Employability of higher education graduates: reflections and pedagogical implications

Sílvia Monteiro & Leandro S. Almeida

Abstract:

The changes that have occurred in higher education and labour market in recent years highlight the need for an in-depth reflection on current prevailing educational paradigms, and their adequacy in responding to the demands of today's society. One of the topics that has gained particular attention is related with graduates' employment rates, which represents one current criteria used to assess the quality of higher education institutions and courses. In this context, this article aims to reflect on current knowledge about graduates' employability. Considering various empirical works and research lines developed over recent years, we propose a set of four premises in an effort to lend structure to some pedagogical and curricular implications for higher education institutions: (i) the risk of the "one-dimensional prioritisation" of technical skills; (ii) career management skills as a catalyst for employability; (iii) graduates and their transformative potential within organizations; (iv) the implausibility of a single model for promoting employability. To conclude, it is argued that the education of future graduates should not limit itself to the present. Pedagogical practices of teaching and learning must promote the continued construction of knowledge and skills, practical experience and work placements in organizations with different structures within the community.

Keywords:

higher education; graduates; employability; pedagogical implications

Empregabilidade dos graduados do Ensino Superior: Reflexões e implicações pedagógicas

Resumo: As mudanças, ocorridas no ensino superior e no mercado de trabalho ao longo dos últimos anos, remetem para a necessidade de uma reflexão aprofundada acerca dos paradigmas educativos que hoje prevalecem e da sua adequação face às exigências sociais que hoje se colocam. A este respeito, um dos tópicos que ganha particular relevância relaciona-se com as taxas de emprego dos graduados, e que representa um critério atual utilizado para avaliar a qualidade das instituições e cursos de ensino superior. Pretende-se com este artigo apresentar uma reflexão em torno do conhecimento atual sobre o tema da empregabilidade, integrando diferentes trabalhos e linhas empíricas desenvolvidas ao longo dos últimos anos, organizada em quatro premissas: (i) o risco da "priorização avulsa" das competências técnicas; (ii) as competências de gestão de carreira como catalisadoras da empregabilidade; (iii) os graduados e o potencial transformador das organizações; (iv) a implausibilidade de modelos únicos na promoção da empregabilidade. Para concluir, argumenta-se que a educação dos futuros licenciados não se deve limitar a uma visão de curto prazo. As práticas pedagógicas de ensino e aprendizagem devem promover a construção contínua de conhecimentos e competências, experiência prática e estágios em organizações com diferentes estruturas, dentro da comunidade.

Palavras-chave: ensino superior; graduados; empregabilidade; implicações pedagógicas

Perspectivas actuales sobre la empleabilidad de los graduados de la enseñanza superior: reflexiones e implicaciones pedagógicas

Resumen: Los cambios que se han producido en la enseñanza superior y en el mercado laboral en los últimos años apuntan a la necesidad de una reflexión profunda sobre los actuales paradigmas educativos imperantes y su adecuación a las exigencias de la sociedad actual. En este contexto, uno de los temas que adquiere especial relevancia se refiere a las tasas de empleo de los graduados después de su formación, que es un criterio que se utiliza actualmente para evaluar la calidad de las instituciones y cursos de enseñanza superior. Así pues, este artículo pretende reflexionar sobre los conocimientos actuales en materia de empleabilidad de los graduados. Considerando varios trabajos empíricos y líneas de investigación desarrolladas en los últimos años, se presenta un conjunto de cuatro premisas: i) el riesgo de la "priorización única" de las competencias técnicas; ii) las competencias en materia de gestión de la carrera como catalizadoras de la empleabilidad; iii) los graduados y el potencial transformador de las organizaciones; iv) la inverosimilitud de los modelos singulares en la promoción de la empleabilidad. En conclusión, se argumenta que la educación de los futuros graduados no debe limitarse a las circunstancias y necesidades actuales. Por otra parte, se propone la idea de prácticas de enseñanza y aprendizaje que promuevan la construcción continua de conocimientos, habilidades y experiencias prácticas a fin de contribuir a diferentes tipos de contextos.

Palabras clave: educación superior; graduados; empleabilidad; implicaciones pedagógicas

Employabilité des diplômés de l'enseignement supérieur: Réflexions et implications pédagogiques

Résumé: Les changements survenus dans l'enseignement supérieur et sur le marché du travail ces dernières années soulignent la nécessité d'une réflexion approfondie sur les paradigmes éducatifs qui prévalent actuellement, et sur leur adéquation pour répondre aux exigences de la société actuelle. L'un des sujets qui a fait l'objet d'une attention particulière est lié au taux d'emploi des diplômés, qui représente l'un des critères actuellement utilisés pour évaluer la qualité des institutions et des cours de l'enseignement supérieur. Dans ce contexte, cet article vise à réfléchir sur les connaissances actuelles concernant l'employabilité des diplômés. En tenant compte de divers travaux empiriques et lignes de recherche développés au cours des dernières années, nous proposons un ensemble de quatre prémisses afin de structurer certaines implications pédagogiques et curriculaires pour les institutions d'enseignement supérieur: (i) le risque d'une «hiérarchisation unidimensionnelle» des compétences techniques; (ii) les compétences en gestion de carrière comme catalyseur de l'employabilité; (iii) les diplômés et leur potentiel de transformation au sein des organisations; (iv) l'invraisemblance d'un modèle unique de promotion de l'employabilité. Pour conclure, on fait valoir que l'éducation des futurs diplômés ne devrait pas se limiter au présent. Les pratiques pédagogiques d'enseignement et d'apprentissage doivent promouvoir la construction continue de connaissances et de compétences, l'expérience pratique et les stages dans des organisations ayant des structures différentes au sein de la communauté.

Mots clés: enseignement supérieur; diplômés; employabilité; implications pédagogiques

Introduction

The issue of the employability of Higher Education (HE) graduates has garnered particular attention in recent years. Various political, economic, and social phenomena have contributed to a growing focus on graduates' employment rates, being currently one of the criteria used to assess the quality of HE institutions and courses.

With regard to the Portuguese situation specifically, the number of students in HE expanded greatly as a result of the policies for democratising access, introduced in Portugal following the 1974 revolution. HE, formerly restricted to the social and cultural elite, came to represent an opportunity for social mobility and access to better job opportunities. Over the last three decades, Portugal has more than doubled the number of HE graduates, with 33.5% of the population aged between 25 and 34 holding a HE qualification in 2018 (OECD, 2018). The increasing well-qualified population can therefore be one of the principal achievements of the democracy in Portugal, similarly to other countries. At the same time, though there has been a sustained rise in unemployment rates among all sectors of the population, including graduates, since the early to mid-2000s, a HE qualification continues to be a significant protective factor against unemployment. Meanwhile, European policies and objectives for improving levels of qualification, such as the target that by 2020, 40% of the population aged 30-35 should possess tertiary education, have opened the doors to new groups access to HE. This includes older individuals who have already entered the labour market, or "mature students". The publication of specific legislation on access to HE for people aged over 23 increased the size of this cohort of students, creating a more diverse student body, in terms of socioeconomic backgrounds and characteristics. Though the choice between university and polytechnic systems and between different courses still tends to be determined by background, with more students from underprivileged segments of society opting for polytechnics and social sciences and humanities subjects, the expansion of HE access has, in general, led to greater diversity among students. International students, students with sensory and physical disabilities, competitive athletes, and students who access HE via special access ways also contribute to this diversity. These wide-ranging attributes and skillsets have implications in terms of their academic trajectories while in education, but also in the development of strategies for promoting individual resources to improve their future employability.

In addition to the transformation of HE in recent years, the changes that have occurred in the world of work, with impact upon the way graduate employability is conceptualised today, should also be considered. The internationalisation and globalisation of markets has led to the relocation of many companies and to a tendency to subcontract services, commonly referred to as outsourcing (Coutinho et al., 2008). In turn, these phenomena have been accelerated by rapid technological development and the

increasing ease of mobility, which, together, have contributed to an overall decrease in the number of jobs (Allen & van der Velden, 2011). On the other hand, employment contracts, once associated with the idea of continuous, vertical progression, usually in the form of a series of promotions within the same company, now tend to be shorter-term and more precarious. It has become increasingly common to move from one company to another over the course of a career (Brown et al., 2003). Within this international context, which impacts on the internal policies of each country, unpredictability, instability, and uncertainty are now watchwords to describe career prospects (Savickas, 2013), giving rise to specific concepts in the literature on career development.

Hall (2004) introduces the concept of *protean career*, referring to the decisive role of individuals in steering their own career, shaped by their interests and values, rather than by one specific company. Skills such as adaptability, identity and self-knowledge are important, as individuals require these attributes when deciding on the path they intend to carve out for themselves. Similarly, Tams and Arthur (2010) use the term *boundaryless career* to describe the flexible and adaptable approach of individuals to the employment market. No longer confined exclusively to a single company, they instead experience different jobs and organizations over the course of their working lives. As a result, they no longer have a sense of belonging to a specific organization, instead offering varied services and skills to multiple employers.

This set of political, economic, and social changes has led to a much broader and more dynamic understanding of employability, which goes beyond the simple ability to find and keep a job, as suggested by Hillage and Pollard in 1998. The most recent definitions of employability characterise it as "a psycho-social construct that embodies individual characteristics that foster adaptive cognition, behavior and affect, and enhance the individual-work interface" (Fugate, Kinicki, & Ashforth, 2004, p.15). According to this definition, the emphasis on "immediate employment" or "suitable work" is replaced with the notion of sustainable employment (Lo Presti & Pluviano, 2016; Monteiro, Taveira, & Almeida, 2019; Van der Heijde, 2014).

Taking into account the series of transformations that HE and the labour market have undergone in recent years, this paper aims to reflect on current knowledge on the subject of employability, considering various empirical works and lines of enquiry developed in recent years, in an effort to lend structure to some pedagogical and curricular implications for HE institutions. To do so, we will next introduce a set of four premises that will guide our argument.

1. The risk of "one-dimensional prioritisation" of technical skills

One line of research that has received particular attention in the literature is the identification of specific skills associated with a given professional field (Allen & van

der Velden, 2012). This idea of "filling gaps" in the job market can be quite appealing, especially in the early stages of career development, when young graduates need to find a way of setting themselves apart from a multitude of applicants for a single job position. Though the identification and development of technical skills is, logically, relevant and necessary, particularly when focused on specific areas of knowledge and combined with strategies for approaching the labour market, we must be aware of the risks associated with pedagogical models solely, or strongly, based on this factor. A report produced by the the World Economic Forum (2016) foresaw an unprecedented rate of change in the core curriculum content of many academic fields, with nearly 50% of subject knowledge acquired during the first year of a four-year technical degree outdated by the time students graduate. This warning is most relevant to technical fields, in which tools, processes and products are developing at great speed.

This premise does not imply that the promotion of specific, technical skills, such as learning a given programming language in the field of computer sciences, or a given diagnostic technique in the field of medicine, should not be a key educational objective. Rather, we wish to emphasise the importance of learning skills of this type as a steppingstone to developing a more complex - and more transferable - mastery of the knowledge. The optimization of technical training sessions represent an opportunity to develop further skills which, in turn, act as catalysts for cross-sectoral skills, such as continuous learning, critical thinking and problem-solving. This is not a complete novelty in the wider field of Education. For example, if we revisit Bloom's taxonomy, it is possible to find parallels with the distinctions made between fields of knowledge that are, necessarily, interlinked, reflecting a cumulative approach to knowledge: factual knowledge - the basic facts that students must possess in order to become familiar with the discipline or solve problems existing within it; conceptual knowledge - the interrelationships between basic elements of a larger structure, which enable them to work together; knowledge of process - knowing how to do something, for example research methods and criteria for applying skills, algorithms, techniques and methods; and metacognitive knowledge - knowledge of cognition in general, and awareness, self-regulation and knowledge of personal cognition. The aim is, therefore, to regain this knowledge and apply it to the issue of employability in current context, as summarised in the introduction to this paper. Returning to the example of learning a programming language, we could question how this more focused objective can represent an opportunity to stimulate other skills, such as problem identification and solving skills? Could it be that by creating "noise" in the learning process, including, for instance, superfluous or erroneous data among the information provided during a practical exercise, it would stimulate the development of such skills? The example of learning a medical diagnostic technique could also represent a possible opportunity to develop skills and/or attitudes of critical thinking skills. Can it be that presenting students with a practical scenario in which the procedure is shown to be fallible in certain cases, can encourage them to read conflicting scientific works on the procedure in question? These examples illustrate efforts to replicate professional settings, in which "real" problems are complex and unstructured, requiring to seek new information in order to find a solution.

2. Career management skills as a catalyst for employability

The previous premise illustrates how HE courses must not only provide students with a body of accumulated knowledge, but also an ability to apply this knowledge in a variety of contexts (Clarke, 2018). Just as jobs are no longer characterised by fixed and finite sets of tasks, skills and abilities, which remain unchanged over a long period of time, careers, in general, no longer follow a pattern of vertical progression within a single organization (McMahon et al., 2003). This means that HE institutions should favour, or at least value, what authors such as Bridgstock (2009) refer to as "'meta' work skills" or "career management skills", characterized as the ability to recognise and draw on existing skills and knowledge to enhance training and employability. At a time when employment issues are at the top of the political agenda and job prospects are an important metric of student satisfaction with HE (Lafuente et al., 2012), the question of how institutions can better prepare graduates for the transition to the labour market takes on particular relevance. However, at the same time, we have observed a tendency to "simplify" the discourse on training for employability, with an explicit and almost exclusive focus on the development of "key" skills (Mason et al., 2009), neglecting the abilities required to graduates to efficiently manage these skills through a decision-making process based on reflection and evaluation (Bridgstock, 2009). In a recent paper, we demonstrated that graduates are aware that they need more than a simple set of scientific and technical skills developed through an academic curriculum, while highlighting the lack of suitable opportunities for students to develop career management skills (Monteiro, Almeida & Garcia-Aracil, 2020). Though scientific and technical skills are a prerequisite for employability, graduates must also be equipped with adaptability resources, in order to manage their own attributes and smooth the transition to today's labour market (Monteiro, Taveira & Almeida, 2019). The current and future reality of the labour market demands more than just preparedness for a job; it requires graduates to be prepared for a non-linear career, and possess an ability to continuously plan, learn, adapt, change and assess their individual skills to meet changing needs in different contexts. With this in mind, Clarke (2018) argues that government bodies and education institutions should shift the focus away from short/medium term (un)employment rates, which only take into account the ability to find a job within a given period of time. Instead, indicators of employability, focused on individual attributes, structural and circumstantial factors related to supply and demand in the job market, should be appreciated.

3. Graduates and their transformative potential within organizations

Employability, as it is understood today, implies a sense of agency, associated with the capacity of individuals to manage their careers, as well as their capacity to play an active role within organizations. This premise can be particularly relevant on the Portuguese context, characterised by a business ecosystem comprised primarily of small and medium enterprises, in which a large proportion of employers do not possess a HE degree. In this context, graduates can be key figures in bringing innovation and transformation within businesses, as they can be capable of transferring general learning to a real setting, with specific, concrete needs, which might not even have been identified by the organization itself. Following on from the second premise outlined in this text, current requirements are incongruous with a straightforward, linear approach to developing and applying skills and techniques, though these are often a "passport" for accessing employment, Instead, any approach must empower students to become critical learners. In a labour market that prizes flexibility, graduates must be capable of helping organizations adapt to ongoing rapid change (Harvey, 2000), as recently evidenced by the crisis triggered by the COVID-19 pandemic. This need has even been reflected in a preference, among certain employers, for graduates from the fields of humanities and social sciences, due to the perception that they are "better critical thinkers" and more capable of "learning to learn" (Bridgstock, 2016). Similarly, certain companies also value staff turnover, as a means of stimulating innovation and development within the organization by exposing people to new ideas and contexts (Guidice et al., 2009). It is also worth stressing that the need for innovation and transformation, existing within companies, is not limited to the world of business. The ability to harness knowledge and skills to solve complex problems demanding innovative solutions is now a requirement of society in general, due to the global nature of the issues it faces, such as climate change, the migrant and refugee crisis and, more recently, the struggle against pandemics. Such demands call for a shift in the educational paradigm, requiring a transition from a "content delivery" approach, in which students are mere consumers of information, to an approach that is both constructivist – in that learning occurs through the construction of knowledge and meaning based on personal experience - and constructionist - in that learning occurs through experimentation and creative activity (Bridgstock, 2016). This approach favours learning outcomes that stimulate the ability to screen, compare, contrast, assess and (re)contextualise information, learning strategies and experiences, as well as identifying new sources of knowledge (Bridgstock, 2016). These outcomes must be linked to learning processes structured to promote an increasing degree of autonomy, favour deep learning over superficial learning, value collaborative learning processes, provide feedback, stimulate capacity for self-assessment and help students become aware of, and document, their achievements during their time in HE (Knight & Yorke, 2002). A paradigm shift of this nature, drawing strongly from the oft-cited concept of "lifelong learning", aims not only to provide skills for employment in a competitive job market, but also to empower students to become critical and reflective, socially responsible, participatory and engaged citizens.

4. The implausibility of a single model for promoting employability

Building on the arguments presented above, this reflection would not be complete without due consideration of the multidimensional and dynamic nature of the concept of employability. That is to say that: (i) it is impossible to identify a simple predictor of this construct. Instead, a set of various factors appear to be organised in different ways, depending on the attributes and life experiences of each individual; (ii) these factors are dynamic, largely as a result of the changeability of the employment market itself, but also due to the interaction between subjects and their surroundings. In this context, we reach an expectable conclusion: there is no "one-size-fits-all" model for promoting graduate employability in an unpredictable and non-linear labour market. Multiple proposals have arose to intervene in employability, with the potential to help define measures appropriate to each context: integrated or cross-curricular strategies, strategies outside the curriculum, and mixed models, which combine both of the above (Sultana, 2012). Certain strategies will be more or less efficient in each specific context, depending on their capacity to adapt to the characteristics and needs of the setting and the individuals within it. Furthermore, within one same institution, there will be different models that naturally better suit to the reality of each student, each member of teaching staff, each curricular unit, and each course, strongly influenced by structural, circumstantial, and regional factors.

Final remarks

The arguments explored in this article allow us to distinguish between two terms that are often confused: *employment* – which is binary and limited (either you have a job or you do not) - and *employability* – which has a much broader meaning, reflecting the complex range of resources that HE can develop. This means employability is contingent on the interaction between multiple factors, beyond the acquisition of technical and scientific skills in a specific area of study. It also means that while an individual might not have *employment* at a given time, he or she can maintain an attitude that

fosters *employability*. This set of resources, typically less referred but no less important, includes the capacity to think and reflect about the self and the environment, in order to capitalise on existing skills: "How can I show that I am the right person for company X?"; and develop new skills: "What skills must I acquire/develop to get job Y in company X?"; as part of a strategy guided by personal interests: "What would I really like to do?"; as well as the needs of the labour market: "What does the market need in my chosen field?". More holistic than a focus on *employment*, a focus on *employability* allows us to adopt a more proactive, more controllable and, consequently, more optimistic approach. A focus on *employability* also fosters a broader understanding of one of the missions of HE and the manner in which it assesses its "outcomes". This assessment must look beyond employment statistics for HE graduates. Instead, it should promote a commitment among institutions to change their forms of organisation and practises and offer students a participatory education that takes into account current scientific, technological, cultural and social changes.

With this in mind, HE institutions face the challenge of changing their teaching practices and overhauling an approach to education that places a strong focus on the transfer of scientific and technical knowledge, particularly following the implementation of the Bologna Declaration. The described diversity of students requires constructivist teaching and learning methodologies that favour individual approaches to assimilating and constructing knowledge. When a pedagogical approach more focused on learning than teaching is adopted, students assume a central role in the new pedagogical practices. At the same time, the promotion of graduate *employability* requires opportunities to learn by applying knowledge and organising projects, decision-making and problemsolving, both inside and outside the classroom. Opportunities of this nature have greater impact on development if based on work with partners, learning communities, or cooperative learning in pairs or groups of students. These push students to participate more actively, collaboratively and responsibly to develop new knowledge and competencies, to view learning as a lifelong process and to recognise how the technical skills and scientific knowledge can be applied in response to the challenges of a changing society.

The academic experience of students, which necessarily depends on the type of course studied, must encompass a wide and varied set of opportunities to develop skills related to identity, a personal sense of agency, autonomy and career management, essential for the transition to adult life. In today's society, the transition to adult life, in the personal, family, professional and social spheres, requires not only technical and scientific competencies, but also skills such as adaptability, critical thinking, self-knowledge, decision-making and problem-solving. To this end, and assuming that the education of young people should not limit itself to the present, pedagogical practices of teaching and learning must promote individual and group work for the continued construction of knowledge and skills, practical experience and work placements in

organizations with different structures within the community. Opportunities for mobility and internationalization, and proactive attitudes to personal action and empowerment as an adaptive and transformative response to a constantly changing society and labour market should also be considered.

Finally, this article seeks to present one potential approach to promoting graduate employability, focused on a set of implications, mainly pedagogical in their scope. Several other approaches, ranging from individual interventions to structural ones, are, of course, both possible and necessary for the effective, multidimensional promotion of employability among HE graduates. Regarding the quality of teaching practices, it is essential to equip teaching staff with the skills needed to implement these approaches. Paradigm shifts in teaching and assessment processes require teachers trained specifically in active and socio-constructivist teaching and learning methodologies. While the new proposals for organising teaching and learning in HE place great demands on students, the demands placed on teachers, trained in traditional pedagogical models, are no less significant.

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Sílvia Monteiro

Centro de Investigação em Educação, Universidade do Minho, Braga, Portugal

Email: silviamonteiro@ie.uminho.pt

ORCID: http://orcid.org/0000-0002-5236-2711

Leandro S. Almeida

Centro de Investigação em Educação, Universidade do Minho, Braga, Portugal

Email: leandro@ie.uminho.pt

ORCID: http://orcid.org/0000-0002-0651-7014

Correspondência

Sílvia Monteiro, Universidade do Minho, Centro de Investigação em Educação, Campus de Gualtar, 4710-057 Braga.

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