

INFORMATION NOTE

CONNECTING HIGHER EDUCATION WITH THE LABOR MARKET AND PRODUCTION - WHERE WE ARE TODAY:

A. The digital revolution, the new technologies and the challenges of the green transition, are decisively changing the data, creating new needs in skills and professions and intensifying the demand for highly qualified workers.

14% of workers in the EU is currently employed in jobs that may disappear in the future due to digital automation, while 40% in jobs that will be significantly transformed and 34% in jobs that will undergo changes due to digital automation.

About 4 in 10 jobs in the EU will be significantly transformed in the coming years due to artificial intelligence (AI) and digital automation. According to the World Economic Forum (WEF), by 2025 the new division of tasks between humans, machines and algorithms will result in the evolution of 85 million jobs, but also the creation of 97m. new positions with new features.

85% of the jobs and specialties of 2030 have not yet been created.

Only 1.8% of employees in Greece possess specialized Information and Communication Technology (ICT) skills, compared to 3.9% in the EU, and Greece ranks 27th. Skills shortage is high, especially in the fields of energy and information and communication technologies, despite very high youth unemployment rates (39.9% among young people aged 15-24, compared with 16.1% in the EU, and 28, 5% aged 25-29 compared to 10% in the EU in 2018) and the low employment rates of graduates of all levels of education.

Participation in lifelong learning in Greece is 30% below the European average. This makes it difficult to upgrade workers' skills - especially digital ones - and adapt to the changing needs of the economy.

It is estimated that, due to new technologies, 40% of low-skilled and high-skilled workers (in medicine, engineering, financial services, etc.) will have to be retrained for at least 6 months. At the same time, the useful life cycle of these skills is significantly reduced. Technological progress increases the demand for a workforce with modern qualifications and skills.

According to the OECD PIAAC (Program for the International Assessment of Adult Competitions) examining the reading, calculating and problem-solving skills of people aged 16-65, Greece ranks 17th in 19 EU Member States. who participated in the program, with a performance well below the OECD average.

In the European Skills Index of CEDEFOP, Greece occupies the last position with 17% (with an EU average of 66%) in terms of skills matching, it lags significantly behind both in terms of skills activation with skills 45% vs. 79% of the EU, as well as in terms of skills development with 43% vs. 76% of the EU, while in the overall ranking it occupies the penultimate position.

Greece ranks 25th among EU countries in terms of digital business maturity.

The Greek economy traditionally makes a low volume of technological and mechanical investments, a fact that also happened before the pandemic (about 1% of GDP, compared to 2.3% in the EU).

Only 7.1% of Greek companies have adopted Cloud services, a percentage lower than one third of the European average (20.3%).

Only 4 out of 10 companies in our country possess a culture and administrative decision-making procedures based on data analytics.

Only 3% of companies in Greece utilize Technical Intelligence solutions compared to 45% in other advanced countries.

Only 5 out of 10 commercial and industrial companies in the country have invested in the digital transformation of the "internal" supply chain.

B. Greece is one of the countries facing the greatest difficulties in linking education with the labor market and the transition of young people from education to employment (OECD).

Phenomena such as high youth unemployment rates, brain drain, incomplete and declining technical vocational education and training, the inability to combine supply and demand of out-of-school workers, demonstrate the difficulty of integrating young people into the labor market.

Lack of work experience is one of the factors that contribute to the high unemployment of young graduates of higher education but also to employment in less qualified positions.

The doctoral degree is usually not a field of interaction between the research produced in higher education and business, despite the high level of scientific excellence of Greek universities.

Internships should be the bridge between the educational process and the labor market. In Greece, internship programs are relatively degraded and characterized by optional nature, short duration, dependence on NSRF (National Strategic Reference Framework) funding, and bureaucratic procedures.

Internships need to be approached holistically, within a broader context of facilitating the transition of young people from education to the labor market. The internship has significant benefits for both companies, as they utilize new knowledge and skills, but also for young people, as businesses create a pool of valuable human resources.

Universities and enterprises need and can work together, in a structured and systematic way, within a framework of mutual understanding of needs.

C. Greece, despite showing positive elements and trends of improvement, is still characterized by mediocre performance in innovation, as a result of which the connection between education and business becomes imperative, as well as a faster scale up of the overall innovation ecosystem of the country.

Although Greek scientists participate to a large extent in European competition programs, occupying the 6th position in the relevant ranking, Greece is systematically ranked in the last positions in international indicators in the production of innovation (patent applications, etc.), which is an indicative factor of deterioration and brain drain.

The Greek innovation ecosystem faces structural weaknesses and lags behind the European average. According to the composite innovation index of the "European Innovation Scoreboard 2020", Greece is ranked in the group of countries with "Moderate performance in innovation" and occupies the 20th place with a score (83.47) among the EU countries.

The concentration / number of companies investing in research and development is very small / small (2.8 / 16.2 in the composite index) and the public procurement related to advanced technological products is relatively small / limited (2.6 / 3,5). Negative performance is reflected in the fact that as a country we record slightly higher performance in terms of residents with university education, which contributes to the chronic devaluation of skills.