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# GiLE Journal of Skills Development

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## Are young graduates ready for the job market of the future? The study of the Italian case

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### Abstract

The current paper presents the Italian results of the Project Erasmus + “21<sup>st</sup> Century Skills: Changing the Approach to Teaching in Higher Education” funded by the European Commission. The paper is aimed at presenting the work of Smarthink Ltd, as project partner, providing definitions, current research, and the best practices for teaching the ‘so-called’ soft skills among university students and fresh graduates in Italy, and to understand the employers’ perception of the owned and desired competencies among young employees. The study design was twofold. Firstly, desk research where major documents, national and international, were collected on the topic in Italy, and secondly, market research where a sample of entrepreneurs was interviewed in order to gather additional information on the level of development of these skills among young graduates and employees. Findings revealed that in Italy 21<sup>st</sup> Century Skills developed by young graduates are still few and that there are only a few examples of best practices to develop these competencies at the university level. In addition, employers testified that, while young graduates are usually well prepared in terms of the level of knowledge acquired during their studies, on the other side, they regularly lack practical skills and soft skills required by the marketplace. In conclusion, there is a broad and general need in Italy to improve these skills in order to make young people more employable, giving priority to skills such as critical thinking, collaboration, and self-direction. For this reason, the role of institutions like universities becomes crucial in order to reach this goal.

**Keywords:** 21<sup>st</sup> century skills, soft skills, higher education, young graduates, employees, employers

### 1. Introduction

The main purpose of this paper was to provide an outlook on the current situation regarding 21<sup>st</sup> Century Skills in Italy and its further development in the years to come since there is a

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paucity of literature regarding the development of these skills in the country. The initial part of this work aimed to analyse the actual competitive landscape in the country, with special attention to key definitions and main contributions made by local and governmental authorities with “skills-related” projects and researchers. In the paper are reported several Italian best practices concerning 21st Century Skills; this section serves as an introduction for obtaining a general overview, and it will be followed by a market research study. This work was particularly important because it enables the reader to understand what is the current state of the art in Italy in relation to the development of soft skills while adding perspectives from representatives of both the university and the corporate world. The second part of the study presented additional reflections that emerged during the interviews carried out online and face-to-face, together with possible limitations. In the light of the above, our aim was to identify the skills perceived as key for recruiters and academicians, so as to figure out if and how students were able to meet these expectations and what could eventually be done in order to reach this goal. The two key research questions of the study were:

- 1) What competencies and skills do business representatives seek for hiring university graduates? Why?
- 2) Which qualifications should the university's graduates have in order to meet the needs of the labour market? Why?

In an attempt to respond to these research questions, we highlighted the differences between soft and hard skills, taking into account that sometimes they were equally requested from recent graduates. Also, ideas coming from the digital evolution are discussed.

## **2. Review of the current situation in Italy concerning the development 21st Century Skills: The state of the art**

Before discussing the topic of 21st Century Skills, it is important to give a broad definition of them, considering that, in this report, they will also be referred to as soft skills, or the so-called transversal skills, required today across different subjects and disciplines in order to become market-ready.

OECD (2018a) report discusses 21st Century Skills in these terms:

“Learning to form clear and purposeful goals, work with others with different perspectives, find untapped opportunities and identify multiple solutions to big problems will be essential in the coming years. Education needs to aim to do more than prepare young people for the world of work; it needs to equip students with the skills they need to become active, responsible, and engaged citizens” (p. 4).

More in detail, the organization identifies the skills of the future as follows:

“Students will need to apply their knowledge in unknown and evolving circumstances. For this, they will need a broad range of skills, including cognitive and meta-cognitive skills (e.g. critical thinking, creative thinking, learning to learn and self-regulation); social and emotional skills (e.g. empathy, self-efficacy and collaboration); and practical and physical skills (e.g. using new information and communication technology devices)” (p. 5).

With reference to the topic of 21st Century Skills and soft skills in general, Italy has introduced a series of challenging reforms to improve the performance and responsiveness of the labour market. These interventions are also aimed at improving the capacity of the education system to develop and identify students’ skills while encouraging individuals to grow skills beyond

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school. In addition, recent reforms that promote innovation and digitalization are part of a long-term view that includes the development and improvement of skills policies that respond to the unique national and regional conditions of the country. In the case of Italy, various stakeholders, such as universities, are interested in the topic of soft skills development as they play an important role in this sector and sometimes offer targeted training (Cinque, 2016).

The Ministry of Education, University and Research (Ministero dell'Istruzione, dell'Università e della Ricerca, MIUR) allocates funds to schools and universities and is responsible for the governance of the education system by setting nationwide minimum standards and central principles. Part of the responsibility for education is shared between the central government and regions, but the majority of schooling decisions in lower secondary education are taken at the central and school levels (OECD, 2017a). From a general point of view, Italy's education spending for improving education itself has risen in recent years. In fact, according to the OECD, the education spending as a share of total government spending in Italy is around 22 per cent (Di Matteo, 2019).

On the other side, Italy's poor skills performance has contributed to its economic slowdown. Skill mismatch is a pervasive phenomenon in Italy and it emerges when workers are over-skilled for their current jobs because they are not ready to fully use the abilities required for their tasks, or when they result as underskilled (OECD, 2017b).

The OECD Survey of Adult Skills (PIAAC), is a useful tool to measure adults' proficiency in processing skills and to gather information and data on how adults use their skills at home and at work. It gives proof that Italian workers have below-average levels of cognitive skills and are less inclined to use certain cognitive skills that are significant drivers of workers' and companies' performance. (OECD, 2018b). The same report outlines that around 12 per cent of Italian workers are over-skilled, and 8 per cent are underskilled. These inadequacies are found even among university graduates.

In countries with the highest youth unemployment rate, skill gaps can be considered as one of the main reasons for causing this issue. Indeed, it should be taken into consideration that if students are not gaining the skills that employers are seeking, it is because the three players (students, employers, and educators) are not collaborating in the right way to achieve a common goal. In this scenario, the MIUR supports resumes that depend on results in terms of learning and evidence since they sustain four key skills: namely social and civic competencies, learning how to learn, the spirit of initiative and entrepreneurship (MIUR, n.d.).

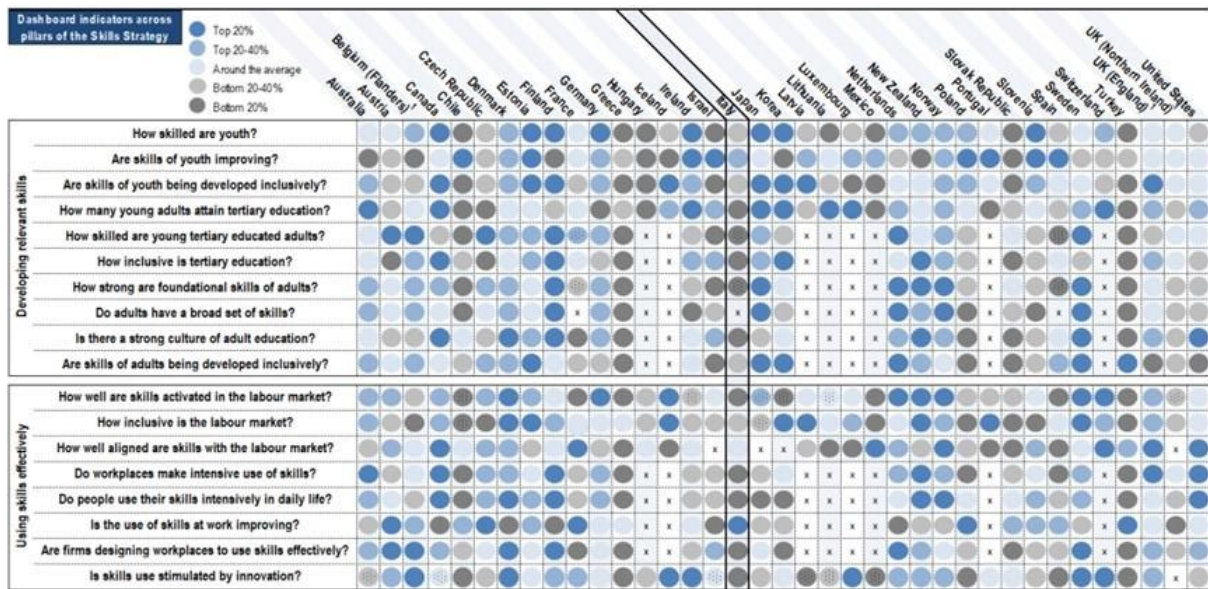
Furthermore, university students, as shown in a series of surveys conducted within different countries, among which Italy, consider their degree not successful enough to meet the current labour market needs (Ricchiardi & Emanuel, 2019). To confirm this, in the OECD (2019) National Skills Strategy Diagnostic Report - Italy underlies that, despite the growth in employment rates and productivity, these levels have not reached the desired values yet.

Finally, the OECD (2019) recognizes that Italy has presented an ambitious plan aimed at sustaining the economic growth with the contribution of an adequate level of competencies: the so-called Industry 4.0 Plan is intervening in every aspect of the digital transformation (MIUR, 2017) and it represents an opportunity for becoming market-ready and for creating a competitive network.

The newly developed PNRR document, which is an acronym for National Recovery and Resilience Plan (Piano Nazionale di Ripresa e Resilienza), and part of the Next Generation EU program (NGEU) launched in July 2020 during the COVID-19 Pandemic. A central role in this paper is played by competencies, conceived as a crucial objective to be reached by the plan and

a strategic asset to rely on in the near future. Civil servants' soft and digital skills will be at the core of the innovation, with the need to develop an integrated platform for recruiting purposes and the aim of enhancing each individual's abilities and professional career (Sismondi, 2021).

FIGURE 1. OECD SKILLS STRATEGY DASHBOARD:  
SUMMARY INDICATORS OF SKILLS PERFORMANCE



Source: OECD (2019)

Shifting back to the OECD report, the figure reported above shows the summary indicators of skills performance adopted by OECD (2019). Reflecting on the Italian data, it is evident that the majority of the indicators are marked by a bottom level of around 20-40 per cent, with an exception for the values corresponding to the parameter connected to the increasing use of skills in the workplace and the improvement of skills among youngsters. Some other indicators are just around the average compared to the rest of the European countries, such as those related to the skills alignment with the labour market. Hence skills performance indicators for Italy are still very low.

### 3. Summary of key research conducted at a national level concerning 21st Century Skills development

According to the research conducted at a national level on 21st Century Skills, university professors and experts had previously deepened the topic and had also contributed by adding their perspectives.

One main example is 'Earnings Inequality and Workers' Skills In Italy' (OECD, 2019), a study focused mainly on discovering whether the rise in earnings inequality could be linked to education and skills development. Several previous studies started from the idea that the increase in inequality is a consequence of the processes that occur in the labour market, leading to a decrease in skills development.

To reach their objective and better understand the role of education as a driver of earnings inequality, researchers divided workers into three subgroups according to their highest



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educational accomplishment, and then they measured the relative size of inequality within the three educational groups.

Finally, the researchers reported that increasing wage inequality in Italy over the last two decades depends on higher skill-premia only to a very limited extent. To reach this conclusion, they considered the influence of several variables able to capture non-observable skills, the return to education and the share of wage inequality.

An additional study that should be reported is ‘Getting Skills Right: Italy’ (OECD, 2017c). In addition to a general view on the topic of soft skills and skill mismatches, the study introduces the role of ANPAL, the national agency for Active Labour Market Policies (ALMPs), which constituted a major change in the Italian approach to labour market challenges. Together with other initiatives, ANPAL was set to assist schools and help students find suitable work-based learning opportunities. The ANPAL has been designed to provide renewed incentives and support for the unemployed to retrain and upskill in order to meet the needs of the marketplace.

Another important research of the OECD that is focused on the Italian situation regarding employability and soft skills is the ‘Skills Strategy Diagnostic Report’ (OECD, 2017d), a project produced from the collaborative effort of the OECD and the Government of Italy, with the support of the European Commission. The central theme of this report is the creation of the right skills to help countries improve their economic prosperity and social cohesion; the main observation is that, in order to achieve these results, the skills systems need to be strengthened.

The last publication that should be taken into consideration at this stage is the work of Zanazzi (2018). The article aims to describe the situation of low-educated and low-skilled workers in Italy and the impact of the economic crisis on this particularly vulnerable group. The most important outcome of the research report is that lifelong learning, as well as active labour market policies, should be a priority in Italy, where educational attainment is comparatively very low and the labour market extremely inefficient.

#### **4. Best practice in Italy on 21st Century Skills development**

In this part of the paper, a series of projects are presented, which are implemented in Italy concerning the topic of 21st Century skills, especially at the educational level.

From a national perspective, in the secondary school sector, the ‘Good School Reform’ (MIUR, 2018) contains several actions aimed at improving skills results, implementing school management practices, recognising the important role of teachers, and dealing successfully with students’ transition from school to work. The reform introduces the ‘National Plan for Digital Education’ which is a pillar that includes an operative governmental perspective with reference to the key innovation challenges in the public sector.

Another important component of the reform is the *AlternanzaScuolaLavoro* (ASL) (OECD, 2018b): this project has the main objective of introducing several measures in order to make traineeships mandatory during the last three years of upper secondary education; this will also be considered as a prerequisite for students’ admission to the secondary school leaving examinations. Implementing these actions requires the reinforcement of trust and dialogue between these players and may be able to strengthen incentives for education providers.

‘Making Learning and Thinking Visible in Italian Secondary Schools’ (INDIRE, n.d.) is a project created by Harvard Project Zero and INDIRE (Istituto Nazionale di Documentazione, Innovazione e RicercaEducativa) with the aim of experimenting a new way of teaching in Italian secondary schools. These two institutions cooperated to create a new educational and

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innovative model able to enhance competencies and abilities such as critical, creative, and decisional thinking.

In the university sector, a set of measures have been taken to improve the scenario both within private and public universities. One example is the Bicocca University in Milan which created two projects called iBicocca and BBetween, aimed at helping their students to develop entrepreneurial and soft skills respectively.

Another best practice that should be taken into consideration, is the active role of METID (Methods and Innovative Technologies for Learning), a university department located at the Politecnico University in Milan that started a few national and international projects to foster innovation and employability through MOOCs.

A good project example in which METID is involved is the European project ‘eLene4work’ (METID, n.d.), created with the objective of helping students and young entrepreneurs to develop transversal competencies and soft skills required by the labour market and helping companies to exploit the digital talents of their young workers.

The “Didattica per competenze” (De Santis et al. 2019) (“Competency-based” learning and teaching) project, activated at the University of Modena and Reggio Emilia, was a three-year project started in 2016 with the idea that it was necessary to rethink the teaching strategies to influence the development of soft skills among students successfully. The project began with the training of professors and tutors who were asked to select the key skills and the most suitable teaching methodology for redesigning the structure of their own courses.

Moreover, in some Italian universities, parallel curricula regarding the process of learning soft skills have been created as part of the university education. For example, at the Insubria University in Varese, a curriculum called “Competenzedigitali e Soft skills” (Digital competencies and Soft Skills) has been introduced in parallel to the most traditional plan of studies among the third-year students (Università degli Studi dell’Insubria (2021).

Some other universities have created special departments focused on the role of soft skills, and one best practice in this field is the “Competency Centre” founded by Ca’ Foscari University in Venice, with the mission of conducting research, training and consulting activities in the area for the development and assessment of behavioural competencies (Cà Foscari University of Venice, n.d.).

In conclusion, several studies discussed above demonstrate how Italy still lacks key skills for its future workforce, at secondary school and university levels. However, some interesting initiatives like those promoted by MIUR addressing the Digital Transformation 4.0 in schools and by some other local universities as discussed above, reveal that some concrete actions are taking place in order to address this important need. A significant aspect to remember is that Italian workers are considered to have below-average levels of cognitive skills and are less inclined to use certain cognitive skills that are significant drivers of workers’ and companies’ performance (OECD, 2018), and this constitutes a challenge that our study may partially attempt to address.

## **5. The research study**

One of the reasons for the existence of universities is to train qualified personnel needed by the job market. For this reason, the question of whether universities can educate or actually educate graduates with the qualifications required by the marketplace is crucial. When examining the literature, it was evident that studies able to answer this question were not sufficient, and this situation creates a gap at the Italian level. Therefore, the aim of this study is to fill this gap

partially. It is clear that in order to answer this question, we need to learn the perspective of both academics and employers. In other words, to hear their voices. This study aims to understand the 21st-century proficiency levels of university graduates also through business representatives and faculty members in Italy. More specifically, it seeks to answer the following questions:

1. What competencies and skills do business representatives seek when hiring university graduates? Why?
2. Which qualifications should the university's graduate students have to meet the needs of the labour market? Why?

## 6. Methods

The qualitative research method was used to answer the two previous research questions. For this purpose, semi-structured interviews were conducted with specific individuals coming mainly from companies and with one view only coming from the academic world.

### 6.1. Participants

In relation to Italy, the sample of participants was composed of five Human Resources Managers or CEOs of companies located in Italy and one Researcher/Academician. In total, there were four males and two females in the selected sample; detailed information about demographic variables is given in Table 1.

TABLE 1. DEMOGRAPHIC INFORMATION ABOUT RESEARCH PARTICIPANTS

|                                     | P1                                    | P2                           | P3                | P4       | P5                                | P6   |
|-------------------------------------|---------------------------------------|------------------------------|-------------------|----------|-----------------------------------|--|
| <b>Gender</b>                       | Male                                  | Male                         | Male              | Female   | Female                            | Male   |
| <b>Role</b>                         | CEO                                   | CEO                          | CEO               | CEO      | HR manager                        | Researcher/<br>Academician   |
| <b>Field</b>                        | Commercialisation of air-conditioning | Commercialisation of glasses | Funerary services | Textile  | Search and selection of personnel | Didactic innovation and e-learning in Academic/Research institutions |
| <b>Sector/University experience</b> | 27 years                              | 20 years                     | 30 years          | 40 years | 27 years                          | 15 years   |
| <b>Nationality</b>                  | Italian                               | Italian                      | Italian           | Italian  | Italian                           | Italian  |

Source: Own compilation, based on personal interviews (2020)

The age of participants ranged from 32 to 60 years, and the work experience of respondents from the business sector varied between 6 years and 33 years.

## 6.2. Data collection tool and process

Data were collected through semi-structured interviews piloted and agreed upon among the project partners. Two interview protocols were developed: the first one was used for HR managers and company CEOs, and the other one for Academicians. Before starting the interview, participants were sent an “Informed Consent Form” that they had to sign in order to agree for the interview to take place. All our interviews took place online via Skype, and consent forms were received in advance. Only one interview with the HR manager was held face-to-face.

Research participants were selected randomly from some known companies. The interviews lasted approximately 30-50 minutes for each participant. Semi-structured interviews contained both a set of initial demographic questions and then 10 (for academicians) to 14 open-ended questions (for HR managers and CEOs). For confidentiality reasons, codes such as P1 and P2 were assigned to each participant.

## 6.3. Data analysis

The thematic analysis approach (Alhojailan, 2012) has been used to capture key themes and concepts from the interview. Sub-themes were extracted from codes, and they were collated into different themes based on similarities and differences among them.

During the interview, notes were taken and transcribed immediately into the interview protocol. The interviewer summarized the answer to the respondent in order to make sure the concept was clear and approved by both parties.

## 7. Findings

### 7.1. The results of thematic analysis

The thematic analysis of the interviews with CEOs, HR managers, and one research/academician showed different types of results. Considering the academician, we have identified three main themes, namely the introduction of micro-credentials in the university context, the increasing importance of ICT skills, and the growing connection between soft and digital skills. On the other side, the five interviews with CEOs and HR managers showed key themes such as soft skills, deepness & passion, and academic practicality. Table 2 groups the results of the overall thematic analysis.

TABLE 2. THEMES RESULTED FROM THE QUALITATIVE INTERVIEWS OF ACADEMICIANS AND CEO/HR MANAGERS

| MAIN THEMES<br>From<br>Researcher/Academician | MAIN THEMES<br>From CEO/HR Managers | SUB-THEMES  |
|---|-------------------------------------|---|
| University Micro<br>Credentials               | Soft Skills                         | Communication, Listening,<br>Critical thinking, Teamwork,<br>Self Direction |
| ICT Skills                                    | Deepness & Passion                  | /   |
| Soft Skills/Digital Skills                    | Academic Practicality               | /   |

Source: Own compilation, based on personal interviews (2020)



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## 7.2. Researcher/Academician's themes

We decided to create different sections for the analysis of themes that emerged from various types of interviews, especially between Researcher/Academician and CEO/HR manager; this is mainly because we only had the chance to interview one Academician and this contribution cannot be considered so representative of the overall Italian Academicians sample. In this section, the themes that emerged during the Researcher/Academician's interview are described.

### 7.2.1. University micro-credentials

The first theme that emerged from the interview with the researcher was university micro-credentials. Basically, micro-credentials (Deaking, 2017) are considered as a system coming mainly from US and Australia that tends to issue credits or credentials to an individual based on the competencies matured rather than on knowledge acquired in the university context (CBEN, 2018). Micro-credentials are also defined as:

“Mini-qualifications that demonstrate skills, knowledge, and/or experience in a given subject area or capability.” (Deakin, 2017, Online).

The researcher explains how universities can create training through micro-credentials that could be recognized afterwards as a formal pathway for students, although this has not been fully implemented yet in the Italian context.

This possible journey can help the student build the necessary skills and competencies required by the marketplace while attending more formal university training. An example of this project is the European MOOC Consortium (EMC; n.d.), from Holland, where they are trying to connect the European Qualification Framework together with the European Vocational one in order to create an overall new credentialing framework.

### 7.2.2. ICT skills

This is the second theme that emerged from the interview. What emerged from the discussion was that technical and ICT skills were the key ones for students to own for their first approach to the job market. Usually, their graduates have these skills, and they easily find a job because of them. 100% of graduates from this institution, especially engineers, find a job while they are still enrolled at the university. In Italy, the request for these graduates is higher than the number of graduates currently available on the market, and these graduates are normally employed whatever degree of soft skills they may have in comparison with the ICT ones.

### 7.2.3. Soft skills/digital skills

What employers value very much is the fact that graduates also own important soft skills, and Table 3 explains what they are and how they are important for the marketplace. We will explore the table further later on.

The researcher highlights how soft skills are today combined with the digital ones, especially those related to “being able to communicate in a chat”, or “on social network” for example. Hence soft skills are also defined here as those skills that allow you to use ICT and digital competencies in alignment with the company's needs. For example, Politecnico University is organizing MOOCs on soft and digital skills called POK (POK, n.d.) for both students accessing and leaving courses. Coursera is another example of an institution providing short courses to students as micro-credentials, for developing specific competences, in order to find a job.

The researcher reported how companies see young graduates have some difficulties to move from theory to practice so they rely very much on knowledge rather than on skills while accessing the marketplace. Another important point made by the researcher was that while in the university environment we tend to emphasize teamwork skills, inside the company it usually

prevails the individual performance. As a result, graduates tend to forget the added value of any teamwork activity. In addition, one project reported at the university level in Italy is Elene4Life (Elene4Life, n.d.), aimed at developing students' soft skills through teachers' training, being a project funded by European Commission with an Erasmus + action.

The key point here is mainly how digital skills are becoming crucial nowadays if connected with the soft ones since while the former tend to become obsolete quite quickly, the latter remains a key pillar of the performance of workers in the marketplace. In addition, at the university level, the initial introduction of micro-credential can become a new and important incentive for young graduates to undertake future skills development.

#### 7.2.4. The soft skills level rating

In one of the interview questions, participants were asked to rate from 1 to 10 in order of importance the 21st Century Skills presented and coming mainly from OECD's work on soft skills (OECD, 2018a). Table 3 shows the researcher's ratings of 21st Century Skills.

TABLE 3. THE RESEARCH/ACADEMICIAN RATINGS OF 21ST CENTURY SKILLS IN TERMS OF THEIR IMPORTANCE FOR THE MARKETPLACE

| 21st Century Skills list                | Human Resources managers from different sectors |   |   |   |   |   |   |   |   |    |
|---|---|---|---|---|---|---|---|---|---|----|
|   | 1   | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Critical Thinking                       |   |   |   |   |   |   |   |   | X |    |
| Collaboration                           |   |   |   |   |   |   |   |   | X |    |
| Communication                           |   |   |   |   |   |   |   |   | X |    |
| Creativity and Innovation               |   |   |   |   |   |   |   |   | X |    |
| Self-Direction                          |   |   |   |   |   |   |   |   | X |    |
| Making Global and Local Connections     |   |   |   |   |   |   |   |   | X |    |
| Using Technology as a Tool for Learning |   |   |   |   |   |   |   |   | X |    |

Source: Own compilation, based on personal interviews (2020)

Table 3 highlights how the researcher interviewed rated all the 7 given skills as important with a value corresponding to 9, where 1 is a very low level of importance and 10 is the maximum one. He already described his perspective on technical and soft skills as explained in the above section, but he provided the same overall degree of importance to all the listed 21st Century Skills.

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### 7.3. CEO/HR Managers themes

In this subsection, we will describe the themes that emerged from the CEO/HR Managers' interviews, and we will discuss these themes one by one.

One of the key questions of the interview is "What were the most important skills required by companies today". Answers were different and varied. Companies' CEOs reported several times that this depended very much on the professional role the candidate had to cover. However, we identified the following key skills for companies that can be defined as soft skills, based on the definitions already provided in the sections above.

#### 7.3.1. Communication

In this case, communication is considered not only the capacity to well explain something to someone but as the skill that helps individuals to enter into a constructive relationship with somebody else. This skill has been cited by nearly all the interviewees. It is a key skill when workers are selling something for example or supporting their customers for a specific service. Communication is also related to being able to properly communicate what they are selling because this is a way to understand customers' needs. This connects with critical thinking and listening skills as well, since companies are able to communicate with their customers in a good way only when they properly listen to them and they understand what customers' needs are while using a critical approach. This quotation from P3 is interesting:

*"It is hard for them (young graduates) to deal with people, they are not able to understand the particular moment people are facing and they deal with people with detachment. Instead, they need to understand the moment people are facing, they need to be able to learn how to communicate inside a relationship with them". (P3)*

and P1:

*"The individual should be prepared in relation to the product he/she has to sell, however it is also important to know how to face the market and how to deal with it, he/she needs to pay attention...he/she needs to be able to communicate and he/she needs to well know what he/she is going to sell...he/she should have also some critical thinking skill in order to make a customer buy the product." (P1)*

#### 7.3.2. Listening

Listening is another key soft skill that emerged during the interview, cited by P4 mainly. They identify this skill as the capacity to understand others better in order to establish a relationship with them. Without listening, it is hard to be able to get into a relationship with others and understand what they want. Listening is intended here also as the "pay attention" action to the other individual.

#### 7.3.3. Teamwork

P4 also reported how teamwork is another key skill required by companies today. Teamwork is defined as the skill of being able to work together as a team with colleagues and accomplish tasks together.

#### 7.3.4. Self-Direction

Self-direction as being able to carry out our tasks and activities in an autonomous way is a key skill for P5:

*"Being able to work in an autonomous and self-directed way, having initiative, taking our own responsibilities, having more and more autonomy... solve problems is key because in this way the entrepreneur has to solve less and fewer problems" (P5).*

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Self-Direction also implies for P5, being able to adapt oneself according to the market needs and changes.

#### 7.3.5. Critical thinking

This is a key skill highlighted mainly by P3, and it is defined as the capacity to think in a different way in order to solve a problem and in order to understand customers' needs.

#### 7.3.6. Deepness & passion

Deepness has been cited mainly by P4. It is defined as the skill of being able to go deeper into things rather than remaining on their surface, and this relates both to personal and professional life. Especially participant 4 described how young graduates lack the capacity to go deeply into things and how at the same time, they are not fully aware of this.

*“Lack of the capacity of going deeply into things, they tend to use a surface approach to work; they tend to give to work less commitment than required, they start already with a less level of commitment than the one required by the company itself. They tend to give the same value to both professional and spare time commitments while the working life usually requires more time and efforts than the extra-work life” (P4).*

Passion is also another important trait sought by employers in young graduates, but it is usually something they lack about. Here, passion is intended as the passion for our work and for what we do. Both P4 and P2 named this as an important trait of young graduates and that's the reason why often young people around 28 years old with some kind of professional experience, are preferred instead of older ones.

#### 7.3.7. Academic practicality

All respondents agreed that universities should provide more “practical” training to young graduates because they know many things, but they do not know how a company works, how to do some tasks in concrete, where to find things, and so on. Nearly all of the CEOs of the companies we have interviewed started with basic roles and tasks in the company, and they have learned to do anything in the same company years after years. This helped them afterward to better understand how a company works and how to accomplish all its tasks. *“When graduates arrive in the company from university, they are completely outside the market place and they really do not have any idea of how the work works in general terms, the individual is not professionally prepared” (P1).*

P3 added that: *“Universities have a key role today in preparing graduates on the practical aspects...young graduates today are not able to learn what they are doing, they need somebody who has to tell them what they need to do...” (P3).*

P4 provided an interesting perspective stating how the practical university stage should help young graduates to identify their real and key skills. Moreover, the key University role should be the one of “Educere” to promote these skills among young people so that they can become fully aware of them.

An interesting suggestion for universities also came from P2:

*“In Italy, we are not able to create a good bridge between universities and companies, we need to exchange more information between the twos, we need graduates to spend more time inside the company, on the ground, in order to fully understand the workplace experience” (P2).*

TABLE 4. THE CEOs AND HR MANAGERS RATINGS OF 21ST CENTURY SKILLS  
IN TERMS OF THEIR IMPORTANCE FOR RECRUITMENT

| 21st Century Skill List                 | CEO and HR from different companies |    |    |    |    | Mean | Order of importance |
|---|-------------------------------------|----|----|----|----|------|---------------------|
|   | P1                                  | P2 | P3 | P4 | P5 |      |                     |
| Critical Thinking                       | 8                                   | 10 | 8  | 10 | 9  | 9    | 1                   |
| Collaboration                           | 10                                  | 9  | 8  | 10 | 8  | 9    | 1                   |
| Communication                           | 8                                   | 7  | 10 | 10 | 7  | 8.4  | 4                   |
| Creativity and Innovation               | 9                                   | 6  | 7  | 10 | 7  | 7.8  | 5                   |
| Self-Direction                          | 6                                   | 10 | 8  | 10 | 10 | 8.8  | 2                   |
| Making Global and Local Connections     | 8                                   | 9  | 3  | 1  | 8  | 5.8  | 6                   |
| Using Technology as a Tool for Learning | 10                                  | 10 | 7  | 7  | 9  | 8.6  | 3                   |

Source: Own compilation, based on personal interviews (2020)

Table 4 displays the interviewed CEOs and HR Managers' ratings of 21st Century Skills in terms of their importance for recruitment. As shown in this table, critical thinking and collaboration were highlighted as essential skills. They were followed by Self-Direction. The third position was occupied by Using Technology as a Tool for Learning. Similarly, the fourth position was for Communication. These were followed by Creativity and Innovation and by Making Global and Local Connections, which were the fifth and sixth skills, respectively, on the list. From this analysis, it is important to note that, although the communication skill has been cited by several interviewees, it was not marked by a high value in the grid since the mean was approximately 8.4 in contrast with means equal to 9, 8.8, or 8.6 associated to other skills.

### 7.3.7. Critical thinking

As seen in Table 4, critical thinking skill has one of the highest mean scores, with a value corresponding to 9 out of 10; indeed, from the results collected, all of the interviewees attributed high importance to this skill. Critical thinking can be defined as the ability to analyze complex problems, investigate questions for which there are no clear-cut answers, evaluate different points of view or sources of information, and draw appropriate conclusions based on evidence and reasoning; it is a combination of problem-solving, analytic thinking, reasoning and concluding. CEOs and HR managers stated how this skill is fundamental because when they hire someone in the company, this individual should bring something new to the company to improve an already existing practice. For example, it is an exchange of experience between the company and the hired person since they should bring new ideas, and novelty. P4 states how:

*“It depends very much on the professional role, but critical thinking is very important ... Very often it is difficult to hire people with experience in the same sector and for the same task because they tend to have their own old approach to solve things. On the other side, those coming from different sectors have another, a new approach performs better, so it depends very much on the type of individual, for leaving the old for doing something new. The enthusiasm, the will of doing is important, the skill of performing on different tasks, flexibility, versatility are very important” (P4).*



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P5 also states how critical thinking is essential because it involves the reasoning and ability to identify differences and being able to make choices. This applies to any professional role.

#### 7.3.8. Collaboration

Collaboration has the same highest score as critical thinking, with a mean equal to 9. All respondents reported how collaboration is an added value and a key skill for them, and it basically refers to teamwork. It pulls together all the company work and helps the company to progress rather than making everyone progress individually on different routes. P5 again adds:

*“It is absolutely necessary because an individual who does not have this skill can become a big problem for the company because it creates an obstacle to the capacity of others to express themselves. The individual who wants to shine in the middle of the team and who does not want to work as a team prevents other people’s self-expression” (P5).*

On the other side, P4 stated that working in a team is also difficult because people are different from each other in their strengths and weaknesses.

According to the mean score rating for essential skills in recruiting, self-direction, with an average score of 8.8 had the second-highest result. Self-direction is very required by employers today, and it is considered mainly as the skill that demonstrates the ability to be an autonomous worker. P2 explains how companies can not pretend that a 30-year-old employee is 100 per cent self-directed even though some of them are, and when firms have these individuals, the company becomes stronger. Usually, lack of motivation, according to P4 point of view, is the reason why young graduates lack self-direction. P5 adds:

*“Self-direction is important for any professional role and level. Because although someone may own some repetitive or in-chain roles, if there is no sense of responsibility and They do not understand how the role/job works, they become a real danger/problem for the company” (P5).*

P1 interestingly adds that if you have skills such as collaboration, critical thinking, communication, creativity and so on, self-direction becomes a key skill and consequence of those discussed above.

#### 7.3.9. Using technology as a tool for learning

Using technology as a tool for learning was the skill placed in the third position according to CEOs and HR managers’ ratings. All interviewees think that if today you are not able to use technologies and integrate them into the company’s daily activities, you are kept apart from the company itself and you will become isolated. So, having at least a basic level of technical skill is really key. Young generations are particularly good at this, and they fully own this skill. P5 is still the one providing a more expanded view on the topic:

*“This is a very important skill because if you have not a bit more than a basic level of technological skills, such as how to use a PC or a smartphone, Internet and so on, you are kept apart... for example in the majority of companies there are WhatsApp groups where people communicate with each other, in real time, to discuss any kind of problem and this is a real advantage for the business and for the people. Those who are not able to deal with these types of technologies become a problem for the company and themselves because they remain isolated” (P5).*

#### 7.3.10. Communication

Communication registers the fourth highest mean score with 8.4 out of 10 on the scale provided. However, we have to say that 3 interviewees out of 5 rated this as less important than the other skills cited at the top of the list. On the other side, we noticed that the skill becomes more

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important based on the type of role covered by the employee in the company. So, for example, being able to communicate becomes key for a seller or for employees who have to deal with bereavements and funeral services because they should be able to make people at their ease through good communication. P1 also states:

*“If someone is not able to pass on to somebody else what he/she wants to do or to say, is not someone who can make a difference. For example, for the commercial person, communication is the basis of everything. When an individual has to express him/herself and has to communicate what he/she needs to know and how to say and this becomes a problem if you are not able to transfer to a potential customer what you do and your message” (P1).*

#### 7.3.11. Creativity and innovation

For CEOs and HR managers creativity and innovation are important but not as much as for the other skills discussed above, at least not for all of them. Nearly all respondents reported how the creativity and innovation skill depends very much on the role played in the company by a specific employee. For example, in a company delivering funeral services to people, there is not much new to invent, so for some roles, this skill does not become an added value, and it is not perceived as needed. On the other side, when you carry out some tasks in the production process, creativity is unnecessary, while innovation might become a real added value.

#### 7.3.12. Making local and global connections

Last on the list is the skill (making local and global connections) according to CEOs and HR managers' ratings with 5.8 mean scores. Usually, employers do not value this skill if they do not sell their products abroad. In this case, they may value primarily local connections considered as the capacity to get in touch and to connect with other Italian networks, stakeholders, and customers. If, on the other side, the company in question does not sell to an international market, making more global connections becomes useless. That is probably the reason why it has been placed as the last item on our list of skills.

## 8. Conclusion

This study made an attempt to answer the following two research questions, namely:

1. What competencies and skills do business representatives seek for hiring university graduates? Why?
2. Which qualifications should the university's graduates have in order to meet the needs of the labour market? Why?

Before answering each research question, it is important to note how none of the CEOs and HR managers interviewed by Smarthink Ltd during the study knew the meaning of 21st Century Skills initially. On the other side, this meaning was quite clear to the interviewed Researcher/Academician.

Moving forward, the answer to Research Question 1, also based on the interview results presented here above, highlights how in Italy, businesses value soft skills such as critical thinking, collaboration, self-direction, digital skills, and communication, more than any other soft skills. However, this is done in combination with key technical skills that each individual should possess in connection with a specific professional role/activity. Moreover, although the communication skill was discussed quite often by participants when they were required to list the provided skills in order of importance, critical thinking and collaboration skills appeared to be those with the highest rate. In addition to the skills listed by the research team in the study,

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research participants also included the ability to “Listen” to others in order to better establish a relationship and connect, and the ownership of “Deepeness and Passion” in new young candidates. These two were particularly important for employers since they favorably advantage candidates who feel the desire to go deeper into their professional daily tasks rather than remaining on the surface and those who have passion for what they do since this leads to motivation and the development of all the other above key soft skills.

Another important aspect sought by companies nowadays in young candidates is the one we called “Academic Practicality” skill. With this last, we refer to the individual ability to put the knowledge acquired in the university context into practice since, very often, recent graduates do not know where to start if placed in a company, and they need to be clearly told what to do in order to complete a given task.

More key information answering the Research Question 1, has been collected thanks to the interview of the Researcher/Academician. Although he valued all the given 7 skills in the same way with a score equal to 9, he discussed how soft skills connected with digitalization are becoming more and more important. They are applied to digital skills such as how to communicate through social media platforms, with a smartphone, and so on. Value is also given to ICT skills since, in Italy, the demand on the market for candidates with these skills exceeds the available graduates. These students find a job when they are already studying at university regardless of the soft skills they may or may not possess.

Hence in connection with Research Question 2 asking for what kind of qualifications graduates should have in order to meet the requests of the job market, we can state how the engineering and ICT fields are currently some of the key ones with the highest request from the marketplace in Italy.

Interestingly, here in Italy, universities are experimenting with new ways of delivering certifications, using for example micro-credentials as recognition of specific skills and competencies (rather than knowledge) gained differently and in various institutions through different pathways. In this way, young graduates can prove how and what kind of specific employability skills they have developed and can have these pathways recognized by a formal institution. Although this last process is still unclear and under discussion, it may represent a new way for universities to deliver qualifications connected with the development of 21st Century Skills.

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### **Disclaimer**

Erasmus + “21st Century Skills: Changing the Approach to Teaching in Higher Education” is a project funded by the Erasmus + Program of the European Union. However, European Commission and Turkish National Agency cannot be held responsible for any use which may be made of the information contained therein.