASSOCIADAS À AVALIAÇÃO

Tendo em conta a sua experiência enquanto aluno(a) do Ensino Superior **no 1º semestre de 2016/2017**, por favor, indique as ideias que associa à avaliação, assinalando uma das opções da seguinte escala:

1 – Nada; 2 – Pouco; 3 – Bastante; 4 – Muito.

	1 Nada	2 Pouco	3 Bastante	4 Muito
1. Verificação de conhecimentos	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Negociação	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Participação	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Imposição	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Conflito	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Sucesso	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Notas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Testes/Exames	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Reflexão	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Aprendizagem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Injustiça	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Ajuda	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Ansiedade/Stress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Receio/Medo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outro(s). Qual(is)?				

MÉTODOS DE AVALIAÇÃO UTILIZADOS PELOS DOCENTES

Tendo em conta a sua experiência enquanto aluno(a) do Ensino Superior, **no 1º semestre de 2016/2017**, por favor, indique o grau de frequência com que foram utilizados os seguintes métodos de avaliação, assinalando uma das opções da seguinte escala:

1 – Nada Utilizados; 2 – Pouco Utilizados; 3 – Bastante Utilizados; 4 – Muito Utilizados.

	1 Nada Utilizados	2 Pouco Utilizados	3 Bastante Utilizados	4 Muito Utilizados
1. Testes/Exames Escritos	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Testes/Exames Orais	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Portefólios coletivos	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Portefólios individuais	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Trabalhos práticos ou experimentais individuais	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Trabalhos práticos ou experimentais em grupo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Projeto realizado individualmente	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Projeto realizado em grupo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Relatórios individuais	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Relatórios em grupo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Reflexões escritas individuais	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Reflexões escritas em grupo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Apresentações orais individuais	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Apresentações orais em grupo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outro(s). Qual(is)?				

Assinale o grau de concordância ou discordância em relação às afirmações que se seguem, assinalando uma das opções da seguinte escala: 1 - Discordo completamente; 2 - Discordo; 3 - Nem concordo nem discordo; 4 - Concordo; 5 - Concordo completamente.

	1 Discordo completamente	2 Discordo	3 Nem concordo nem discordo	4 Concordo	5 Concordo completamente
1. A avaliação é mais eficaz quando me estimula a aplicar o conhecimento em contextos/situações reais.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. A avaliação é mais eficaz quando me permite melhorar as minhas competências técnicas ou científicas (relacionadas com a minha área de conhecimento).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. A avaliação é mais eficaz quando me permite melhorar simultaneamente as minhas competências técnicas e transversais (pesquisa e seleção de informação, trabalho em equipa, etc.) .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. A avaliação é mais justa se for feita individualmente mesmo que se promova o trabalho em grupo nas aulas.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. A avaliação é mais eficaz quando contribui para o aprofundamento das minhas aprendizagens.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. A avaliação é mais justa quando inclui testes ou exames escritos.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. A avaliação é mais justa quando eu também faço a minha autoavaliação.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. A avaliação é mais justa quando inclui avaliação feita pelos pares/colegas (heteroavaliação).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. A avaliação é mais justa quando existe quer autoavaliação, quer heteroavaliação.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Dedico mais horas ao estudo quando a avaliação é realizada através de portefólios ou projetos ou reflexões.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Os testes ou exames escritos permitem uma avaliação das aprendizagens mais eficaz.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. A avaliação feita com base em portefólios, projetos ou reflexões permitem o desenvolvimento de novas aprendizagens.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. A avaliação feita com base em portefólios, projetos ou reflexões permitem que eu desenvolva o pensamento crítico.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Os testes ou exames escritos permitem uma avaliação das aprendizagens mais justa.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. A avaliação é mais justa quando os docentes utilizam pelo menos dois métodos de avaliação diferentes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. De um modo geral, a metodologia de avaliação nas Unidades Curriculares do 1º semestre de 2016/2017 foi decidida somente pelo(s) docente(s).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Os portefólios, projetos ou reflexões permitem uma avaliação das aprendizagens mais justa.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Normalmente, esqueço a maior parte da matéria que estudei depois de fazer o exame/teste.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Dedico mais horas ao estudo quando a avaliação é realizada através de testes ou exames.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Sinto-me mais confiante quando sou avaliado(a) por testes ou exames.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Sinto-me mais confiante quando sou avaliado(a) por um método de avaliação que não seja o exame ou teste.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Sinto-me mais confiante quando sou avaliado(a) por métodos de avaliação em que participo ativamente na realização das tarefas.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Normalmente, só estudo os conteúdos programáticos que integram as provas de avaliação.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Os portefólios, projetos ou reflexões permitem uma avaliação das aprendizagens mais eficaz.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Quando me preparo para um exame só começo a estudar pouco tempo antes da realização da prova e não ao longo do semestre.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Quando realizo um projeto ou portefólio vou estudando ao longo do semestre.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. No 1º semestre de 2016/2017 fui solicitado(a) a realizar uma autoavaliação.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. No 1º semestre de 2016/2017 , participei na avaliação dos(as) meus(minhas) colegas (heteroavaliação).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. No 1º semestre de 2016/2017 , a avaliação das aprendizagens realizou-se ao longo do semestre.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. No 1º semestre de 2016/2017 , a avaliação das aprendizagens realizou-se somente no final do semestre.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. No 1º semestre de 2016/2017 , a avaliação das aprendizagens ocorreu sempre que realizei uma tarefa ou atividade.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. De um modo geral, a metodologia de avaliação nas Unidades Curriculares do 1º semestre de 2016/2017 foi discutida e negociada com os(as) alunos(as).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. Normalmente, não esqueço a matéria que estudei depois da realização de um trabalho prático, portefólios ou projetos.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Se pretender acrescentar algum comentário sobre os temas abordados, por favor, utilize o verso da folha.

Se desejar conhecer os resultados deste estudo, por favor, entre em contacto por e-mail.

Muito obrigada pela sua colaboração! Pela Equipa de Investigação: Maria Assunção Flores; Cláudia Pinheiro; Eva Fernandes; Patrícia Santos (Universidade do Minho); Email para contacto: aflores@ie.uminho.pt

CIE ANKIETA DOTYCZĄCA SYSTEMU OCENIANIA

Szanowna Pani/Szanowny Panie,

w ramach pracy doktorskiej prowadzę badania nad wykorzystaniem alternatywnych metod oceniania w szkolnictwie wyższym. Badania są realizowane w ramach projektu "Ocenianie w szkolnictwie wyższym: możliwości metod alternatywnych" (ang. Assessment in Higher Education: the potential of alternative methods).

Poniższa ankieta jest częścią tych badań. Ankieta jest poświęcona poznaniu Państwa opinii oraz doświadczeń w zakresie zasad i metod związanych z systemem oceniania w szkolnictwie wyższym. W ankiecie wykorzystano pytania z kwestionariusza Diany Pereiry (2011; 2016).

Uczestnictwo w ankiecie jest w pełni dobrowolne, a anonimowość i poufność strzeżone. Do Państwa należy decyzja o wzięciu udziału w badaniach lub rezygnacji w każdym momencie jej trwania, bez potrzeby jakichkolwiek wyjaśnień oraz bez żadnych konsekwencji.

Państwa współpraca jest niezwykle ważna, ponieważ od niej zależy sukces prowadzonych badań.

Bardzo dziękuję za poświęcony czas

Badania są finansowane przez Narodowy Fundusz za pośrednictwem FCT (Fundacja na rzecz Nauki i Technologii) oraz współfinansowane przez FEDER (Europejski Fundusz Rozwoju Regionalnego) za pośrednictwem projektu COMPETE 2020- Programu Operacyjnego Wzrostu Konkurencyjności i Internacjonalizacji (POCI) w ramach CIEC (Centrum Badań nad Edukacją Dzieci Uniwersytetu w Minho) o sygnaturze POCI-01-0145-FEDER-007562 oraz w ramach projektu "Assessment in Higher Education: the potential of alternative methods", o sygnaturze PTDC/MHCCED/2703/2014]]



DANE PERSONALNE

1. Płeć	Mężczyzna	<input type="checkbox"/>	Kobieta	<input type="checkbox"/>
2. Wiek				
Mniej niż 20 lat	<input type="checkbox"/>			
21 – 25 lat	<input type="checkbox"/>			
26 – 30 lat	<input type="checkbox"/>			
31 – 35 lat	<input type="checkbox"/>			
36 – 40 lat	<input type="checkbox"/>			
Więcej niż 41 lat	<input type="checkbox"/>			
3. Kierunek studiów			
4. Obecny poziom i rok Pani/Pana studiów w ramach roku akad. 2018/19	Jednolite pięcioletnie studia magisterskie			
	1.º rok	<input type="checkbox"/>	2.º rok	<input type="checkbox"/>
	3.º rok	<input type="checkbox"/>	4.º rok	<input type="checkbox"/>
	5.º rok	<input type="checkbox"/>		
Studia I-szego stopnia: licencjackie/inżynierskie				
1.º rok	<input type="checkbox"/>	2.º rok	<input type="checkbox"/>	
3.º rok	<input type="checkbox"/>			
Studia II-giego stopnia: magisterskie				
1.º rok	<input type="checkbox"/>	2.º rok	<input type="checkbox"/>	
Studia III-ego stopnia: doktoranckie				
1.º rok	<input type="checkbox"/>	2.º rok	<input type="checkbox"/>	
3.º rok	<input type="checkbox"/>	4.º rok	<input type="checkbox"/>	
5. Proszę wybrać dziedzinę Pani/Pana aktualnych studiów				
Nauki ścisłe i przyrodnicze	<input type="checkbox"/>			
Nauki inżynieryjno-techniczne i technologie	<input type="checkbox"/>			
Nauki medyczne i nauki o zdrowiu	<input type="checkbox"/>			
Nauki społeczne	<input type="checkbox"/>			
Nauki humanistyczne	<input type="checkbox"/>			

SYSTEM OCENIANIA STUDENTÓW

W jakim stopniu proces oceniania kojarzy Pani/Panu z poniższymi zagadnieniami w kontekście Pani/Pana doświadczeń z ostatniego semestru rok akad. 2018\2019?

Proszę wybrać jedną z opcji poniższej skali:

1 – Wcale; 2 – Trochę; 3 – Dość silnie; 4 – Bardzo

	1 Wcale	2 Trochę	3 Dość	4 Bardzo
1. Sprawdzanie wiedzy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Negocjacje w procesie kształcenia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Udział w wystawianiu oceny	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Narzucanie sposobu oceniania	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Konflikt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Sukces	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Punktacja	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Testy/ Egzamin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Analiza mojej oceny	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Nauka	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. niesprawiedliwość	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Pomoc	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Niepokój/ Stres	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Lęk/ Strach	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inne? Jakież?				

SPOSOBY OCENIANIA WYKORZYSTYWANE PRZEZ OSOBY PROWADZĄCE ZAJĘCIA

Jak często osoby prowadzące zajęcia wykorzystywały następujące sposoby oceniania?

Proszę wziąć pod uwagę Pani/Pana doświadczenia jako studentki/studenta w semestrze zimowym rok akad. 2018/2019 i zastosować poniższą skalę do odpowiedzi na każde z podanych stwierdzeń.

1 – Wcale niewykorzystywane; 2 – Trochę wykorzystywane; 3 – Dość często wykorzystywane; 4 – Bardzo często wykorzystywane

	1 Wcale niewykorzystywane	2 Trochę wykorzystywane	3 Dość często wykorzystywane	4 Bardzo często wykorzystywane
1. Testy/ Egzamin pisemne	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Egzamin ustne	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Portfolia (teczki) zbiorowe	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Portfolia (teczki) indywidualne	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Praktyczne zajęcia indywidualne lub zajęcia z wykorzystaniem eksperymentów	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Praktyczne zajęcia grupowe lub zajęcia z wykorzystaniem eksperymentów	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Projekty realizowane indywidualnie	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Projekty realizowane w grupie	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Sprawozdania\raporty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Sprawozdania grupowe\raporty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Dzielenie się refleksami	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Zespołowe wypracowywanie stanowisk	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Wystąpienia indywidualne	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Wystąpienia grupowe	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inne? Jakież?.....				

W jakim stopniu zgadzasz się z poniższymi stwierdzeniami? Przy każdym stwierdzeniu wybierz tę odpowiedź na skali, która najlepiej opisuje Twoje doświadczenia, przemyślenia na temat oceniania na uczelni.

Skala:
1 – Zdecydowanie się nie zgadzam; 2 – Nie zgadzam się; 3 – Nie mam zdania; 4 – Zgadzam się; 5 – Zdecydowanie się zgadzam

	1 Zdecydowanie się nie zgadzam	2 Nie zgadzam się	3 Nie mam zdania	4 Zgadzam się	5 Zdecydowanie się zgadzam
1. Ocenianie jest bardziej skuteczne, gdy zachęca mnie do zastosowania nabytej wiedzy w realnych sytuacjach.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Ocenianie jest bardziej skuteczne, gdy pozwala mi rozwijać moje umiejętności związane z nauczaniem.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Ocenianie jest bardziej skuteczne, gdy pozwala mi jednocześnie rozwijać moje kompetencje społeczne i dydaktyczne.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Ocenianie jest bardziej sprawiedliwe, wówczas gdy odbywa się indywidualnie, nawet jeśli na zajęciach jest promowana praca w grupie.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Ocenianie jest bardziej skuteczne, kiedy przyczynia się do pogłębienia mojej wiedzy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Ocena jest bardziej obiektywna, kiedy obejmuje testy lub egzaminy pisemne.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Ocena jest bardziej obiektywna, kiedy ja również dokonuję samooceny.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Ocena jest bardziej obiektywna, kiedy obejmuje ocenę mojej wiedzy przez koleżanki/kolegów z grupy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Ocena jest bardziej obiektywna, kiedy obejmuje zarówno moją samoocenę, jak i ocenę koleżanek/kolegów z grupy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Poświęcam więcej czasu na naukę, gdy ocena jest dokonywana na podstawie portfolio, projektów i dzielenia się refleksjami.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Testy/egzaminy pisemne pozwalają na ocenę faktycznego stanu wiedzy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Ocena dokonana na podstawie portfolio, projektów czy dzielenie się refleksjami pozwalają na wypracowanie nowych form nauki.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Ocena oparta na portfolio, projektach czy dzielenie się refleksjami, przemyśleniami pozwala mi rozwijać krytyczne myślenie.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Testy czy egzaminy pisemne pozwalają na bardziej obiektywną ocenę zdobytej wiedzy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Ocena jest bardziej obiektywna, gdy prowadzący wykorzystują przynajmniej dwa z różnych rodzajów systemów oceniania.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Zwykle to wyłącznie prowadzący decydował o sposobie oceniania z danego przedmiotu w 1 ^o semestrze roku akad. 2018/2019.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Portfolio, projekty i dzielenie się swoimi refleksjami pozwalają na bardziej sprawiedliwą ocenę zdobytej wiedzy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Zwykle, po egzaminie/teście zapominam większą część materiału, którego się nauczyłem/am.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Poświęcam więcej czasu na naukę, kiedy ocena wystawiana jest na podstawie testu czy egzaminu pisemnego.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Czuję się pewniej, kiedy jestem oceniany/a na podstawie testu czy egzaminu pisemnego.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Czuję się pewniej, kiedy jestem oceniany/a inaczej niż tylko na podstawie testu czy egzaminu pisemnego.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Czuję się pewniej, kiedy jestem oceniany/a na podstawie zadań, w których aktywnie uczestniczę.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

23. Zwykle uczę się jedynie materiału, który wchodzi w zakres sprawdzianu.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Portfolio, projekty i dzielenie się refleksjami pozwalają na bardziej obiektywną ocenę zdobytej wiedzy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Naukę do egzaminu zaczynam na krótko przed dniem egzaminu, a nie w ciągu całego semestru.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Kiedy realizuję projekty, czy portfolio uczę się przez cały semestr.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. W 1 ^o semestrze roku akad. 2018/2019 zostałem poproszony o dokonanie samooceny.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. W 1 ^o semestrze roku akad. 2018/2019 uczestniczyłem w procesie oceniania kolegi/mojej koleżance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. W 1 ^o semestrze roku akad. 2018/2019 ocenianie zdobywanej wiedzy na większości przedmiotów odbywało się w ciągu całego semestru.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. W 1 ^o semestrze roku akademickiego 2018/2019 ocenianie zdobytej wiedzy na większości zajęć/przedmiotów miało miejsce wyłącznie na koniec semestru.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. W 1 ^o semestrze roku akad. 2018/2019 ocenianie zdobywanej wiedzy na większości zajęć/przedmiotów miało miejsce za każdym razem, gdy zrealizowałam/em jakieś zadanie.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. w 1 ^o semestrze roku akad. 2018/2019 na większości przedmiotów system oceniania został przedstawiony przez osoby prowadzące zajęcia i przedyskutowany ze studentami/studentkami.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. Zwykle, po zrealizowaniu zajęć praktycznych, projektów czy opracowaniu portfolio nie zapominam materiału, którego się nauczyłam/am.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Jeśli chciałaby Pani/chciałby Pan poznać wyniki naszych badań, bardzo prosimy o kontakt drogą mailową.

Bardzo dziękujemy za współpracę!

Zespół badawczy:
Cláudia Pinheiro (claudiampinheiro@hotmail.com);
Maria Assunção Flores (aflores@uminho.pt);
Joanna Madalinska-Michalak (j.madalinska@uw.edu.pl)

GRUPOS FOCAIS
ALUNOS

A Utilização de Métodos Alternativos de Avaliação no Ensino Superior:
Um estudo com professores e alunos universitários

Contexto do grupo focal: Projeto de Doutoramento intitulado *A Utilização de Métodos Alternativos de Avaliação no Ensino Superior: Um estudo com professores e alunos universitários* que pretende analisar os métodos alternativos de avaliação no Ensino Superior.

Participantes no grupo focal: Alunos do Ensino Superior das áreas científicas de Ciências Sociais e Ciências Médicas e da Saúde

Objetivos do grupo focal:

- Conhecer as conceções dos alunos acerca da avaliação das aprendizagens no Ensino Superior;
- Conhecer as práticas de avaliação das aprendizagens no Ensino Superior;
- Analisar metodologias de avaliação utilizadas no contexto do Ensino Superior;
- Compreender os atuais desafios da avaliação no Ensino Superior na perspetiva dos alunos;
- Compreender a relação entre avaliação, aprendizagem, *feedback* e métodos de avaliação na perspetiva dos alunos.

Caraterização dos participantes (dados biográficos)

- Sexo
- Idade
- Curso que frequenta
- Ano que frequenta
- Ciclo de estudos que frequenta

GUIÃO DA ENTREVISTA

Dimensões	Objetivos	Questões	Aspetos a ter em conta
Ser aluno no Ensino Superior	Conhecer as motivações atuais e as perceções futuras em relação ao ser aluno no Ensino Superior	<ul style="list-style-type: none"> • O que é ser aluno universitário? • Quais são os principais desafios enquanto aluno no ES? • Tendo em conta a sua experiência enquanto aluno universitário, quais são, atualmente, as maiores dificuldades que enfrenta? • Como descreve o processo de ensino/aprendizagem de um modo geral no curso que frequenta? • Como descreve, de um modo geral, a sua relação pedagógica com os professores? 	Motivações e perceções atuais quanto ao ser aluno no Ensino Superior
O processo de ensino e de aprendizagem	<p>Compreender as conceções de ensino e de aprendizagem de professores do Ensino Superior</p> <p>Conhecer métodos e estratégias mais utilizados no contexto do Ensino Superior</p>	<ul style="list-style-type: none"> • Quais as atividades que mais realiza no contexto de sala de aula? • Que métodos ou estratégias de ensino são mais utilizados? Dar exemplos. • Conhece ou preocupa-se em conhecer os objetivos ou resultados de aprendizagem das UC? Se sim, porquê? Se não, porquê? • Que aspetos influenciam positiva e/ou negativamente a sua aprendizagem? Porquê? • Que estratégias desenvolve para tornar a sua aprendizagem mais eficaz? Como estuda e como organiza o seu estudo? Porquê? Quais as suas principais preocupações quando estuda? • O que acha que poderia ser melhorado? 	<p>Modo como o professor entende as componentes do seu trabalho (ensino) e a aprendizagem</p> <p>Conceções de ensino e de aprendizagem dos alunos</p> <p>Métodos e estratégias de ensino e de aprendizagem</p>

Avaliação	Compreender as conceções de avaliação de professores do Ensino Superior Conhecer metodologias de avaliação utilizadas no contexto do Ensino Superior	<ul style="list-style-type: none"> • Quais são os métodos de avaliação mais utilizados para avaliar as suas aprendizagens no Ensino Superior? • De que modo os métodos de avaliação utilizados influenciam o modo como estuda e aprende? Dê exemplos. • Quem define e como é definida a forma como é avaliado? • Na sua opinião, qual é o principal objetivo da avaliação? • Costuma participar na escolha da metodologia de avaliação? Se sim, quando e em que aspetos/elementos? • Já ouviu falar de métodos alternativos de avaliação? Se sim, quando? (se não tiverem ouvido falar, diga o que é antes de continua) • Os métodos alternativos de avaliação costumam ser adotados pelos seus professores para a avaliação das aprendizagens nas diferentes unidades curriculares? Se sim, quais as potencialidades e/ou vantagens e desvantagens? Se não, acha que seriam uma melhor opção? Porquê? • Costuma receber <i>feedback</i> dos professores? Se sim, como (individual, coletivo, oral, escrito) e quando? Se não, acha que seria uma mais-valia? Porquê? • Em geral, o que pode ser melhorado na avaliação no Ensino Superior? 	Conceções de avaliação dos alunos Métodos de avaliação
Relação avaliação/ aprendizagem	Compreender a relação entre avaliação e aprendizagem no contexto do Ensino Superior	<ul style="list-style-type: none"> • Considera que a avaliação influencia a sua aprendizagem? Se sim, de que modo? Se não, porquê? • Em que medida a avaliação revela ou comprova a aprendizagem e o conhecimento que adquiriu? • Como se pode potenciar a aprendizagem dos alunos através da avaliação? 	Relação entre avaliação e aprendizagem
<p>Questão final: Gostaria de acrescentar alguma questão, ou de fazer algum comentário que considere pertinente para a discussão desta temática?</p>			

**GRUPO FOCAL
PROFESSORES**

A Utilização de Métodos Alternativos de Avaliação no Ensino Superior:

Um estudo com professores e alunos universitários

Contexto do grupo focal: Projeto de Doutoramento intitulado *A Utilização de Métodos Alternativos de Avaliação no Ensino Superior: Um estudo com professores e alunos universitários* que pretende analisar os métodos alternativos de avaliação no Ensino Superior.

Participantes no grupo focal: Professores do Ensino Superior das áreas científicas de Ciências Sociais e Ciências Médicas e da Saúde

Objetivos do grupo focal:

- Conhecer as conceções dos professores acerca da avaliação das aprendizagens no Ensino Superior;
- Analisar as práticas de avaliação das aprendizagens no Ensino Superior;
- Analisar metodologias de avaliação utilizadas no contexto do Ensino Superior;
- Compreender os atuais desafios da avaliação no Ensino Superior na perspetiva dos professores;
- Compreender a relação entre avaliação, aprendizagem, *feedback* e os métodos de avaliação utilizados pelos professores.

Caraterização dos participantes (dados biográficos)

- Sexo
- Idade
- Habilitações literárias (licenciatura, mestrado, doutoramento)
- Formação e área de conhecimento
- Tempo de experiência como professor e tempo de experiência na universidade em questão
- Ano(s) e ciclo(s) que leciona
- Curso(s) e unidade(s) curricular(es) que leciona
- Departamento a que pertence
- Categoria profissional (prof. Convidado, auxiliar, com agregação, catedrático...)
- Outros cargos e/ou funções

GUIÃO DA ENTREVISTA

Dimensões	Objetivos	Questões	Aspetos a ter em conta
Ser professor no Ensino Superior	Conhecer as motivações atuais e as perceções futuras em relação ao ser professor no Ensino Superior	<ul style="list-style-type: none"> • Atualmente, como definiria ser professor no ES? O que é ser professor universitário? • Como se descreve enquanto professor? • Como se sente em relação ao seu trabalho académico? Neste momento, qual o seu grau de motivação, numa escala, de 1 a 5, em que 1 é “muito desmotivado” e 5 é “muito motivado”? 2 é “desmotivado”, 3 é “nem motivado, nem desmotivado” e 4 é motivado. Porquê? • E a sua autoestima enquanto professor? Porquê? • Como perspetiva o seu futuro profissional? Porquê? 	Motivações e perceções atuais quanto ao ser professor no Ensino Superior
Contextualização do Ensino Superior	Compreender os atuais desafios do Ensino Superior	<ul style="list-style-type: none"> • Tendo em conta a sua experiência enquanto professor universitário, quais são, atualmente, os maiores desafios que enfrenta? • Quais são os maiores desafios na avaliação das aprendizagens do Ensino Superior? Porquê? 	Atuais desafios no Ensino Superior

O processo de ensino e de aprendizagem	Compreender as conceções de ensino e de aprendizagem de professores do Ensino Superior Conhecer métodos e estratégias mais utilizados no contexto do Ensino Superior	<ul style="list-style-type: none"> • Como descreve a sua relação pedagógica com os alunos no processo de ensino e de aprendizagem? • Quais os métodos e estratégias de ensino que adota nas suas aulas? Porquê? • Costuma partilhar os objetivos de aprendizagem com os seus alunos? Porquê? • Que aspetos influenciam positiva e/ou negativamente a aprendizagem dos seus alunos? Porquê? • Que estratégias desenvolve para tornar a aprendizagem dos seus alunos mais eficaz? • Como perspetiva as estratégias de estudo dos seus alunos? O que acha que poderia ser melhorado? 	Modo como o professor entende as componentes do seu trabalho (ensino) e a aprendizagem Conceções de ensino e de aprendizagem dos alunos Métodos e estratégias de ensino e de aprendizagem
Avaliação	Compreender as conceções de avaliação de professores do Ensino Superior Conhecer metodologias de avaliação utilizadas no contexto do Ensino Superior	<ul style="list-style-type: none"> • Quais são os elementos que considera essenciais no processo de avaliação das aprendizagens? Porquê? • Quais são as metodologias de avaliação das aprendizagens que utiliza com mais frequência para avaliar as aprendizagens dos alunos no Ensino Superior? • Já usou ou usa métodos alternativos de avaliação? Se sim, quais as potencialidades e/ou vantagens e desvantagens? Se não, porquê? • Quando define a metodologia de avaliação das aprendizagens dos alunos, que fatores, prioridades ou preocupações tem em consideração? • Negoceia a metodologia de avaliação com os alunos? Se sim, como e quando? Se não, porquê? • Costuma fornecer <i>feedback</i> aos alunos? Se sim, como (individual, coletivo, oral, escrito) e quando? Se não, porquê? • Há algum aspeto(s) que gostaria de melhorar nas suas práticas de avaliação? Se sim, qual/quais? • Em geral, na sua opinião, o que pode ser melhorado na avaliação no Ensino Superior? 	Conceções de avaliação dos alunos Métodos de avaliação
Relação avaliação/ aprendizagem	Compreender a relação entre avaliação e aprendizagem no contexto do Ensino Superior	<ul style="list-style-type: none"> • Considera que a avaliação que faz influencia a aprendizagem dos seus alunos? Se sim, de que modo? Se não, porquê? • Como se pode potenciar a aprendizagem dos alunos através da avaliação? • Em que medida a avaliação dos alunos ajuda a compreender o modo como eles aprendem, ou como podem aprender melhor? 	Relação entre avaliação e aprendizagem
<p>Questão final: Gostaria de acrescentar alguma questão, ou de fazer algum comentário que considere pertinente para a discussão desta temática?</p>			

ENTREVISTA ESTRUTURADA COORDENADORES DE CURSO

A Utilização de Métodos Alternativos de Avaliação no Ensino Superior:

Um estudo com professores e alunos universitários

Contexto da entrevista: Projeto de Doutoramento intitulado *A Utilização de Métodos Alternativos de Avaliação no Ensino Superior: Um estudo com professores e alunos universitários*.

Participantes na entrevista estruturada: Coordenadores de curso no Ensino Superior das áreas científicas de Ensino e Enfermagem.

Objetivos da entrevista estruturada:

- Conhecer as perceções dos coordenadores de curso acerca da avaliação das aprendizagens no Ensino Superior;
- Conhecer as metodologias de avaliação mais utilizadas;
- Identificar os atuais desafios da avaliação no Ensino Superior na perspetiva dos coordenadores de curso.

Dados biográficos

Sexo Masculino Feminino

Idade

Habilitações literárias Licenciatura Mestrado Doutoramento Agregação

Formação – área de especialização

Cursos em que leciona

Categoria profissional

Tempo de experiência enquanto professor universitário

Tempo de experiência enquanto professor nesta instituição

Tempo de experiência no cargo de coordenador de curso

ENTREVISTA ESTRUTURADA

Questão 1

Que balanço faz do curso que coordena em termos de aprendizagens dos estudantes e dos seus resultados académicos?

Questão 2

Quais são os principais desafios ao nível da avaliação do curso que coordena?

Questão 3	De um modo geral, quais são as metodologias de avaliação mais utilizadas para avaliar as aprendizagens dos estudantes no curso que coordena? Pode dar exemplos?
Questão 4	Na sua opinião, quais são os aspetos positivos e a melhorar no curso que coordena?
Questão 5	Na sua qualidade de coordenador, quais considera serem os maiores desafios na avaliação das aprendizagens dos estudantes?
Questão 6	Na sua perspetiva, o que poderia ser melhorado na avaliação das aprendizagens no curso do qual é coordenador/a?
Reflexão Final	Se pretender acrescentar alguma questão ou fazer algum comentário que considere pertinente, por favor use este espaço.

AGRADEÇO A SUA COLABORAÇÃO!

Para qualquer informação adicional ou dúvida, por favor, contacte:
Cláudia Pinheiro (claudiampinheiro@hotmail.com)

**STRUCTURED INTERVIEW
PROGRAMME COORDINATORS**

**The use of alternative methods of assessment in higher education:
A study of university teachers and students**

Interview context: Ph.D project entitled: The use of alternative methods of assessment in higher education: a study of university teacher and students.

Participants in the structured interview: Coordinators of programmes in Higher Education in the scientific area of Education.

Goals of the structured interview:

- To get to know the perceptions of programme coordinators about the assessment of learning in higher education;
- To get to know the most used assessment methods;
- To identify current challenges of assessment in higher education in the perspective of the programme coordinators.

Biographical data

Gender Male Female

Age

Qualifications Graduation Masters Ph.D Other?

Training - area of expertise

Programmes in which you teach

Professional category

**Years of experience as a
university teacher**

**Years of experience as a
university teacher in this
institution**

**Years of experience time as
programme coordinator**

STRUCTURED INTERVIEW

First question	What is the most used assessment methods in the programme that you coordinate in terms of student learning and their academic results?
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Second question	What are the main challenges regarding assessment in the programme that you coordinate?
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Third question	In general, what are the assessment methods most used to assess students' learning in the programme that you coordinate? Can you give some examples?
Fourth question	In your opinion, what are the positive aspects and aspects to be improved in the programme that you coordinate?
Fifth question	As coordinator, what do you consider to be the greatest challenges in assessing student learning?
Sixth question	In your perspective, what could be improved in the assessment of learning in the programme of which you are the coordinator?
Final reflection	If you wish to add any question or make any comments that you consider pertinent, please use this space.

I APPRECIATE YOUR COOPERATION!

For any additional information or questions, please contact:
Cláudia Pinheiro (claudiampinheiro@hotmail.com)

QUESTIONÁRIO SOBRE PRÁTICAS DE ENSINO, AVALIAÇÃO E FEEDBACK ONLINE NO ENSINO SUPERIOR

Este questionário insere-se no âmbito do projeto de doutoramento "The use of alternative methods of assessment in higher education: a study of university teacher and students" (financiado pela Fundação para a Ciência e Tecnologia – FCT – com referência SFRH/BD/122094/2016) e tem como finalidade conhecer práticas de ensino, avaliação e feedback online no contexto do Ensino Superior. Este estudo integra algumas questões baseadas no inquérito "Aprendizagem online em tempos de COVID-19: um estudo com estudantes do Ensino Superior" de Flores & Veiga Simão (2020).

A sua participação é voluntária, o anonimato e a confidencialidade são salvaguardados, cabendo-lhe a decisão de participar ou desistir a qualquer momento, sem necessidade de dar qualquer explicação.

A sua colaboração é extremamente importante, pois dela depende o sucesso do estudo. Agradecemos a sua colaboração.

***Obrigatório**

1. Consentimento Informado *

Marcar tudo o que for aplicável.

Confirmo que tomei conhecimento do protocolo de investigação acima descrito e que aceito participar voluntariamente nesta fase de investigação do presente estudo

Dados biográficos

2. Sexo *

Marcar apenas uma oval.

Masculino

Feminino

3. Selecione a opção que corresponde à sua idade *

Marcar apenas uma oval.

]Menos de 20]

[20 - 25]

[26 - 30]

[31 - 35]

[36 - 40]

[Mais de 40]

4. Ciclo de estudos que frequenta *

Marcar apenas uma oval.

Licenciatura

Mestrado

Mestrado Integrado

Pós-graduação

Doutoramento

5. Ano letivo que frequenta em 2019/2020 *

Marcar apenas uma oval.

1.º ano

2.º ano

3.º ano

4.º ano

Ano probatório

Práticas de avaliação
em contexto online

Tendo em conta a sua experiência, assinale o grau de concordância quanto às afirmações seguintes:

14. 9. Participei na minha avaliação das aprendizagens (autoavaliação). *

Marcar apenas uma oval.

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

15. 10. Sinto-me satisfeito(a) com a avaliação das aprendizagens online realizada. *

Marcar apenas uma oval.

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

16. 11. Sinto-me confortável com a avaliação online. *

Marcar apenas uma oval.

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Técnicas de
avaliação
utilizadas pelos
professores

Tendo em conta a sua experiência, assinale a frequência com que cada uma das técnicas foi utilizada para avaliação das aprendizagens por parte dos professores em contexto online.

17. A avaliação das aprendizagens online foi realizada através de: *

Marcar apenas uma oval por linha.

	Nunca	Às vezes	Regularmente	Muitas vezes	Sempre
1. Testes escritos de resposta aberta	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Testes de resposta fechada (e.g. escolha múltipla, Verdadeiro Falso, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Trabalhos individuais	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Trabalhos em grupo	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Portefólios individuais	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Portefólios em grupo	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Relatórios individuais	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Relatórios em grupo	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Recensões críticas individuais	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Recensões críticas em grupo	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Apresentações orais individuais	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Apresentações orais em grupo	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Feedback em contexto online

Tendo em conta a sua experiência, assinale o grau de concordância quanto às afirmações seguintes sobre feedback em contexto online.

22. 5. No ensino online recebi feedback por parte dos colegas sobre os trabalhos que realizei (e.g. apresentações orais). *

Marcar apenas uma oval.

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

23. 6. O feedback que recebo por parte dos professores é importante para melhorar a minha aprendizagem. *

Marcar apenas uma oval.

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Formas de dar
feedback utilizadas
pelos professores

Tendo em conta a sua experiência, assinale a frequência com que cada forma de dar feedback foi utilizada por parte dos professores em contexto online.

24. O feedback online foi dado através de: *

Marcar apenas uma oval por linha.

	Nunca	Às vezes	Regularmente	Muitas vezes	Sempre
1. Fóruns de discussão (feedback assíncrono – desconectado no momento real)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Email (feedback assíncrono – desconectado no momento real)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Plataforma da instituição (e.g. Blackboard)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Plataformas online (Colibri/Zoom, Teams, Skype, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Chats/sala de bate-papo (feedback síncrono – conectado no momento real)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Webconferências – aulas online (feedback síncrono – conectado no momento real)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Telemóvel (áudio e/ou vídeo chamada)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Smartphone (Whatsapp, Messenger, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Redes sociais (instagram, Facebook, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Comentários deixados no documento/ trabalho/ portefólio enviado para correção	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Ensino e aprendizagem online

Tendo em conta a tua experiência, assinala o grau de concordância quanto às afirmações seguintes sobre ensino e aprendizagem online.

41. 17. Dedico mais horas ao estudo quando a aprendizagem é feita em contexto online. *

Marcar apenas uma oval.

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

42. 17. Dedico mais horas ao estudo quando a aprendizagem é feita em contexto online. *

Marcar apenas uma oval.

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

43. 18. Participo ativamente nas atividades de aprendizagem online. *

Marcar apenas uma oval.

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

44. 19. Assisto passivamente às aulas/atividades em contexto online. *

Marcar apenas uma oval.

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

53. 28. Os resultados de aprendizagem em contexto online não corresponderam às minhas expectativas do início do semestre. *

Marcar apenas uma oval.

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

54. 29. Os meus professores sabem como desenvolver o ensino online. *

Marcar apenas uma oval.

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

55. 30. Os meus professores utilizam adequadamente os recursos digitais necessários para o ensino online. *

Marcar apenas uma oval.

	1	2	3	4	5	
Discordo totalmente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Concordo totalmente

Tempo dedicado à aprendizagem em contexto online

56. Por semana, quantas horas despende em aulas online, gravadas ou em outros formatos à distância? *

Marcar apenas uma oval.

- Menos de 1 hora
- Entre 1 e 2 horas
- De 2 a 3 horas
- De 3 a 4 horas
- Mais de 4 horas

57. Por semana, quantas horas gasta com as tarefas que lhe são propostas (trabalhos solicitados pelos professores)? *

Marcar apenas uma oval.

- Menos de 1 hora
- Entre 1 e 2 horas
- De 2 a 3 horas
- De 3 a 4 horas
- Mais de 4 horas

58. Por semana, quantas horas gasta a estudar (exceto tempo de aulas e de execução dos trabalhos)? *

Marcar apenas uma oval.

- Menos de 1 hora
- Entre 1 e 2 horas
- De 2 a 3 horas
- De 3 a 4 horas
- Mais de 4 horas

59. *

Marcar apenas uma oval por linha.

	Sim	Não	Talvez
1. Possuo computador próprio para a aprendizagem online.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Tive de pedir emprestado um computador ou tablet para acompanhar as aulas online.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Possuo acesso próprio à internet, em casa, para a aprendizagem online.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Possuo condições adequadas (espaço, silêncio, etc.) em casa para a aprendizagem online.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. O suporte tecnológico prestado por parte da instituição de ensino superior foi assegurado.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Os recursos tecnológicos disponibilizados pela instituição de ensino superior foram suficientes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Senti dificuldades na utilização dos recursos tecnológicos necessários à aprendizagem online.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

60. Por favor, refira, no espaço que se segue, que estratégias pedagógicas utilizadas pelos seus professores em contexto online promoveram uma aprendizagem eficaz. *

61. Por favor, descreva brevemente, no espaço que se segue, um episódio/uma situação que o(a) tenha marcado na sua experiência de aprendizagem online. *

Informação adicional

Se pretender acrescentar algum comentário sobre os temas abordados ou se desejar conhecer os resultados deste estudo, por favor, entre em contacto com a responsável do projeto através do e-mail:

claudiampinheiro@hotmail.com

Muito obrigada pela sua colaboração!

Este conteúdo não foi criado nem aprovado pela Google.

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PROJETO DE INTERVENÇÃO NA LICENCIATURA EM ENFERMAGEM

Saúde Comunitária II – 2019/2020

Apreciação por pares do trabalho de grupo

Aspetos a considerar para a apreciação por pares do trabalho de grupo:

- **Comentário geral do trabalho**
(p. ex.: linguagem clara, articulação e coerência de ideias, fundamentação e rigor científico; rigor nas Normas APA, etc)
- **Pedido de esclarecimento**
(p. ex.: inclusão/exclusão de algum aspeto)
- **Um/dois aspetos relevantes (positivos)**
(p. ex.: forma de abordagem do tema trabalhado)
- **Um/duas sugestões de melhoria**

Para a redação da apreciação por pares do trabalho de grupo os estudantes deverão ter em consideração os seguintes aspetos (limite máximo de 200 palavras):

- Pertinência dos comentários;
- Objetividade do discurso;
- Capacidade de reflexão e análise crítica;
- Fundamentação das opiniões (através da mobilização de conhecimentos teóricos).