

REthinking EDUcation COmpetencies. Expertise, best practices and teaching in Digital Era

RE-EDUCO Newsletter

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What is **RE-EDUCO**?

The RE-EDUCO (Rethinking Education Competencies. Expertise best practices and teaching in Digital Era) project encourages the production, experimentation and sharing of new approaches and training methods in the field of digital culture.

It enhances the role of digital culture improving the possibilities for growth and exchange, widening the choices for young people in private and professional life.

The project was born from the need to produce and test, at a transnational level, a range of methodologies and best practices to improve the skills of students and teachers and encourage them to embrace digital innovation in their lives, career opportunities and educational environments.:

The main objective of RE-EDUCO is the improvement of the wide **socio-economic environment** by:

- the creation of a bridge between different system such as: education-training-work; researchinnovation-development necessary to contribute to restore an educating community
- the innovation in organizational and educational processes to reduce the mismatch in job offerdemand in a digital era
- the promotion of excellence in teaching and skills development
- the spread of best practices at European level
- the dissemination of a broader digital culture useful to manage responsibly digital technologies.





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The idea behind the project

The project promotes the production, experimentation and sharing of new approaches/training methods in digital innovation. Through research, best practices exchange, training and creative activities, the role of digital culture will be enhanced as a means of improving the possibilities for growth for students and teachers, widening their choices in private and professional life, improving the access to the labour market, renewing educational systems. The project support individuals in acquiring and developing basic skills and key competences.

As highlighted in the recent work of EC, digital transformation gives a rapid acceleration thanks to the development of new technologies, including artificial intelligence, robotics, cloud computing, blockchain, industry 4.0 and the new Internet era.

These innovations have a deep impact on lifestyles, socio-economic systems and learning processes. Digitalization and new technologies play a central role in this process, influencing the way people live, interact, study and work. Some professions disappear, others are replaced, and new ones are created; many professions and activities are transformed, and new ones will emerge.

Although several opportunities are emerging thanks to digital transformation, the greatest risk is given by a poorly prepared society to face the future: 90% of the jobs in the future require skills in the digital field; 44% of Europeans do not even manage the basic skills.

The education system is expected to lead this process, accompanying people throughout the entire period of their life: to take the opportunities and meet the challenges of a globalized, interconnected and rapidly evolving world.

This scenario impacts on learning systems and models as they must provide young people and citizens to live fully in new societies characterized by innovation, equity, and resilience, according to objectives for integrated sustainable development. Lifelong Learning (LLL) requires strong partnerships and synergies between business, education, research, working and learning environments. The education maintaining its high-quality profile must be accompanied by extracurricular activities and characterized by a broad approach, moving in an increasingly mobile and digital society, and exploring new ways of knowing. Digital technologies play an important role in the development of more flexible learning environments, supporting the development of new skills: problem-solving, critical thinking, cooperation, creativity, computational thinking, self-employment.

Strengthening digital skills, using new technologies and constructing new methods for learning, represents a new challenge for educational systems.





Outputs

The project will produce the following outputs:

IO1 - NEED ANALYSIS: Active citizenship for digital society

A training scheme for Active citizenship for digital society. Skills and Formative Planning which includes:

IO1.A1 Needs analysis: Competence profiles update: perspective and impacts for the future digital society for understanding the specific effect of digital revolution in local market labour.

IO1.A2 Empowering people and community. Risks and opportunities of digitalization for life.

IO2 - Excellence in teaching, learning and skills development

This IO provides an international Alliance 4 Digital challenge Community (All4DigCha) and Training course and online learning community.

IO3 - School Contest: from the idea research to digital start up

It aims to create new cooperation, networking, including network creation and strategies, peer learning by the School Contest: from idea research to digital start-ups sessions.

IO4 - Active Learning for digital innovation

This output elaborates learning/teaching/training material for Active Learning for digital innovation to improve their digital skills and competencies.

IO5 - Release Project results and Recommendations

It provides methodologies and guidelines for non-formal learning methods and represents the final step for the peer review and evaluation of the project results.





Partners

Link Campus University Foundation's mission is to promote research, studies, and training activities. The main goals are the development and dissemination of knowledge in the fields of Economics, International and Political Relations, Business Organization, Communication, Legal matters, and all other disciplines of socio-economic, artistic, cultural, environmental, and health-related bases. FLCU avails itself of the elevated and international know-how of Link Campus University about both technology-enhanced learning/advanced e-learning and the expertise available, represented by professors and advisers, some of whom have experience in leading strategic advice to policymakers and supporting central government bodies and agencies of several European countries and beyond.

DITES provides a space for research and experimentation within the "Link Campus University" in Rome, dedicated to tackling topics related to education, lifelong learning, and guidance, as well as the use of new technologies in different learning contexts.

Italian Digital Revolution is a no-profit association based in Rome, Italy that operates in full compliance with the principles of equality, subsidiarity, equal opportunities between men and women, transparency and democracy that allow the effective participation of the associative team in the life of the AIDR itself. It promotes and develops the widest dialogue with all the interested actors to create partnerships for innovation that allow to seize the opportunities that the digital revolution is creating.

Hellenic Open University (HOU), based in Patras, Greece, is the only Greek State University that offers formal and non-formal lifelong education, in both undergraduate and postgraduate levels, to more than 40.000 students who are dispersed all over the country (www.eap.gr). Its training methodology combines distance learning with principles of adult education, relies heavily on digital material and virtual meetings and used online training platforms and tools.

Insomnia Consulting is a Business Accelerator and Incubator located in the start-up ecosystem of Valencia "La Marina", Spain. For years, the start-up has specialized in innovation, digitisation, market success and access to finance for innovative businesses (SMEs, start-ups, entrepreneurs, scale-ups, etc.) and run Corporate Acceleration Programs for big companies, conducting a scouting worldwide and looking for the best start-ups and scale-ups capable of developing and co-creating technological solutions.





The **Cyprus Computer Society (CCS)** is the ICT (Information and Communication Technology) professional association based in Nicosia, Cyprus. It is a not-for-profit private association which represents the ICT professionals nationally. Established in 1984 and governed by a 7-member Board elected every two years, the CCS has more than 1000 members and has been active in the areas of professional training, ICT skills certification, research and development, European projects, and collaborations. Since 1999, the CCS is the National Licensee of the ECDL – European Computer Driving Licence programme in Cyprus.

Omnia, the Joint Authority of Education based in Espoo, Finland, is a large and modern multi-sector education provider that offers flexibility to combine study and leisure activities into meaningful entities for different learners of all ages. Omnia has more than 1000 members of staff and there are approximately 35 000 students. Omnia promotes citizens' inclusivity, skills and well-being and enhances the vitality of the region's municipalities, communities, and enterprises. Omnia has an important role in developing vocational education and training on regional, national, and international level through its wide partner networks.





Desk Analysis

Desk Analysis is an activity foreseen during the first phase of the RE-EDUCO Project by the first Intellectual Output: the five partner countries, Italy, Greece, Spain, Cyprus, and Finland, selected three types of formative activities aimed at students and teachers.

Italy

Italy first started the desk analysis activities of IO1.A2 in February 2021 and ended them on March 30th. Activities included informative and orientation seminars and training activities to offer the opportunity to improve digital skills, increase the role of digital culture, and broaden the possibilities of applying new knowledge to personal and professional life. The goal of this phase was to raise awareness about digital transformations, increase strategic skills in the use of new technologies and online environments, and – additionally – experiment with a new training model for students and teachers, contributing to the creation of the so-called digital skills.

Nine secondary school institutions (much more than the threshold) were engaged in the territory, which allowed 426 students (born and resident in Italy, between 14 and 19 years old) and 63 teachers. Furthermore, the participants had the opportunity, thanks to the management and the technical support of DiTES, AIDR, and the Link Campus University, to interface with numerous specialists in the field, listening to their testimony, actively dialoguing, and discussing with them.

Topics included: analysis of the European context and digital innovation; risks and opportunities posed by new technologies in both professional and everyday life; digital ethics, cyberbullying, and a critical and conscious use of social media and the Internet.

Attendees were called to interact in research actions and group work to facilitate their comprehension through the skills required by the increasingly global and technological society. These two sessions (New skills and new labour perspectives. Trends, profile, emerging competencies and Digital Technologies and Society 5.0) for a total of 16 hours workshops, accompanied in the debate on the changes in the world of work and professions, closely linked to the evolution of required skills.

Finally, the Training sessions (also divided into two modules – New Digital Identity and Active Citizenship and Secure Data and Privacy Skills and New Labour Perspectives: trends, profile emerging) involved a total of 24 hours, carried out in both synchronous and a-synchronous ways, dealing with topics such as digital citizenship related to rights and on-life duties; the concept of digital identity and its constituent elements, governance models and some of its practical examples; the concept of privacy and how to manage one's social accounts, Data Protection at both national





and international level, the notion of anonymous curriculum and the tools necessary to analyse specialists' digital skills.

Finland

Omnia started organizing different orientation and information seminars and training activities for students and teachers in Omnia and their social partners Varia, Espoonlahti high school, and Saint-Petersburg Academy of Urban Management, Planning and Printing.

There were altogether 18 virtual seminars with 73 students and 34 teachers implemented during March–June 2021. These seminars aimed to show students the opportunities and risks connected to the new technologies, giving examples and tips for better using digital instruments in daily life and studying. Ms. Veera Lahti-Olsen and Ms. Mimmi Heiniö, teachers of digital skills, organized a virtual tour around Italy to the students of Omnia

(https://www.youtube.com/watch?v=i5nL3QOPSjY). The activity represented a new way of studying – only virtually, including information about a new topic, different tasks, discussions, group works, and guidance on using new tools and methods. For social partners, orientation seminars were organised. Due to COVID-19, all seminars were held online. Feedback from students and teachers was primarily positive: the seminars and training activities were beneficial, they learnt a lot of new on 'how to save own devices from hackers, how to find needed information on the internet and a lot of other things and new methods. But, on the other hand, many students reported that they prefer 'the normal classroom learning.'

The COVID-19 situation rapidly increased the use of different online services, both for education, work, and free-time activities. Due to the global pandemic, many digital services have developed and been implemented more widely. All education and training (basic level shorter, secondary longer and higher education level mostly for one year) was transferred too online. The remote studying and virtual teaching challenged the schools to provide training and support for the teachers and improve the equipment. The students were obliged to learn on different platforms and by using virtual learning methods. The most challenging scene was the lack of a proper network connection and a computer. Many students, especially adult students with an immigrant background, did not have a computer at home or the needed skills to study remotely. The lack of digital skills required to keep up with digitalization and promote digital citizenship is a challenge that vocational schools and the education system need to resolve.





Cyprus

The Cyprus Computer Society carried out the "Empowering People and Community" seminars in four schools. Two in the public schools of Archangelos High School in Nicosia and the Regional Gymnasium of Livadia in Larnaca, two in private schools, the Pascal Private English School Lefkosia and the Pascal Private Greek School, both in Lefkosia. A total of 195 students participated in the seminars overpassing the initially estimated numbers of local participants. Additionally, 11 educators were involved in the seminar sessions. Information about the schools is available on the project website under the "Associated Partners" section.

The training language was Greek for three of the schools and English for the private English School. The classes were offered in person, online, and on a hybrid model due to the COVID pandemic since schools were either closed or some of the students attended classes over the internet. At the end of the seminars, students offered an exciting feedback.

Emmelia Menoikou, a student from Archangelos High School in Nicosia, mentioned: "I have learnt many important things and life lessons. I think the same applies to the rest of my classmates, who were lucky enough to participate in this wonderful experience. One of my favourite topics was cyberbullying: it is becoming more and more common nowadays, especially as technology is evolving, so it fully deserves our attention. This horrifying form of bullying may be even worse than typical bullying since it has anonymity and the bully's identity is kept secret. That's why I appreciated that you raised awareness on this topic."

The partner carried out a national desk research aiming to support the competence profiles update perspective and impacts for the future digital society. The Cyprus national report included information deriving from the 2012-2020 Digital Strategy for Cyprus and the strategies by the Deputy Ministry of Research, Innovation, and Digital Policy which was established in March 2020. The report also included data from the Digital Economy and Society Index (DESI) 2020 report, the Ministry of Education, Culture, Sports and Youth 2019 Annual Report, other reports evaluating the ICT profession in Cyprus, and initiatives promoting Digital Skills.

The report concluded that although Cyprus ranks lower than the EU average, a great effort is being put by public and Private organizations. Everyone must identify and acknowledge that digital transformation all around the world is happening at a fast pace. As a result, public authorities need to speed up their policies and implement their strategies to not be left further behind.





Spain

Digital transformation is not a future utopia, but a steadily increasing reality. The outstanding development of digital technologies has been a worldwide process that Spain did not want to miss. Furthermore, Covid-19 situation acted as a catalyser for the digital uptake. The DESI Index, aimed at calling the attention to the state of digitisation from a broad perspective in economics and society, has evidenced the digitisation boost experienced by Spain due to the pandemical, especially in public services. However, there is a long way to tackle with new uptakes and developments since Spain remains slightly under the EU average in basic digital skills for SMEs and training.

Together with the global trend, this context led to the elaboration of different legal instruments that allow this transformation: Administrative Procedure Law (Ley 39/2015) and Public Sector Law (Ley 40/2015) for Public Services; or the Digitisation Strategy for Agri-food and Forestry sectors and Rural Environment, Connected Industry 4.0 National Strategy, Strategy for the internationalisation of the Spanish Economy 2017-2027, and the ICEX Spain Exports and Investments Strategic Plan for SMEs and digital skills in different sectors.

España Puede Plan (Recovery, transformation, and resilience plan), the "Agenda Digital 2025", is one of the more outstanding programs that received funding. Plans like this one gathers different financial instruments, such as the AI National Plan or the Digital Toolkit Program, that foster digitisation. This strategy is rooted on the principles and challenges that include the inclusion in the digital world, and the inclusion of digitalisation in the education and VET, among others. The total budget of the plan amounts to ξ 3.75 billion and a 45.56 % of it is devoted to Digital Transformation of the Education.

This essential milestone of the Spanish strategy on digital training is being already put into effect, seeking to fix some structural weaknesses. The Spanish digital skills national plan calls the attention, specially, to the following ones:

- 21% of students do not prove to have advanced digital skills.
- According to ITSE standards, Spanish students not only show low performance in mathematics and technology skills, but also in problem-solving, critical thinking and creativity.
- Technological changes being faster than programme adaptations to them.

Within this scenario, a plan aimed to digitalisation and digital skills in the educative system will encompass a set of actions to endorse the digital transformation of the education sector.

Focusing the labour market, the already-existent mismatch between the labour market's supplydemand in Spain, slightly smoothed by the adaption necessity to teleworking, evidences the necessity of the development of initiatives such as "Academia de inventores", that uses STEAM techniques.





In conclusion, Spanish economy will have to face severe difficulties to promote a nationwide, inclusive development. Measures and policy must be implemented to make digitalisation an opportunity for all groups of people, tackling the gender and regional gap, as well as the skyrocketing number of jobless young people. Therefore, digital education will be a flagship policy to be implemented through a digital skills national plan, already budgeted.

Greece

The Greek desk research revealed that there is a significant tendency to reduce unskilled work. A dramatic increase in the supply of skilled labor is expected, while for now skilled labor supply appears to exceed by about 99.000 the corresponding demand. The supply of moderately skilled work is projected to be relatively stable. Overall, people with a moderate level of skills will continue to make up about half of the workforce. Respectively, the share of people with a Higher Education degree is expected to exceed 30% of the total.

Many positions in the field of new technologies and information technology remain vacant and employers report significant difficulty in finding skilled people to fill these positions. The 10 skills that every company will be looking for in 2020 are: critical thinking, technical skills, adaptability and flexibility, creativity, emotional, intelligence (eq), cultural intelligence and diversity, leadership skills, judgment and complex decision making, and cooperation. An estimated 11.5% of the task force are self-employed in Greece and the there is a tendency for increase. The skills needed vary from ICT to soft skills. CEDEFOP verifies these needs in demand of skillful persons in ICT, soft skills, data analysis and an increase in demand for marketing, retail, and human resource management across Europe.

The majority of companies recognize the importance of digital transformation, as 90.2% have either initiated or intend to activate a digital transformation roadmap immediately. They include a large part of their workforce in relevant projects (over 74% participate full time or dedicate a significant part of their time). For yet another year, staff education and training in hard and soft skills is emerging as the most effective practice for implementing any digital transformation plan. Although, before the pandemic, 7 out of 10 Greek companies had only 25% of their workforce in remote work, after the outbreak of Covid-19, 6 out of 10 companies have more than 50 % of their employees working remotely. Only 14.8% of companies were able to proceed with the change immediately, while 48.4% said they were quite ready to do so.

Seminars and training activities in Greece took place from 1/3/2021 until 24/4/2021 with the participation of three provincial schools, namely the 5th General Lyceum of Agrinio, the 5th General Lyceum of Heraklion and the Model High School of Mytilene. A total of 127 students and 9 teachers were registered and participated. Since the schools were closed throughout Greece due to the





COVID-19 pandemic, all actions were realized in an online manner. Both teachers and students expressed their satisfaction with the topics and the educational content and their willingness to participate in other project activities as well, such as the RE-EDUCO's teachers' online training and school contest.



For more information, follow us on RE-EDUCO Facebook and visit RE-EDUCO project website. Contact info: re-educo@unilink.it