JUNIOR DIGITAL CURRICULUM

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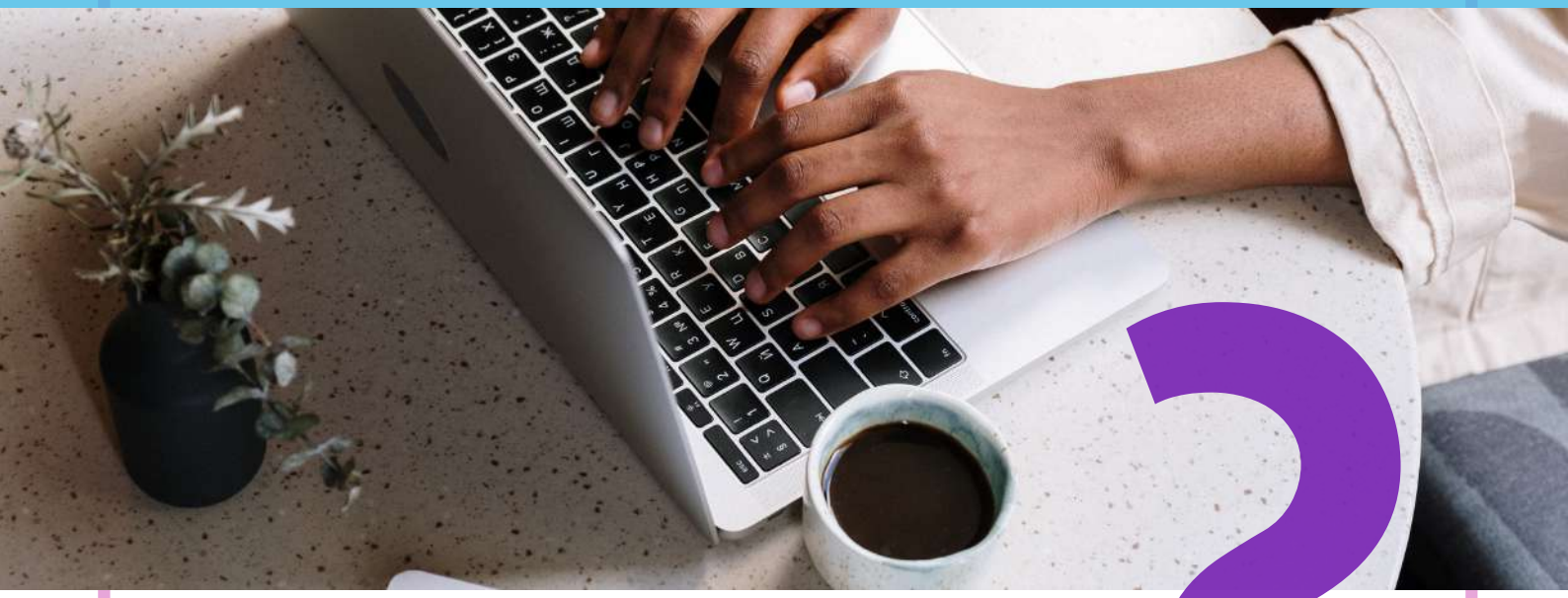
JUNIOR DIGITAL CURRICULUM | QUESTIONS



QUESTIONS

- What perception do NEETs have of school and the opportunities offered by school education?
- What perception do NEETs have of vocational training?
- What really "works" for NEETs? What are the main concerns of young people neither in training nor at work?
- What are the expectations and concrete opportunities for success?

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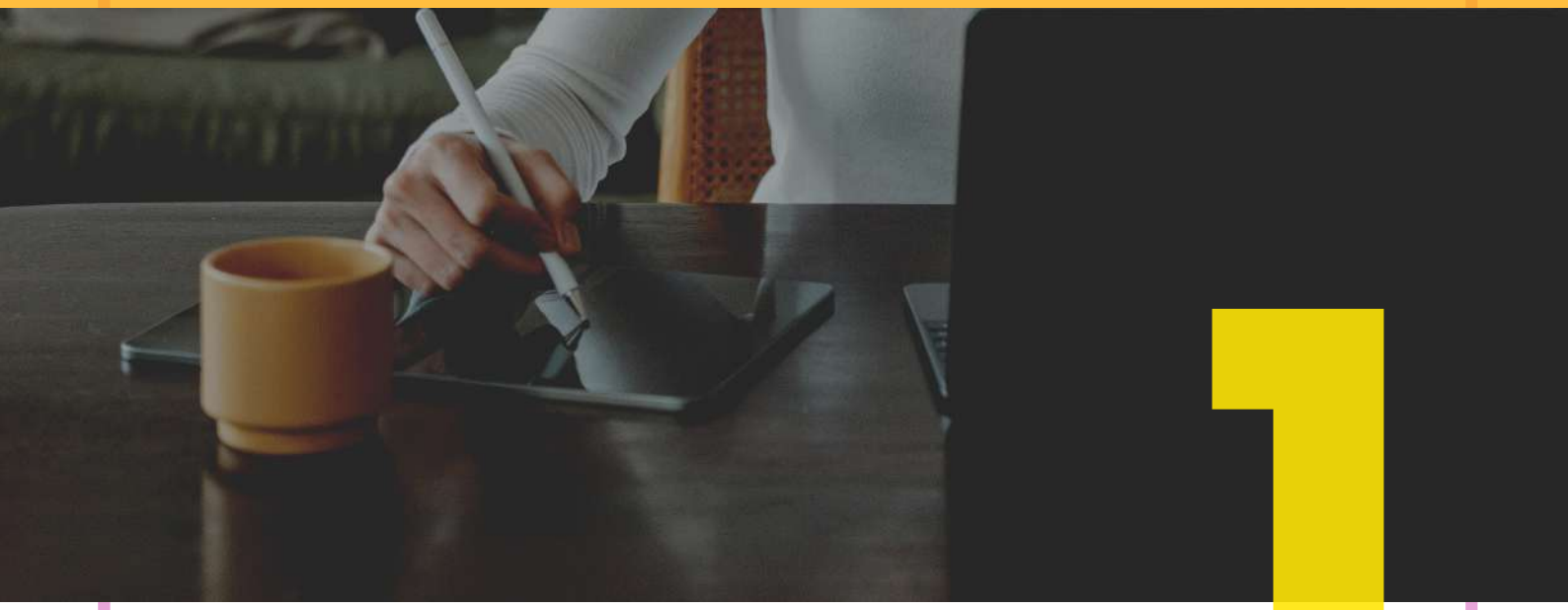

1

DIGITAL COMPETENCES: TOOLS OF EVALUATION AND THEIR IMPACT

Numerous international organizations, including the European Commission, have promoted active programs and policies since the new millennium and especially since 2010 in support of digital literacy for all citizens (European Commission, 2016; OECD, 2015; ECLAC, 2010). These indications have often been translated, in Europe and by various national governments, into active policies and strategies in the field of school education and vocational training (ICT education) so that ICT ‹‹becomes mediation tools for teaching and learning processes››.

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DIGITAL COMPETENCES: TOOLS OF EVALUATION AND THEIR IMPACT

These policies and strategies, analyzed below, have therefore had the merit of underlining the educational value of ICT and that is the impact that these can have on ‹‹the personal and educational development›› of young adults and seniors.

At the same time - at both national and community level - numerous guarantee and evaluation tools and programs have been created: useful criteria to truly understand how the integration of digital technologies in the educational curriculum is beneficial for learners of different ages and backgrounds.

Different parameters and indicators provide different frameworks, also depending on the geographic regions analyzed as well as on the historical micro-period considered (De Pablos, 2010, Gonzalez, 2011, Colás, 2015, Conde, 2017).

For example, ‹‹public economic expenditure›› was examined for the introduction of new technologies in the curriculum and in educational places; the ‹‹number of hours›› actually dedicated to the conscious use of ICT (by learners, teachers, educators, trainers, etc.).

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DIGITAL COMPETENCES: TOOLS OF EVALUATION AND THEIR IMPACT

More in detail, the quality of the ICT used has been widely taken into consideration: are ICTs in the educational and / or training field really effective? Which ICTs, in detail, are used and introduced in order to train Youth and/or adult learners?

Above all, the authors and references listed above had the merit of investigating the microstructural and subjective dimension: emotionality, actual competence and perceived digital competence, perception of usefulness and advantage from the point of view of individual beneficiaries: what is the impact of ICT and its introduction in lifelong learning?

In any case, all the studies agree in underlining the fact that digital skills already are key competences, indicators of success and crucial elements to be introduced in any international education system. Key skills because they allow ‹‹the acquisition of other skills, therefore in a transversal way›› (European Commission, 2018-19).

However, it is necessary to underline the difficulty in assessing the successful acquisition and possession of these skills: a difficulty that is reflected in the uncertainty of the assessment tools and guidelines.

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DIGITAL COMPETENCES: TOOLS OF EVALUATION AND THEIR IMPACT

In this regard, the most important work was undoubtedly carried out by the European Commission starting from 2017, having started a path of empirical implementation of the theoretical evaluation indicators previously proposed.

In detail, the efforts of the European Commission's institutions have recently led to the development of models and empirical evaluation criteria of ICT skills, also taking into consideration the subjective dimension of the learner and/or trainer, educator, teacher, as well as the specific socio-cultural framework.

The model, promoted by Jesús Conde-Jiménez (2018), has the advantage of introducing - in an operational key - the socio-cultural and subjective dimension of the user-learner-trainer:

In detail, this approach considers ICT not as educational elements per se, but as hybrid and holistic elements capable of functioning, for the subject, as a medium for any unit of learning, education and training.

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DIGITAL COMPETENCES: TOOLS OF EVALUATION AND THEIR IMPACT

Digital competence has therefore been broken down into a ‹‹series of skills, attitudes, values››, oblique, basic and sectoral, intimately connected to the user-learner and his socio-cultural background. A ‹‹set of constructs››, so different uses of ICT, including different adaptations to different contexts and environments››. The mobile, versatile and often all-encompassing nature of digital skills means that they are considered ‹‹priority [over other skills] to respond to personal development needs››.

The socio-cultural context, along with the transversal and particularistic nature of digital skills, acquires now a great value: it will be the user-learner, according to his/her/their inclinations, background and training needs, to understand what is, in detail, the set of tools and applications from time to time more effective.

‹‹In the field of technology applied and integrated into educational and training paths››, the importance of micro-decision-making processes and the analysis of socio-cultural specificities translates into the choice of some tools to the detriment of others, in the enhancement of certain skills and not of others.

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DIGITAL COMPETENCES: TOOLS OF EVALUATION AND THEIR IMPACT

One aspect seems to be widely shared: digital skills, given their versatility and effectiveness, are invariably considered fundamental for users-learners to interpret reality and contemporaneity, to ‹‹develop their personal and cultural potential››, to perform actions today of ‹‹cultural appropriation, even beyond the technical and instrumental dimension››.

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NEET, DROP-OUT, TRAINING AND COMPETENCES

The acronym NEET (Not in Education, Employment or Training) originally indicated - even in a derogatory way - a specific segment of the population: young people who - generally up to 29 years old - abandon any path of education and training, as well as the labor market.
Today, due to numerous criticisms and thanks to a greater understanding of the problem - NEET is used as a common term, a label that describes a broad and non-generalizable category of individuals, referring to large, structural, objective problems from a social, economic and cultural point of view.

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NEET, DROP-OUT, TRAINING AND COMPETENCES

The approach of BUCOLICO's partner organizations is therefore not merely descriptive: it wishes to really understand what lies behind the NEET label: experiences, values, aspirations, personal and global difficulties, focusing above all on the difficult transition from education to labor market.

The goal is to build a ‹‹conversation›› with NEETs - mostly post-schooling, young adults -, a path that from tools and policies can lead to a «better understanding of the condition of NEETs››, keeping in mind the specificities of places and communities: rural areas, often depressed, with little inclination towards digitization, entrepreneurship and self-entrepreneurship.

The numerous studies available - which analyze the different contexts of the Union and, more generally, the West - often do not answer ‹‹this specific question ››, nor do they focus on the ‹‹voice and opinions›› of NEETs.

Another point of strong interest is the following: what is really the role of educators, trainers and of the skills/competences they provide to counter the NEET phenomenon?

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NEET, DROP-OUT, TRAINING AND COMPETENCES

On the contrary, training courses are often seen as a source of disappointment: ‹‹so many menial jobs, so much unemployment, a bad relationship between training and professional opportunities›› undermine confidence and self-esteem.

An important element to consider is the quality of the relationship between the educator and the learner: a relationship built according to the principles of mutual trust and growth, but often absent or at least fragile.

Another element already analyzed is competence: asking oneself what are the educational opportunities, the basic and specific skills useful to ensure greater adaptability, future and fulfillment.

Education and training - of both young people and seniors -, depending on the skills actually acquired, should not only be a springboard to the labor market, but also an exciting path per se, a process of personal motivation.

The improvement of the relationship between learner and educator goes through some key points: the status of NEET, very often...

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NEET, DROP-OUT, TRAINING AND COMPETENCES

1) It is not a matter of choice or lack of motivation.
2) It is not a direct consequence of the socio-cultural background or context of reference
3) It is usually not a ‹‹selfish, individualistic lifestyle choice››

On the contrary, one ‹‹of the indicators›› is precisely education, training: the inability of education and training courses, very often, to respond to ‹‹subjectivity››, as well as to contemporary social challenges, according to the specificity of places and territories.

This assumption, namely that education and training courses are no longer able to ‹‹prepare young people›› for life, for the labor market it is, however, as extreme as the one which sees the NEET as a ‹‹lazy›› category, unable to face daily challenges and any form of competition.

The context is, in fact, much more complex: the NEET label is hybrid and elusive: now antisocial, now a vulnerable category that faces numerous challenges during the transition between training and the labor market (Olssen, Castells, Rifkin, 2005).

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NEET, DROP-OUT, TRAINING AND COMPETENCES

NEETs are not, in reality, a homogeneous group and the same keywords that make up the acronym (Education, Employment, Training) lend themselves to numerous interpretations. Each ‹‹NEET›› is therefore a subject who has ‹‹specific individual needs›› and requires ‹‹various forms of support››.

Very often the data suggests that NEET status is actually temporary: ‹‹More than three out of ten young people (31%) interviewed were NEETs at some point during the three years after the end of compulsory schooling›› (Mengual-Andrés, 2016).

On the other hand, it is true that NEET Youth often have a lower level of education - or, more generally - lower skills -.

On average, NEET Youth had a lower level of education: ‹‹they›› wasted ‹‹more time›› between one path and another, they have a more conflictual attitude towards, for example, the school and often belong to more disadvantaged social and family contexts.

How true the gender gap is: women in the EU tend to stay NEETs longer than men.

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NEET, DROP-OUT, TRAINING AND COMPETENCES

The available data, however, are not always so daunting: the majority of young people in Europe, even in rural areas, are successful in education and training and make a smooth transition to the labor market, albeit recently youth unemployment in the EU, after a moment of recovery, is once again worrying, especially for countries such as Italy, Bulgaria, Greece, Spain (considering the considerable variations from a regional point of view or according to the periphery-center relationship):

23.4% of young people aged between 16 and 24 in Italy were, at the beginning of 2020, without work, nor in education or training (NEET) (European average 14.2%. Source: Eurostat, 2020).

These data, which have not undergone major changes, translate into an incredible public cost, a loss of production, and poor social inclusion.

But in addition to the social and public costs of NEETs, there are above all the individual, subjective, emotional and experiential effects, all related to well-being: unemployment increases ‹‹medical consultations››, ‹‹drug use››, ‹‹risk of mortality››, ‹‹suicidal tendencies›› and the risk of psychiatric disorders and / or substance consumption››.

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NEET, DROP-OUT, TRAINING AND COMPETENCES

Recently, initiatives and support programs specifically for NEET have become very numerous: for example, one of the very first major European programs deemed effective overall was the New Deal for young people (UK) 1998-2002: internships, DET, subsidies, originally intended to avoid school dropout rather than supporting school-to-work transition.

These early programs have not only inspired subsequent programs and actions, underlining the fact that:

- Education and training must be placed at the center of these actions: ‹‹education is not just a path through which to achieve specific results, for example employability; it is a primary result and objective››.

However, it is not easy to assess the impact and effectiveness of programs, actions and active policies, especially if they are aimed exclusively at national, regional or provincial contexts, often given the absence of reference models, guidelines and indicators, as well as the dependence on fluctuations in political and economic climates››, without considering the voluntary, episodic nature of the case studies produced by those

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who actually benefited from active policies and programs, i.e aimed at school-training-work reintegration.

One of the purposes of this introduction is to ‹‹identify, synthesize and evaluate›› the effects of these interventions and programs – but also of specific skills, with attention to ICT skills – not only from an experimental but also localized perspective: macrostructural perspective (employment and employability, performance), but also an individual, subjective, emotional-experiential point of view.

The research was carried out not only through national and community reports (ISTAT, Italy; Eurostat, EU), but also on scientific-academic articles, mostly in English, which analyze the European context in its entirety, except for the strong differences between States and Regions (databases such as Medline, Embase, PsycINFO, Google Scholar).

In summary, before addressing in more detail the situation not only in Italy, but in the countryside, the following points are cyclically highlighted:

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NEET, DROP-OUT, TRAINING AND COMPETENCES

1) There is still a lack of unambiguous identification of what young NEETs really need: what is needed to facilitate their reintegration into training courses and / or labor market

2) It is not clear what is really effective (for example: Education and Training, Placement, Consultancy for the labor market, etc.)

3) The effectiveness of programs that aim more at ‹‹behavior modification››: aiming at the individual, at his/her/their emotional-experiential dimension. This aspect is almost never taken into consideration, along with poor attention to the specifics of the context.

4) Little attention is paid to the more generic analysis of well-being, of the acquisition of basic, transversal skills not specifically oriented to a single place or field.

5) Little attention to qualitative, experiential investigation, for the benefit of mere statistical evaluations

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NEET, DROP-OUT, TRAINING AND COMPETENCES

Although methodological and investigative approach is essential, it is also true that a more qualitative analysis, not necessarily adhering to standardized reporting protocols would offer a more accurate overview of the interventions in support of NEETs in Europe and in the world.

This is potentially achievable because very often, in Italy and in Europe, the interventions - or at least their implementation - are provided and delivered by private organizations, non-profit organizations, voluntary organizations, consequently in closer contact with specific users: NEETs, citizens, communities.

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THE ITALIAN CONTEXT: ITS BACKGROUND

In the period between 2008 and 2014, Italy recorded a sad record: among young people between the ages of 15 and 29, as many as 27% fell into the NEET category. Unfortunately, this figure has remained almost unchanged, although decreasing: in 2020 the estimate was 23.5-24%, well above the European average (around 14.1%).

This dramatic primacy highlights an objective fracture primarily in the school-to-work transition. Although in itself the phenomenon of school drop-out is worrying

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THE ITALIAN CONTEXT: ITS BACKGROUND

(Eurostat 2019, 2020: non-graduates and no longer attending any education and training course, between 14 and 24 years, correspond to almost 14%), the main problem and even more burdensome is the inclusion in the labor market. However, there have been and still are numerous active policies, programs and policies of support in this sense, not without critical issues:

For example, the Youth Guarantee program started between 2014 and 2015, through European funds: a job offer guarantee or a training course, an apprenticeship, even in the world of associations and no profits.

The Youth Guarantee programs are however implemented in a decentralized way: this has produced numerous inequalities in terms of efficiency and effectiveness.

The adoption of mixed models (dual education), according to the German model for example, is equally uncertain and discontinuous: the work and training experiences recorded, for example during school and/or university, are numerically small.

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THE ITALIAN CONTEXT: ITS BACKGROUND

The same situation is found in the analysis of technical high schools, in the relationship between universities, ITCs and companies: ‹‹hires through apprenticeship contracts represent only 4% of the total›› (European Commission, 2020).

In Italy there is also, from a political and strategic point of view, a greater attention towards entry to the labor market, for example through facilitations, with little impact on the dimension of skills and competences, on the updates of the school training offer: ‹‹in Italy the transition from school to the labor market continues to be slow and difficult››. Reports and analyzes of the Italian context have attempted to provide explanations for all this:

1) Concentration of medium-term contracts for young people and poor protection

2) Greater access to different forms of education and training during periods of stalemate and recession, resulting in a high rate of youth unemployment (lost productivity)

3) Above all, as anticipated, slow school-to-work transition

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THE ITALIAN CONTEXT: ITS BACKGROUND

Still in 2020, Italy records and highlights dramatic conditions, which require analysis and explanations: why young people? Why does youth unemployment seem to be always on the rise, beyond the negative accelerations due to the European and global crises?
There have been moments of recovery (for example around 2010, source: ISTAT), immediately nullified: already in 2011 unemployment for the 14-29 age group resumed exponential growth, reaching an all-time high in the 2013-2015 period, almost doubling in less than ten years (recording Italy, as today, one of the highest rates in Europe along with Spain, Greece, Portugal and recently other countries such as Bulgaria).
On the contrary, the unemployment rate of seniors has not risen so dramatically, in fact: the reforms of the pension system of the last decade tend to keep a large number of already senior workers at work for longer periods.

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THE ITALIAN CONTEXT: ITS BACKGROUND

Overall, the gap between youth unemployment and senior unemployment in Italy continues to be very high.
The youth segment is also affected, as mentioned, by the broader phenomenon of inactivity and alienation (NEET) and highlights even more the gender gap, which is also present in the senior population.
Italy is at the same time strongly - and sadly - marked by a very strong regional and territorial difference: ‹‹the South has more than alarming rates and, on the whole, the evolution of the unemployment rate in the South [and in rural areas] is even more sensitive to the economic cycle››: paradoxically, the reduction in the youth unemployment rate before the well-known contemporary crises was faster in the South than in the North.
Regarding the composition of NEETs (inactive, not exclusively unemployed), in Italy there is mostly a mixture: Italian NEETs are often such due to the overall difficulties of entering the labor market.

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THE RELEVANCE OF DIGITAL EDUCATION AND DIGITAL INCLUSION

Digitization and / or "digital transformation" are increasingly characterizing our society and our daily lives, particularly affecting the younger generations.

Being ready to understand the forms of digital transformation also means actively participating in the changes and impacts that these very technologies produce on a social, economic and working level.

‹‹As a social phenomenon, digitization can both favor and hinder social inclusion››.

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THE RELEVANCE OF DIGITAL EDUCATION AND DIGITAL INCLUSION

In any case, access to ICT, to the various digital technologies, is constantly increasing: education and training of youth, adults and seniors, information, communication between peers, entertainment: everything is permeated by ICT.

However, if the advantages of ICT and, more generally, of digitization and "digital transformation" are recognized, it is also true that - as anticipated - they themselves can produce and / or attest ‹‹significant gaps in terms of skills and accessibility››.

Not only that: there is a strong gap in terms of the technologies actually available and usable depending on the territory under consideration, on the socio-cultural context.

‹‹The digital social inclusion›› and, again, the social inclusion ‹‹through the digital›› thus becomes at the same time a priority and a challenge to overcome:

all individuals and all communities should be able to have access to ICT, as well as to training and education courses useful for making the best use of ICT, especially from the point of view of employability.

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THE RELEVANCE OF DIGITAL EDUCATION AND DIGITAL INCLUSION

Over time, various indicators have been identified that are useful for ‹‹evaluating and understanding the level of digital inclusion›› of individuals and communities:

1) Availability / Accessibility of the Net and the Internet (primarily economic accessibility)

2) Possibility of undertaking accessible digital literacy training paths

3) Infrastructure

4) Access to useful, effective, educational online content regarding digital literacy also according to the principles of self-learning

5) Capacity and level of participation

Unfortunately, the advancement of technology – for example from an infrastructural point of view – does not correspond to an increase in digital social inclusion: this second point requires meticulous planning, national and/or community based ‹‹intentional strategies››.

However, tools, strategies and plans are widely present – especially in support of youth and vulnerable categories including NEETs – which can, if well used, contribute to the elimination of socio-cultural, historical and geographical barriers.

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THE RELEVANCE OF DIGITAL EDUCATION AND DIGITAL INCLUSION

Political communities agree in considering digital transformation or, more simply, ICT as fundamental resources today to ‹‹foster social inclusion (...) and democratic participation››, enhancing ‹‹human, social and cultural›› backgrounds not only of young people and young adults, but of all communities of individuals, regardless of age and socio-cultural context.

However, if there is an increase – for example in terms of investment – in digital resources (McLoughlin, 2018), this is not the case for education: the exponential growth of infrastructures and services does not seem to correspond to an adaptation and growth of ‹‹Educational and social dimension of digitization››, capable of favoring not only access, but also the conscious use of these resources and innovations as well as adequate political-cultural literacy.

It is important to emphasize that digital transformation does not only permeate our daily life, habits and consumption: it has already transformed above all access to education, training and, more generally, to knowledge.

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THE RELEVANCE OF DIGITAL EDUCATION AND DIGITAL INCLUSION

If this produces great advantages, for example from the point of view of accessibility, the opposite is also true: individuals are in fact required to "update" constantly their skills in order to cope with rapid changes in techniques, culture and disposition, for example in the field of school, vocational training and labor market: that is, it is necessary to ‹‹equip ourselves›› and to ‹‹retrain ourselves›› constantly in the digital world in order to seize different opportunities from time to time: opportunities often provided from the digital world itself.

In detail, the literature on the subject highlights three major kits or skills that require constant monitoring and updates:

1) Specialist skills in the ICT field: planning, development, sectoral management (for example: networks)

2) Generic skills in the ICT field for the world of work, in a transversal key: management and processing of data even of different nature, communication, self-management

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3) Basic skills, applicable to everyday life, no less important: basic skills and/or primary digital literacy in fact determine a radical change in the quality of everyday life for individuals, with great impact, for example on an emotional, subjective, experiential level

These ‹‹kits››, regardless of their degree of complexity, in any case require greater attention to the «construction of competences»›: skills and dispositions acquired by the individual in the course of his/her/their lifelong learning.

The digital transformation and digitization are no exception: both formal education and training systems and those of a non-formal and informal nature need to be updated.

The three formulas of education, embracing and promoting digital, rather than placing emphasis on the technical and sectoral dimension of ICT, should further enhance the value of a hybrid, holistic, transversal digital education: the demand for technological-digital skills changes in fact suddenly and, ‹‹due to rapid technological changes›› ‹‹it is difficult›› to identify what will be required in the future - even in the medium term - for the labor market.

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THE RELEVANCE OF DIGITAL EDUCATION AND DIGITAL INCLUSION

Digital literacy should provide - in a formal, non-formal, informal context - transversal skills that allow the individual to ‹‹adapt quickly›› to even sudden changes.
Another important point for digital literacy is well-being: access to and a conscious and full use of new technological-digital opportunities lead to an improvement in the quality of life.
Among the best resources available which, by their physiognomy, best respond to these challenges, there are undoubtedly OER (Open Educational Resources).
However, the challenge is not exclusively of a technical-structural nature: it is necessary to ‹‹connect these tools to an effective pedagogical plan››: it is in fact noted that these opensource resources - which also include systems for certification of skills, access to work and / or vocational training, regardless of the impact on the learner's social, cultural, emotional and political dimension - continue to be an exception.

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THE RELEVANCE OF DIGITAL EDUCATION AND DIGITAL INCLUSION

Often little adopted by educators, teachers, trainers, socio-cultural animators often due to a prejudice on the validity of online education, as well as on that relating to the certification of skills acquired through these resources. Nonetheless, demand for basic, generic and transversal ICT skills by the world of work - regardless of the primary source of these skills - continues to grow in EU countries (OECD, 2016).

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SPECIFIC AND SECTORAL ICT SKILLS - AN OVERVIEW

It is well known that high-profile, specialist and sectoral ICT skills tend to correspond to a high employability rate. Not only that: they correspond to ‹‹occupations that are among the most dynamic and evolving››, but also to some strong inequalities. Some data:

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- In OECD countries, ICT specialists represented only 3-4% of the total workforce, with a huge gender gap: a figure that increases significantly, year after year

However, although the demand for ICT experts is constantly growing - not without contradictions and difficulties -, a more cross-cutting question is underlined:

Not only therefore sectorial skills, but the ability to ‹‹adapt to work environments constantly remodeled by ICT and technological-digital innovations››: being able to actively participate in ‹‹environments rich in technology››.

Digital transformation does not only concern professionals: it also has an enormous weight on the transformation of routine, ordinary tasks.

OECD - The strategy for the acquisition of skills and competences

As anticipated, the skills that workers of the future will have to acquire are not only different from the past, but also difficult to identify precisely:

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-Identifying new skills and competences means adapting the systems of transmission, development, education and training rapidly, to changing external conditions.

-The OECD - to face these challenges, has developed a strategy for skills able to identify what is good and what needs to be updated in the various education and training systems, on an international level.

-The goal is to guarantee not only an education able - in a transversal way - to face the challenges of the ‹‹digital transformation››, but also to guarantee overall better social inclusion, development and growth for the individual and for communities:

-An approach for improving the transmission and acquisition of skills that:

-Provide forward-looking investments: a radical change in skills systems is a costly operation that requires the achievement of precise results and benefits

-Is able to understand and tackle short, medium and long-term challenges together: provide skills that are

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really useful in the immediate future, but at the same time transversal and adaptable to possible and imminent challenges and transformations, especially in the digital and technological fields: planning strategy that looks at employment and employability, at moments of possible criticality, at the transformation of different sectors

-Really proposes itself as lifelong learning or permanent learning: an approach that implies the involvement of the individual in different moments and paths of education and training throughout the life cycle, in a formal, non-formal, informal way: this requires a balance of resources, a new perspective through which is possible to rethink the system which regulates the certification of competences, etc.

-Which involves different areas of politics, government, civil society: lifelong learning, in its various forms and practices (formal, non-formal, informal), implies breadth and transversality: an involvement of education and instruction, science, technology, industry, economy, art etc.

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SPECIFIC AND SECTORAL ICT SKILLS - AN OVERVIEW

It would therefore be desirable to align approaches between all the sectors involved (eg in terms of responsibility, between the various public and/or private entities that traditionally manage education, training, schooling).

-Which contributes to the reduction of differences and inequalities: geographical, social, economic, with attention however to the inevitable difference: ‹‹to align local needs and specificities with national and transnational transformations and systemic changes››

-That really supports inclusion: an approach that implies effective policies for the transmission and acquisition of skills, involving, for example, public administration, non-governmental realities, the labor market, associations, education and training institutes, etc.

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Skills for the economy and digital transformation

The recommendations and guidelines of the OECD - and of numerous other agendas, for example of the EU - often imply an element: among the most relevant and transversal skills, the most relevant are undoubtedly the digital ones.

In detail, participation in contemporary economic, social, cultural life - not only from a training and/or labor market point of view - requires the acquisition of specifically digital skills, capable of adapting to rapid technological changes.

As anticipated, from the point of view of training and education systems, this often means focusing one's action on digital literacy, even at the expense of more specialized and, therefore, sectorial skills.

It is therefore a priority that individuals have solid basic skills, a good analytical preparation, thought, social and even emotional involvement.

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SPECIFIC AND SECTORAL ICT SKILLS - AN OVERVIEW

In fact, digital literacy is fully part of the main education, training and school reforms promoted by various OECD countries.

For example: initiatives focused on the full introduction of digital literacy in the ECEC - Early Childhooh Education and Care - Early childhood and primary educational offer.

Among which emerge, for example, the Polish National Strategy (2013) to promote digital literacy in the ECEC field; the National Strategy for Early Childhood in Australia (2009-2014).

The introduction, even in a massive way, of digital literacy modules from an early age - with an adequate proposal for upskilling and reskilling of the educators and educational systems involved - has also worked as an excellent tool to ensure greater inclusion (e.g. in terms of learning opportunities), reducing the school dropout rate, improving competences in science, mathematics, logic.

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Very often the guidelines for the implementation of these strategies and reforms - not only in the ECEC field, but also for higher education, adult education etc. - are structured according to three priorities:
1) Countering the drop-out phenomenon through an improvement of the monitoring systems of acquired competences and, overall, of individuals. Digital literacy is in fact part of the ‹‹Strategic Framework of the European Commission (2013b-2020): it has been shown that the reduction of early school leaving goes hand in hand with (...) widespread digital literacy››: ‹‹What people do [with the media] is more important" than sectoral skills in technology (OECD, 2015d)››.
In fact, digital literacy ‹‹often means competent and informed use of the media, which in any case depends on skills (basic, not sectoral) and on environmental factors (social, cultural) more than Infrastructure››.

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SPECIFIC AND SECTORAL ICT SKILLS - AN OVERVIEW

What kind of competences?

The effective introduction of strategies to support ‹‹digital literacy›› is often structured according to some ‹‹basic principles››:

1) Development of adaptive skills (OECD, 2010b)

2)Adaptive Learning

With emphasis above all on problem solving as a privileged approach.

Examples of good practices

The OECD Innovative Learning Environments Universe project offers one of the few ‹‹inventories›› of reforms, systems and proposals for good ‹‹digital literacy››, according to an overview ranging from Early Childhood to Adult Education and Vocational Training.

1) The Call Them Emotions project (Switzerland) that combines digital skills with "Social and Emotional" skills, for the development of the critical thinking of both the learner and the educator (Early Childhood)

The most significant challenge to face, in the digital environment, is the risk of exclusion and marginalization: the promotion of digital literacy means equal access to certain technological resources,

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beyond basic and more sectoral ICT skills.

The introduction of ICT in the educational, school and training curriculum tends to be the responsibility of national politics and governments, with sometimes substantial differences between country and country within the EU. For instance:

Sweden: the acquisition of ICT skills is fully integrated into the traditional school curriculum, starting from 2011: ‹‹every pupil [attending Swedish schools], at the end of primary school, must be able to use the main modern ICT technologies, especially in order to acquire knowledge, communicate, create, learn››.

This strategy is at the same time visible in the reforms of the higher education and/or professional training: for example, a new parameter to upskill and reskill educators in the ICT field has been introduced in both Primary and Secondary Education Degrees.

In the wider Western world, for example in the United States, it is worth mentioning the Computer Science for All: an initiative aimed at the acquisition of ICT-related competences especially in support of future educators, trainers and teachers: a reformulation of teaching materials (Higher Education) and curricula.

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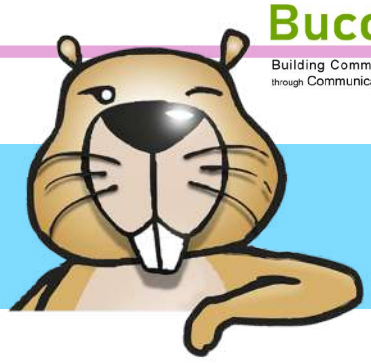
SPECIFIC AND SECTORAL ICT SKILLS - AN OVERVIEW



Another example of good practices for the promotion of ICT skills in a European context is Informatik-Biber (Germany): a real IT ‹‹competition›› promoted for the first time in 2007 and from there replicated every year (aimed at learners aged 10 - 17).
A tool aimed primarily at stimulating the interest of young ICT learners, requiring no special skills or sectoral training. Other examples of good practices in support of digital literacy are undoubtedly those aimed at categories more at risk of exclusion, for example the elderly, but also women.

For example, in Portugal, the "National Strategy for Inclusion and Digital Literacy" has mobilized public bodies - of different nature and size - private sector, non-profit, educators and ordinary citizens, in a transversal way. Activation of digital literacy modules useful for bridging any gaps, especially for those who had never used the internet (mainly through the creation of a national "multi-stakeholder" platform rich in educational and training resources).

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Another virtuous example is Norway, from the point of view of access but also of the conscious use of the media and the internet (Media Barometer, 2015).
In Italy, turning our gaze towards post-schooling Vocational Training, we note the Crescere in Digitale initiative:
Training courses and online workshops (entirely free) of digital literacy together with the activation of training internships in agreement with numerous private entities, able to join the initiative through simple and immediate applications and subscriptions to the programme.

The Crescere in Digitale platform is also an inexhaustible catalog of success stories and virtuous case studies: young adults who have not only completed the digital literacy courses, but who have had the opportunity to access the labor market through a privileged path of upskilling and training.

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Since 2007, the European Commission has been at the forefront of promoting initiatives useful for the acquisition of transversal ICT skills: not only sectoral and specialist skills - useful in order to respond to the ever-growing demand for highly qualified ICT professionals - , but also basic skills necessary to guarantee digital inclusion and equal access to culture, politics and contemporary society.

For example: the initiatives born thanks to the Fund and the Competitiveness and Innovation Program (2014-2020), which had the merit of massively involving the community network of small and medium-sized enterprises.

Another important initiative is Opening-up Education, together with E-Skills for Jobs:
Programs, resources and projects of various kinds - in both cases multi-stakeholder, providing for the involvement of public and private bodies - aimed at reducing the skills gap, at the significant increase in digitization in the labor market, at the ICT reformulation of systems, education-oriented, training offers.

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Both initiatives had immediate repercussions: internships, professional internships, awareness campaigns in almost all EU countries, aimed at involving young adults to familiarize them with the new job opportunities in the ICT field.
These strategies had - and still have today - some essential priorities:

1) Digital literacy and dissemination of basic skills
2) Promotion of sectoral and specialist ICT skills for the labor market
3) Structuring of useful and effective tools for monitoring the results achieved

These three priorities, which should be shared by all training offers and proposals in support of Digital Literacy, respond to specific needs: fostering motivation, employability, training and learning opportunities, improving ‹‹Employability›› through constant research, monitoring, together with consultancy and training.

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The ICT skills required in the workplace - along with the increasingly growing and diversified demand from the market - have also reformulated the consultancy and job support activities:

For example, in Portugal, the Strategy and Action Plan for Digital Employability 2015-2020, a form of Youth Guarantee, proposed numerous post-school and para-school internships together with basic continuing training strategies in the ICT sector.

This type of programs and initiatives is present today in most of the Member States, especially in those suffering from high rates of youth unemployment (Italy, Spain, Greece).

Spain, for example, is one of the virtuous cases of adoption of the guidelines of the Youth Guarantee with a strong propensity towards ICT.
The integration and reintegration programs promoted from 2013 to 2017 - with financial support from Europe - focused on ‹‹ensuring that (...) professional skills

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include ICT and, overall, training and digital literacy, with attention to the role of ICT in promoting entry into the labor market by the most vulnerable and at risk of exclusion››.

Non-profit

Non-profit organizations, of various kinds, are increasingly engaged in the production and dissemination of educational and training resources useful for a) accompaniment towards the labor market b) reintegration c) lifelong training, upskilling, reskilling.
Many projects and initiatives, conceived in this way, facilitate the integration of education and training systems in the ICT field, often with attention – sometimes exclusive – to vulnerable categories.
Many initiatives have focused, for example, on the gender gap: a quality training offer specifically for unemployed women, with ‹‹the aim of improving their employability through ICT›› (e.g. e-Skills for Women, Luxembourg, co - funded by JPMorgan).

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Or also: Interface3 (Belgium): today a set of educational, training and upskilling resources, including programs for language learning, designed specifically for vulnerable women.

Interface3 is a starting point for non-profit projects in support of digital literacy by virtue of its "complete approach": ICT technical training, mentoring, role models, French language for foreigners.

Digital skills: an effective use

The data emerging from the OECD - Survey of Adult Skills (PIAAC) research continues to highlight a strong gap in skills: reading, writing, productivity (2014-2020). When there is no strategy for permanent learning, for continuous training in the workplace, the gap grows.

The conscious and full use of ICT - both for young people and for the senior target - is a priority of all OECD countries.

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Let's dispel a myth...

The previously cited data emerging from the OECD – Survey of Adult Skills (PIAAC) underline another element: young people of early adulthood (18-29 years) who enter the world of work make ‹‹little use of ICT and more generally, of the skills generally derived from digital literacy paths, especially with respect to the younger age group, still in school age››.
This is in contrast to the common opinion that today sees young adults as digital natives, almost spontaneously inclined to understanding and conscious use of ICT (Livingstone et al. 2014).

NEETs and digital competences

What kind of ICT do NEETs (aged 14 to 29) use?
According to the research Digital Exclusion Profiling of Vulnerable Groups - Young People not in Education, Employment or Training (NEET), some highly characteristic elements emerge:

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- NEETs are ‹‹not necessarily aware of having learned specific ICT skills››

Although, at times, a good level of digital literacy may be found, not connected to specific education and training strategies, programs or actions.
Some ICTs - according to the responses of the focus group - are however in common use:

1) Mobile phones - mobile devices for:
- Communication
- Sociability
- Entertainment

With little interest in writing activities, even informal (for example: SMS or similar tools and/or Apps).

However, entertainment is predominant:
- Photography
- Games
- Music

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Much more episodic is the use of devices such as personal computers: predominant, in this case, the use of social media and again:
- Movies, Animation, Music
- Research activities: employment, benefits, housing
- Games, online shopping
- Free online learning
- Processing of texts or other material (for example also audio-video)

In descending order.

Overall, the research and the data that emerged identify specific privileged physical technologies, which seem to work better for individuals neither in training nor at work:
- Technologies and touchscreen interface, easily accessible and understood as highly intuitive
- Intuitive applications specifically geared towards communication, for example between peers
- Elementary messaging

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