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# TRANSMEDIA SKILLS AND INFORMAL LEARNING STRATEGIES

*The Transmedia Literacy research team generated a complete and updated taxonomy of transmedia skills. It is one of the most exhaustive maps of skills related to media production, consumption and post-production in the context of youth transmedia culture. The transmedia skills identified during the research were organised into 9 dimensions (production, risk prevention, performance, social/individual/content management, media and technology, ideology and ethics, narrative and aesthetics), each of which included 44 main skills, and on a second level, 190 specific skills.*

## 1.1 Production Skills

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The work on transmedia skills discussed herein is anchored in the Media Literacy framework. This area of study and intervention has gained increased attention in recent years due to the urgent need to pay attention to media messages, agents, industries and audiences in order to empower citizens to critically and ethically live and participate in a media-saturated world.

### **Media literacy**

According to the European Commission, Media Literacy is “the ability to access the media, to understand and critically evaluate different aspects of the media and media content and to create communications in a variety of contexts”, being “a matter of inclusion and citizenship in today’s information society” and “one of the key prerequisites for an active and full citizenship

in order to prevent and diminish risks of exclusion from community life” (Recommendation 2009/625/EC). This definition highlights three dimensions: (1) access; (2) critical understanding and analysis; and (3) creation and production. Each of these aspects is of fundamental importance in any work aimed at promoting Media Literacy skills.

Although access is essential to the other dimensions, it cannot, however, be considered the only condition for citizens to become media literate. Even if media access is assured, that is, if the conditions to guarantee the democratization of access are created, the digital inclusion of citizens cannot be solved only by access. It is important to go further and promote opportunities for developing skills in critically reading, analysing, understanding, evaluating, creating, producing and participating in media. This approach is based on the

perspective of critical thinking and understanding underlined by the critical Media Education and Literacy tradition, according to which a media literate person is capable of using the media, producing their own contents and participating in the communication sphere. Critical awareness is by far the most relevant traditional dimension of media literacy, even considering the importance placed on production/participation owing to the widespread availability of digital media. Our society lives today immersed in a participatory culture paradigm (Jenkins et al., 2006). But are citizens truly facing the media as fundamental tools for participating and are they contributing to enriching the debate in the public sphere? The levels of media participation and production (concepts that we will not discuss here) are very different, and their meanings and impact are also different, depending on whether they are making a “like”, publishing or sharing a photo on a social network or commenting on a particular subject or a news report, for example. Livingstone, Bober and Helsper (2005:289) advocate that “the question of which online activities merit the label of ‘participation’ remains unresolved”. So, what skills should a *producer* have? As stated by García-Ruiz, Ramírez and Rodríguez (2014:16), “a prosumer citizen will possess a set of skills that will allow him or her to perform a series of actions, as a media and audiovisual resource consumer, as a producer and a creator of critical, responsible and creative messages and content”. Broadly speaking, a person with high levels of Media Literacy should be able to do proper “reasoning, inferences, foresights, assessing the probability of different events, reaching a diagnosis based on a set of indicators, etc.” (Perrenoud, 1995:21), when in contact with the media.

## Competences and skills

With the proliferation of digital media, young people have at their disposal a wider range of tools that could lead to frequent production and participation practices. However, some studies (Bird, 2011; Pereira, Pinto and

Moura, 2015; Ofcom, 2017) have shown that the new generations, while being large media consumers, are more restrained in media production, contradicting some public discourses that circulate an idea of a society in which all young people produce content daily and are prodigal in doing so. It is true that today there are more and better means and conditions for production, but these competences are not innate, they must be developed through work that motivates and empowers young people.

Media Literacy competences must be approached in a holistic way, although it is possible to focus on a particular dimension. Competence is here defined as “an ability to address a class of problems” (Perrenoud, 1995:21) by mobilizing different resources, ranging from knowledge to intuition and assumptions, as well as representations of reality and perception, thought and action processes. Therefore, a competence is much more than know-how and more than proper performance, it is “a problem-solving strategy relying on reasoning, inferences, foresights, assessing the probability of different events, reaching a diagnosis based on a set of indicators, etc.” (Perrenoud, 1995:21). And a skill is understood as an element of a competence. Schools and teachers can play the role of developing these competences and skills.

## Production skills

The table below presents a set of production skills identified by the Transmedia Literacy researchers based on the skills mentioned by the adolescents in the empirical work developed in the participant countries. They derive mostly from teenagers’ self-declared practices and explanations about their media uses (performed or not) and are therefore a good starting point for inspiring, encouraging and promoting activities involving production skills that go beyond technical know-how. These skills should not be considered or developed in a decontextualized way, without

considering what they presuppose in terms of the domain of analytical skills, which can be acquired in previous work and/or during the production activities. As media access does not guarantee that the individual knows how to use the media, neither does production guarantee that students are able to understand and analyse the media and the messages they spread. Nor does it suppose that they put into play critical capacities; teens can only reveal a technical know-how. As García-Ruiz and colleagues reported, “the use of machines or technological devices does not guarantee their adequate use, as far as that required to be media proficient” (García-Ruiz et al., 2014:21).

## Irene

13 YEARS OLD - FEMALE  
Spain

*Interviewer: **And what about making a video with photos, how does that work?***

*Irene: Well, you have lots of pictures, for example with a person, and you want to congratulate her. Then you put all those photos together with the music you want, and you can also add a text.*

*Interviewer: **And you send it to that person...?***

*Irene: No, I post it on Instagram.*

The skills presented are used in informal learning environments, but can be exploited and promoted in formal learning contexts. Our goal is to raise awareness of the need to incorporate these skills across *curricula* and to contribute to bridging the gap between in-school and out-of-school teen activities and experiences. Therefore, the following examples are intended to inspire and assist teachers in this transposition from informal to formal, by encouraging them to develop activities that fit the principles and objectives of Media Literacy. This grid has a double advantage: on one hand, it is based on the abilities reported by the teens themselves or that were observed during the fieldwork with them, as stated before; and on the other hand, it is

an international proposal, since it results from crossing results from the participant countries, that is, from different social and cultural contexts. The skills identified can be extended and completed, the categories are not exhaustive. It is important to bear in mind the production dimension and incorporate it into educational practices. The work could be proposed to students working individually or in groups, as part of class projects or other activities that go beyond the classroom. Moreover, it is always possible to link production activities to the topics of different subjects. Production skills, as noted above, must go hand in hand with critical analytical competences, and it is fundamental that students are able to critically discuss and evaluate their own products and the creation process. Jenkins et al. (2006) consider that formal learning is more static and informal learning is more innovative and experimental. The proposal is to bring this innovation to formal education, promoting a more empowered citizenship.

## Michael

14 YEARS OLD - MALE  
Colombia

*Interviewer: **What is essential to achieve a good meme?***

*Michael: Well, it should be funny and understandable because sometimes there are memes that you don't understand, or at least I don't.*

*Interviewer: **Is the meme planned or produced spontaneously?***

*Michael: In the moment, I see the image and the meme occurs to me. Once I tried to invent one because I was not making friends, I was at home, then I wanted to invent one but I couldn't, that was at the time, at school.*

*Interviewer: **How should they be?***

*Michael: Well, let's say, the vignettes, well, too. The vignettes must be nice, good, not blurry but sharp to see the face of the 'man' (in English).*

## Final remarks

The school curriculum provides several opportunities for promoting students' creative expression and active participation. However, in some areas it tends to propose skills that are more connected to technical and technological areas. These are also important, but they need to be complemented and reinforced by the development of communication and cultural skills that encourage teens' civic interests and ensure that their practices as producers and as participants shape ethical standards. When young people are challenged to perform media-production activities and take on the role of media makers, they have the opportunity of actively reflecting on their media-consumption experiences and they learn to recognize that media shape our perceptions of the world, like their own creations do. They also deal with ethical norms as they need "to cope with a complex and diverse social environment online" (Jenkins et al., 2006:15). Education and schools face a huge challenge in preparing students for a demanding digital era and Jenkins says, "everyone involved in preparing young people to go out into the world has valuable contributions to help students acquire the skills necessary for becoming full participants in society" (Jenkins et al., 2006: XIV-XV).

## References

- Bird, S. E. (2011). Are we all prosumers now? Convergence and media audience practices. *Cultural Studies*, 25(4-5): 502-516.
- García-Ruiz, R., Ramírez, A. and Rodríguez, M. M. (2014). Media Literacy Education for a New Prosumer Citizenship. *Comunicar*, XXII(43): 15-23. DOI: <https://doi.org/10.3916/C43-2014-01>
- Gee, J. P. (2010). *Bons videojogos + boa aprendizagem*. Mangualde: Edições Pedagogo.
- Jenkins, H., Purushotma, R., Clinton, K., Weigel, M., and Robison, A. (2006). *Confronting the Challenges of Participatory Culture: Media Education for the 21st Century*. Chicago: The John D. and Catherine McArthur Foundation.
- Livingstone, S., Bober, M. and Helsper, E. (2005). Active participation or just more information? *Information, Communication and Society*, 8(3): 287-314. DOI: <https://doi.org/10.1080/13691180500259103>
- Ofcom (2017). *Children and Parents: Media Use and Attitudes Report*. Retrieved from [https://www.ofcom.org.uk/\\_data/assets/pdf\\_file/0020/108182/children-parents-media-use-attitudes-2017.pdf](https://www.ofcom.org.uk/_data/assets/pdf_file/0020/108182/children-parents-media-use-attitudes-2017.pdf)
- Pereira, S., Pinto, M. and Moura, P. (2015). *Níveis de Literacia Mediática: Estudo Exploratório com Jovens do 12.º ano*. Braga: Centro de Estudos de Comunicação e Sociedade. Available at: [http://www.lasics.uminho.pt/ojs/index.php/cecs\\_ebooks/issue/view/169](http://www.lasics.uminho.pt/ojs/index.php/cecs_ebooks/issue/view/169)
- Perrenoud, P. (1995). Des savoirs aux compétences - De quoi parle-t-on en parlant de compétences? *Pédagogie Collégiale*, 9(1): 20-24.

## Production skills

SKILLS	SPECIFIC SKILLS	DESCRIPTION AND EXAMPLES
<b>To create and modify written productions</b>	To conceive	To find inspiration in others' creations for creating new writing contents. <b>E.g., [Ta]</b> <i>I was just going through the Internet to find some more ideas for stories.</i>
	To plan	To plan and organize the structure, plot, etc. of a text. <b>E.g., [Ws]</b> <i>A working group made a list of the characters they intended to use, the roles the characters would play, and the settings and time when the action would be set.</i>
	To write	To write novels, poems, short stories, school assignments, blog entries, supporting texts to other formats, songs, etc. <b>E.g., [Int]</b> <i>What do you write about?</i> <b>[Ta]</b> <i>Well it depends on how inspired I feel that day, because I'm a night person and it kicks in just before going to bed. Then I take a piece of paper, a pen and I write a story.</i>
	To review	To review personal and others' creations and to suggest improvements or changes. <b>E.g., [Ta]</b> <i>I just reviewed what she was writing.</i>
	To modify	To appropriate someone else's text and make changes to it. <b>E.g., [Ws]</b> <i>Some group members modified the story initially planned by another member.</i>
<b>To use writing software and apps</b>	To use word processors	To know how to use Word (Office), Open Office. <b>E.g., [Int]</b> <i>What software do you use?</i> <b>[Ta]</b> <i>Word or Paint depending on what I wanna do. And that's about it. I used to use Prezi.</i>
	To use blogging and presentation and other writing platforms and apps	To know how to use writing apps and platforms. <b>E.g., [Int]</b> <i>Do you use those to improve your course assignments...</i> <b>[Ta]</b> <i>Yes, for example, when I get assigned some coursework to do, and they say "You can do it with..." like, you have to do it... in PowerPoint, is like... Prezi is better, I like Prezi better because it's more like...</i>
<b>To create and modify audio productions</b>	To conceive	To find inspiration in others' creations for creating new audio contents. <b>E.g., [Ws]</b> <i>Working together, they write lyrics that refer to the typical catchphrases teachers say in class ("Homework, homework...").</i>
	To plan	To plan a story using a script of a recording. <b>E.g., [Ws]</b> <i>The group asks a classmate to make a singing test on their mobile, and then each person makes her own test. Ainhoa offers to look up a theme that makes her voice "prettier". Everyone is listening to themselves singing. In the end, all decide to make a karaoke-like parody of the hit "What does the fox say?"</i>
	To record	To use a sound recorder. <b>E.g., [Int]</b> <i>In the Workshop you used Audacity to make a radio soap opera.</i> <b>[Ta]</b> <i>Yes... This is for the voice, to record stuff, to cut music... Sometimes we make audios for class...</i>
	To edit	To edit a recording using sound editing software. <b>E.g., [Int]</b> <i>In the Workshop you used Audacity to make a radio soap opera.</i> <b>[Ta]</b> <i>Yes... This is for the voice, to record stuff, to cut music... Sometimes we make audios for class...</i>
	To produce a radio show	To find the sources, write, record, and edit a radio show or podcast. <b>E.g., [Ta]</b> <i>There was a subject called Radio and you had to make improvised interviews...</i>

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<b>To create and modify audio productions</b>	To review	To review personal and others' creations and suggest improvements or changes. <b>E.g., [Ws]</b> <i>The group revised their recordings to decide if they had to start over again.</i>
	To modify	To appropriate someone else's audio and make changes to it. <b>E.g., [Ws]</b> <i>One of the girls used an audio software to create a mix tape that she shared on social media.</i>
<b>To use audio recording and editing tools</b>	To use software and apps	To know how to use audio tools. <b>E.g., [Int]</b> <i>In the Workshop you used Audacity to make a radio soap opera.</i> <b>[Ta]</b> <i>Yes... This is for the voice, to record stuff, to cut music... Sometimes we make audios for class...</i>
	To use digital devices	To know how to use a mobile phone to record audios. <b>E.g., [Ws]</b> <i>They don't have any apps for voice editing, so one of the girls just downloads the tune 'What does the fox say?' on her mobile, and then they record the voices using another mobile. The result isn't convincing and so they ask for permission to move to one of the coordinator's PCs, which has working sound, where they play music from YouTube and start singing while they record themselves.</i>
<b>To create and modify drawings and designs</b>	To conceive	To find inspiration in others' creations for creating personal drawings and designs. <b>E.g., [Ws]</b> <i>They are trying to draw a porcupine and looking for some inspiration in a fairy tale book online.</i>
	To plan	To create a comic sketch. <b>E.g., [Ws]</b> <i>The group decides together what images will go in each vignette of the comic they are drawing.</i>
	To design a logo	To make a logo. <b>E.g., [Ta]</b> <i>We created a sort of logo, we put it at the beginning of the video along with music, and then the video started.</i>
	To design graphic art for video pieces	To make a logo for a YouTube channel using design software such as Photoshop or to build virtual objects. <b>E.g., [Int]</b> <i>This software... What was it for?</i> <b>[Ta]</b> <i>Yes, it was for design... Intros and that.</i>
	To draw and paint	To make drawings and paintings. <b>E.g., [Int]</b> <i>Do you draw?</i> <b>[Ta]</b> <i>I do. Now, I'm attending manga classes. I've just signed up. Although, well... It's still pretty basic.</i>
	To review	To review personal and others' creations and to suggest improvements or changes. <b>E.g., [Int]</b> <i>Do you draw?</i> <b>[Ta]</b> <i>I do. Now, I'm attending manga classes. I've just signed up. Although, well... It's still pretty basic.</i> <b>[Int]</b> <i>And how do you draw them?</i> <b>[Ta]</b> <i>Well, I copy them. For example, the other day I made this... It's a face, that's the most basic that I have...</i>
	To modify	To appropriate someone else's drawings or designs and make changes to them. <b>E.g., [Ta]</b> <i>Sometimes when you are bored, you... like, you go to Paint, and take his eyes out from him... You're bored, you draw stuff on him.</i>

## Production skills

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<b>To use drawing and design tools</b>	To use digital tools	To know how to use digital tools. <b>E.g., [Ta]</b> <i>I used Photoshop for... for example, to create a cube's texture, or whatever, so I was just there tweaking it with Photoshop.</i>
	To use analogic tools	To know how to use traditional drawing and painting techniques and tools like watercolour, charcoal drawing, paintbrushes, etc. <b>E.g., [Ta]</b> <i>I used to draw for real. Look, I've got a tattoo over here, I just keep drawing stuff all over my arms.</i> <b>[Int]</b> <i>Have you done that yourself?</i> <b>[Ta]</b> <i>Yes, I was bored.</i>
<b>To create and modify photographic productions</b>	To conceive	To find inspiration in others' creations for taking photos. <b>E.g., [Ta]</b> <i>Look, I follow Tumblr blogs and things like that. They are owned by girls who give loads of ideas on how to make pictures. And well, sometimes you try and say "Oh that's a nice pic", and sometimes you say "This sucks big time".</i>
	To plan	To search for an original landscape to take a photo. <b>E.g., [Int]</b> <i>Do you think out the atmosphere of the picture before you take it?</i> <b>[Ta]</b> <i>Yes, for example, because I have a white wall in my bedroom, I usually take pictures there because lots of photographers choose white walls.</i>
	To take photos	To take a selfie, capture a landscape, carry out a shoot, etc. <b>E.g., [Int]</b> <i>Do you enjoy snapping selfies?</i> <b>[Ta]</b> <i>Yes... (*laughing)</i> <b>[Int]</b> <i>Why do you like selfies?</i> <b>[Ta]</b> <i>Because I look better in selfies.</i>
	To edit	To apply filters, touch up pictures, etc. <b>E.g., [Int]</b> <i>And when you share pictures, do you put a filter on them?</i> <b>[Ta]</b> <i>Yes, I upload them... I put a filter or something like that, a frame, whatever, like in black and white.</i>
	To make collages	To make a photo collage. <b>E.g., [Int]</b> <i>And these collages, do you make them with this app or with Instagram?</i> <b>[Ta]</b> <i>No, with Instagram, with a brand-new one called, let me look [searches mobile] Layout.</i>
	To review	To review own and others' creations and to suggest improvements or changes. <b>E.g., [Ta]</b> <i>Well, I always show the pictures to my mum. For her to say if she likes it or not... I also go to my brother and if he says it sucks and my sister says the contrary... Then, I spend a lot of time thinking about the picture and all that.</i>
	To modify	To appropriate someone else's photos and make changes to them. <b>E.g., [Ws]</b> <i>The boys of the group draw some characters with Paint while the girl googles some images to place them. The idea is to make a comedy comic strip with a porcupine as the main character.</i>



## Production skills

SKILLS	SPECIFIC SKILLS	DESCRIPTION AND EXAMPLES
<b>To use photographic and editing tools</b>	To use cameras	To use cameras (both analogic and digital) such as Polaroid (instant camera), Leica, Reflex camera, etc. <b>E.g., [Ta]</b> <i>I use the camera, a Canon, or the phone camera if I don't have anything else at hand.</i>
	To use software and apps	To use photographic software and apps such as Afterlight, Picsart, Retrica, VSCOCam, Yin, Instagram, Snapchat, Photoshop, Picsart, Phphoto, Layout, Facebook, in-built mobile gallery apps, etc. <b>E.g., [Int]</b> <i>What about the tablet you use to edit photos? What apps have you installed?</i> <b>[Ta]</b> <i>Loads. Afterlight, VSCOCam, Picsart... I have a lot, really.</i>
<b>To create and modify audiovisual productions</b>	To conceive	To find inspiration in others' creations for creating personal videos. <b>E.g., [Ws]</b> <i>The group starts this part of the workshop watching Harry Potter parodies on the phone. They have set out to make a parody.</i>
	To plan	To plan the organization of a video: structure, storyboard, shoots, etc. (either filming or editing). <b>E.g., [Int]</b> <i>Did you write a script first?</i> <b>[Ta]</b> <i>More or less, because we first sketched out a short script with the ideas we wanted, but it wasn't as planned as in the other groups.</i>
	To film	To film images, live action images, gameplays, machinima, etc. <b>E.g., [Int]</b> <i>Is everything ready to film?</i> <b>[Ta]</b> <i>Yes, we have downloaded some apps.</i> <b>[Int]</b> <i>What have you downloaded?</i> <b>[Ta]</b> <i>Action, which is a recorder to capture how we play, and then video editors.</i>
	To direct	To decide the frame composition, to decide when a take is good or should be repeated, etc. <b>E.g., [Ws]</b> <i>This group opts for making a horror film trailer, and shoots it with an iPhone. Alba takes the role of director while Maria and Cristina perform in front of the camera. During the process, Maria mentions that she has taken up theatre as an extracurricular activity and asks the coordinator to leave the classroom to shoot some scenes. Alba looks for the best shot in relation to lightning, and edits the trailer as she films with iMovies, iPhone's built-in videomaking app.</i>
	To edit	To edit footage using an editing software such as, for example, Final Cut Pro X. <b>[Ta]</b> <i>Well, we made a video and we edited with an app we had, and we were cutting them in parts.</i> <b>[Int]</b> <i>What did you use to edit it?</i> <b>[Ta]</b> <i>VivaVideo</i>
	To review	To review personal and others' creations and to suggest improvements or changes. <b>E.g., [Ws]</b> <i>When the group is done with editing, it reviews the video and decides what to change.</i>
	To modify	To appropriate someone else's videos and make changes to them. <b>E.g., [Int]</b> <i>Have you done this before?</i> <b>[Ta]</b> <i>Yes, we took Gangnam Style, changed the lyrics and made a sort of music video.</i>

## Production skills

SKILLS	SPECIFIC SKILLS	DESCRIPTION AND EXAMPLES
<b>To use filming and editing tools</b>	To use software and apps	To know how to use different software and apps like Action, Cinema 4D, Sonyvegas, Snapchat, Phphoto, MovieMaker, Flipagram, iMovie, Instasize, Videoscribe, Vivavideo, Camtasia, Fraps, Dubsmash, Musical.ly, TextAloud, Capto, etc.  <b>E.g., [Int]</b> <i>Did you shoot the images?</i> <b>[Ta]</b> <i>Yes. We filmed it.... And we cut and pasted it.</i> <b>[Int]</b> <i>What app did you use?</i> <b>[Ta]</b> <i>Viva Video.</i>
	To use digital devices	To know how to use digital devices like a mobile phone, capturer, microphone, etc.  <b>E.g., [Int]</b> <i>What do you do when you wanna make a gameplay video?</i> <b>[Ta]</b> <i>I use a computer application.</i> <b>[Int]</b> <i>Which one?</i> <b>[Ta]</b> <i>Action, for example.</i>
<b>To code software and build hardware</b>	To create a website	To create a website both through a template (blog platforms: Wix, Tumblr) or by writing the source code.  <b>E.g., [Int]</b> <i>Which program?</i> <b>[Ta]</b> <i>It's called Wix. It's free... It includes templates and all you want. I love it. The teacher recommended another one, but I don't remember its name.</i>
	To set up a local server	To set up a server port.  <b>E.g., [Int]</b> <i>Where do you have it? In your bedroom?</i> <b>[Ta]</b> <i>No, for example... No, well, I don't have Switch but I do have a server that allows you to, for example, you connect from here, you open a file, save a document, go to your laptop, and you can Access to that very document in there.</i> <b>[Int]</b> <i>So if you set up one, do you have a fourth PC to play?</i> <b>[Ta]</b> <i>Yes, but that PC will be for playing, but if I try to play a game in this PC, it literally crashes.</i>
	To build a computer	To buy the computer components in pieces and put them together.  <b>E.g., [Ta]</b> <i>The thing that I'd like to do the most now is... My product, to buy the components, the peripherals...</i> <b>[Int]</b> <i>Where do you get them?</i> <b>[Ta]</b> <i>At PC Componentes [a popular Spanish tech website] A gaming computer. And there you buy the motherboard, the compressor, the diversor, the thermic paste, and the rest of the things.</i>
<b>To modify software and hardware</b>	To change a DVD zone	To change the settings of a DVD to watch movies from other zones, or play videogames.  <b>E.g., [Int]</b> <i>Can you hack a DVD reader according to regions and videogames, too?</i> <b>[Ta]</b> <i>Yep. There's also a way for videogames.</i>
	To format a PC	To reset a PC back to its original state.  <b>E.g., [Ta]</b> <i>Well, formatting can be tricky... For example, these days I have a programme for Windows for which I have all the keys. No licences, I can set Windows up back to its original state, something that can cost you 70 bucks, but I do it for free.</i>
	To manipulate TV decoders	To unblock TV settings to watch pay-per-view content for free.  <b>E.g., [Int]</b> <i>For example?</i> <b>[Ta]</b> <i>For example, you have a channel decoder. I can enter codes to watch Canal+ and other sports channels for free.</i>

## Production skills

SKILLS	SPECIFIC SKILLS	DESCRIPTION AND EXAMPLES
<b>To modify software and hardware</b>	To manipulate WiFi networks	To unblock a WiFi password and prevent the owner from accessing their own network. <b>E.g., [Ta]</b> <i>WiFi is so easy, really.</i> <b>[Int]</b> <i>So you were saying you can enter a network without a password</i> <b>[Ta]</b> <i>Yes, because there's an international IP address, because all routers have an address. If you know the router address then you can do whatever you want. You can change up data, the speed, you can even know the phone number that IP is attached to, how many people you are calling, you can control routers at your whim... You can do everything. But, for example, the computers at school have a well-protected server.</i>
<b>To use coding and ICT tools</b>	To use a remote access	To use AnyDesk to access a computer from another one. <b>E.g., [Ta]</b> <i>There's also a software for... Well, I know how to use it and you can control your PC at home with a phone.</i>
	To perform order commands	To know useful shortcuts to perform system processes. <b>E.g., [Ta]</b> <i>Thanks to this order command you can... For example, if you have a closed session... Before working on your PC, you have to start your session. Let's say one day you forget your password which can be a common mistake. So thanks to this order command and the operating system...you can restore the password for the operating system. It's like re-installing the operating system, put it on repair mode, and then you start writing some protocols.</i>
	To use programming languages	To know how to use programming languages like Java, Ruby, etc. <b>E.g., [Ta]</b> <i>But now I'd like to know more about the ascendant language, Javascript.</i>
<b>To create and modify videogames</b>	To conceive	To find inspiration in others' creations and think of suggestions for future and more interesting videogames. <b>E.g., [Ws]</b> <i>The group members constantly go to YouTube to find ideas on how to improve their skills in Minecraft.</i>
	To plan	To think up the concept and rules of a videogame and make strategic decisions to produce content. <b>E.g., [Ws]</b> <i>The group debates the features they would include in their ideal videogame.</i>
	To code	To write up the code source of a videogame. <b>E.g., [Int]</b> <i>And you were never into videogames?</i> <b>[Ta]</b> <i>Videogames... I'm in the process of learning.</i> <b>[Int]</b> <i>Is there a software for programming videogames, something simple?</i> <b>[Ta]</b> <i>Yes, Scratch.</i>
	To design graphics and characters	To draw and build landscapes and characters. <b>E.g., [Int]</b> <i>And you were never into videogames?</i> <b>[Ta]</b> <i>Videogames... I'm in the process of learning.</i> <b>[Int]</b> <i>Is there a software for programming videogames, something simple?</i> <b>[Ta]</b> <i>Yes, Scratch.</i>
	To review	To review personal and others' creations and to suggest improvements or changes. <b>E.g., [Ta]</b> <i>My brother didn't like the character I had created, he thought the clothes I used were too stereotyped.</i>

## Production skills

SKILLS	SPECIFIC SKILLS	DESCRIPTION AND EXAMPLES
<b>To create and modify videogames</b>	To 'mod' a videogame code or a console	To change the source code of a videogame to introduce new landscapes or features or to change the external appearance of a game console.  <b>E.g., [Ta]</b> <i>Well, to create a mod you have to... customise everything, for example, you have to add your own texture, you have to add colours... You gotta customize all the blocks in Minecraft, all of them.</i>
	To hack a videogame or a console	To manipulate a videogame or a console deeply so it provides more perks than those legally intended (e.g., to make a PlayStation 3 console reproduce games designed for a previous console such as PlayStation 2 and older devices), to unblock pay-per-play features or contents in order to play them for free.  <b>E.g., [Int]</b> <i>And how did you hack a PsP?</i> <b>[Ta]</b> <i>My mum was looking at some YouTube videos and typed in "How to hack a PsP?"</i> <b>[Int]</b> <i>Your mum?</i> <b>[Ta]</b> <i>Yes, my mum helps me.</i>
<b>To use tools for videogame creation and modification</b>	To use coding and graphic software	To know how to use coding and graphic software like Scratch, Photoshop, etc.  <b>E.g., [Int]</b> <i>And you were never into videogames?</i> <b>[Ta]</b> <i>Videogames... I'm in the process of learning.</i> <b>[Int]</b> <i>Is there any software for coding videogames?</i> <b>[Ta]</b> <i>Yes, Scratch.</i>
<b>To create cosplay and costumes</b>	To conceive	To find inspiration in others' costumes.  <b>E.g., [Ws]</b> <i>A boy from one of the workshops explains that he is searching the Internet for ideas to make a costume to attend the Manga Salon with his girlfriend.</i>
	To plan	To select the characters to cosplay and the materials to create the costume.  <b>E.g., [Ws]</b> <i>The boy says that he isn't sure about what costume he will be wearing but it'll be anime for sure.</i>
	To design and produce costumes	To design and sew a costume.  <b>E.g., [Ws]</b> <i>They will make the costumes themselves.</i>
	To review	To review personal and others' creations and suggest improvements or changes.  <b>E.g., [Ws]</b> <i>They make the costume and the changes they consider convenient.</i>