



C/2024/872

6.2.2024

**Opinion of the European Economic and Social Committee on the impact of education on wages and labour productivity**

**(own-initiative opinion)**

(C/2024/872)

Rapporteur: **Linda ROMELE**

Plenary Assembly decision	25.1.2023
Legal basis	Rule 52(2) of the Rules of Procedure
	Own-initiative opinion
Section responsible	Employment, Social Affairs and Citizenship
Adopted in section	4.10.2023
Adopted at plenary	25.10.2023
Plenary session No	582
Outcome of vote	
(for/against/abstentions)	207/3/7

## 1. Conclusions and recommendations

1.1. **The European Economic and Social Committee (EESC) welcomes the European Year of Skills**, the aim of which is to boost competitiveness, participation and talent and to foster skills matching. The EESC agrees that skilled workers will enjoy better job opportunities and fully engage in society. Education levels, and especially higher education, provides individuals with better opportunities in terms of employability. There is a strong relationship between educational attainment and labour-market participation whether it is measured by employment, unemployment or inactivity rates.

1.2. The EESC fully supports the European Skills Agenda for sustainable competitiveness, fairness and resilience and calls for an action plan to properly implement it. In this respect the EESC welcomes the **Porto Declaration adopted by the Heads of State in 2020, and confirmed on its anniversary in 2023**, and a commitment to put education and skills at the centre of all policies.

1.3. The EESC agrees that the main driver of sustainable economic growth is skills, especially digital, green and transversal skills ahead of the twin transition. The EESC believes that tackling the skills-related challenges will require **significant political efforts and systemic reforms in education and training and smart investments in human capital from both public and private sources**. Success depends on the commitment of many players: national governments, regions, local authorities, businesses, employers, workers and people themselves.

1.4. The EESC reiterates its call to the Member States to link the initiatives on Individual Learning Accounts (ILAs) and Micro Credentials (MCs) to the implementation of the Council Recommendation of 19 December 2016 on *Upskilling Pathways: New Opportunities for Adults* <sup>(1)</sup>. ILAs and similar financial systems need to support access to recognised and validated training courses and allow workers to participate in processes to have their skills and work experience validated.

1.5. According to the EESC, given the impact of education on wages and productivity, there are three important basic criteria to take into consideration: **the quality of education available, access to education and the rate of employability**. This requires adequate investments to meet skills needs. There are many tools and good practices across Europe (by law or through collective agreements) — study/training leave, personal training accounts or training funds

---

<sup>(1)</sup> OJ C 484, 24.12.2016, p. 1.

(cross-industry or sectoral), vouchers, a certain percentage of the salary allocated to training, etc., all of which have specific objectives and target groups <sup>(2)</sup>. These examples could be included in the list of measures that the Member States, drawn up in consultation with the social partners, must submit to the EC in accordance with the Recommendation on strengthening social dialogue <sup>(3)</sup>. This would show examples of many possible financing schemes to support education and training for all. It is necessary to talk about incentives for employers, an example could be tax credits for companies that provide training. It is necessary to improve EU and Member State initiatives, with the involvement of social partners, regarding employee training in the workplace, creating the right incentives for employers to continue investing in the training of their workforce, while respecting the autonomy of social dialogue and collective agreements at national, sectoral and company levels.

1.6. The social partners, education providers and civil society organisations (CSOs) should work more together to design skills strategies that best respond to the need of the world of work and society more broadly. The involvement and roles of each party should be well defined. At the same time, it should be ensured that SMEs have easier access to funding, since the majority of employees are concentrated in them.

1.7. Although the discussions and measurement of returns are mainly related to tertiary education, initial education plays a key role — we will reap the fruits of the foundations we lay today in the next levels of education. Therefore, it is important to ensure good quality initial education supported by better in-school guidance to accompany and prepare learners in the transition to the world of work using dual learning systems where applicable. It is important to continue to strengthen the role and profile of Vocational Education and Training (VET) to further develop dual systems as a way to train people in basic, transversal and STEM skills.

1.8. The EESC recommends that the new paradigm for the development of skills in Europe be consistently reflected in diversity, gender equality, youth and disability policies.

1.9. The EESC calls for the EU's legal migration policy to evolve into a model based on the coordination of national immigration policies. Such an approach would allow Member States to address their varying needs for skilled migrant workers while doing so in a way that is broadly coordinated at EU level.

## 2. General comments

2.1. Although this opinion is not common, there is competition for jobs, especially among highly skilled workers. In addition, new jobs are entering the market, especially related to artificial intelligence, that require high levels of digital skills for new business models. Despite this trend, there is also a high skills mismatch specifically in the green and digital fields. The latter is affecting competition and earnings for those that are highly qualified and skilled as opposed to the low-skilled population.

2.2. The EESC sees a high demand among high-skilled groups <sup>(4)</sup>. It has been observed that those with higher qualifications and skills are also more involved in education and training in later years. This correlation tells us that the longer individuals stay in education, the more likely they are to engage in other forms of continuous education and lifelong learning activities, which, in turn, increases their chances of higher earnings. However, data show that those benefiting from the training are already qualified and that we are not reaching those who are not in education and employment or non-qualified workers. The European Skills Agenda <sup>(5)</sup>, as a five-year plan helping companies and individuals develop more and better skills, is a tool that should strengthen competitiveness and ensure social fairness.

---

<sup>(2)</sup> Social partner recommendations on skills, innovation, provision of and access to training (2021), chapter on financial incentives for research and development and skills investments.

<sup>(3)</sup> Proposal for a Council Recommendation on strengthening social dialogue in the European Union, 25.1.2023.

<sup>(4)</sup> OJ C 486, 21.12.2022, p. 161.

<sup>(5)</sup> The European Skills Agenda, <https://ec.europa.eu/social/main.jsp?catId=1223&langId=en>

2.3. The EESC believes that the labour force is lacking not only highly skilled workers but also low skilled workers, which are also essential. The European Commission Communication on the New Skills Agenda for Europe highlights clearly that 'Tackling the skills challenges will require significant political efforts and systemic reforms in education and training. It will require smart investments in human capital from both public and private sources. Success depends on the commitment of many players: national governments, regions, local authorities, businesses, employers, workers and people themselves' <sup>(6)</sup>. Employers' investment in employee training differs significantly between European Union Member States — there are countries where employers invest insufficiently in employee training. On the other hand, in some countries employers are highly involved in job-related training and fully support the aim to reskill and upskill to respond to the twin transitions and skills mismatch <sup>(7)</sup>. Companies and workers know best how workers' tasks change.

2.4. The proportion of the population in the 25–64 age group with higher education is increasing every year. This also affects the labour market by increasing competition for jobs requiring professional qualifications. However, the proportion of employed people with higher education varies by country and sector and it can be said that supply does not match demand in all sectors.

2.5. Those who only had upper secondary and post-secondary non-tertiary education earn around one third less than those who have tertiary education. The potential to earn more over their careers can be an important incentive for individuals to pursue further education and training. The earning advantage of tertiary-educated workers varies considerably for different levels of tertiary attainment across industries in Europe. A high rate of return for higher education may indicate significant differences in earnings.

2.6. Research shows that the private average global rate of return to one extra year of schooling is about nine percent a year and very stable over decades: 'Private returns to higher education have increased over time, raising issues of financing and equity. Social returns to schooling remain high, above 10 percent at the secondary and higher education levels' <sup>(8)</sup>.

2.7. Differences in wages cannot be explained only by the level of education. Gender and age inequality also have a significant influence, which mostly decreases with the increase in the level of educational attainment. Country differences also highly influence differences in wages, even within Europe: Southern and Eastern areas of Europe offer lower revenues for the same level of educational attainment <sup>(9)</sup>.

### 3. Skills as a driver of competitiveness, fairness and resilience

3.1. Cedefop predicts that there are indications of an increasing skills mismatch in Europe as a result of the coronavirus pandemic. 77 % of EU companies report difficulties in finding workers with the necessary skills while the OECD shows that 15,3 % of the workforce is overqualified and 16,8 % is underqualified on average in the EU, which affects EU growth and competitiveness. In the opinion of Cedefop <sup>(10)</sup>, we should look not only at income received but also at working conditions; paid, job-relevant training leave is extremely important in the case of ILAs and MCs. Transnational job-relevant paid training leave might be possible for training opportunities for those living near borders of neighbouring countries; however, participation in online training courses is not adjusted yet. But primarily the emphasis should be placed on Member States further strengthening their existing approaches to training, including the role of training funds, or other preferred national solutions.

<sup>(6)</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on *A new skills agenda for Europe — Working together to strengthen human capital, employability and competitiveness*. (COM(2016) 381 final).

<sup>(7)</sup> According to Eurostat (2020 data) countries where the cost of CVT courses as a percentage of total labour cost is above the EU average are France, Ireland, Italy, Estonia, Germany, Sweden and Luxembourg: [https://ec.europa.eu/eurostat/databrowser/view/TRNG\\_CVT\\_16S/default/table?lang=en](https://ec.europa.eu/eurostat/databrowser/view/TRNG_CVT_16S/default/table?lang=en)

<sup>(8)</sup> Psacharopoulos, George & Patrinos, Harry Anthony, 2018, *Returns to investment in education: a decennial review of the global literature*, Policy Research Working Paper Series 8402, The World Bank.

<sup>(9)</sup> Mean annual earnings by sex, economic activity and educational attainment [https://ec.europa.eu/eurostat/databrowser/view/EARN\\_SES18\\_30/default/table?lang=en](https://ec.europa.eu/eurostat/databrowser/view/EARN_SES18_30/default/table?lang=en)

<sup>(10)</sup> Cedefop, 2018. Skill shortage definition: Demand for skill exceeds supply at prevailing rate of pay and working conditions. *Insights into skill shortages and skill mismatch*, Cedefop.

3.2. According to Cedefop, 25 % of young tertiary education graduates in the EU in 2019 were overqualified and the share of EU workers with skills that did not match their jobs reached 45 % (2019). Productivity loss for the EU economy due to skills mismatch in 2019 was 2 % <sup>(11)</sup>.

3.3. Another initiative is the 2030 Digital Compass with targets of at least 80 % of adults having basic digital skills and 20 million employed ICT specialists in the EU. It aims to empower businesses and people in a human-centred, sustainable and more prosperous digital future. This is believed to contribute to skills development, but mostly among qualified workers.

3.4. According to Eurostat, there is a significant difference between people who have higher and secondary education in terms of wages and employment <sup>(12)</sup>. Education policy and the Skills Agenda should be able to harness technological progress. Accordingly, the growth of each EU Member State depends on the ability to create a skills policy that meets the needs of the national economy and the suitability of workers to implement the skills policy.

3.5. The Council Resolution on *a new European agenda for adult learning 2021-2030* (hereinafter 'Council Resolution') recognises that 'a new learning culture should emphasise the relevance of basic skills for all and of continuously acquiring relevant knowledge, skills and competences' <sup>(13)</sup>.

3.6. The Council Resolution states that adult learning can contribute to productivity as well as social inclusion, gender equality, creativity, innovation and entrepreneurship. However, the Council Resolution does not explicitly refer to social partners nevertheless highlighting the cooperation of Member States with relevant stakeholders in drawing disengaged adults in specific target groups back to learning and does not strengthen the role and responsibility of the social partners in adult education. This would also promote the culture of lifelong learning and the involvement of adults in education and strengthen the role and responsibility of the social partners in the governance of education and training systems, including as concerns the updating of curricula so that they are more responsive to evolving labour market needs, taking into account existing national practices.

3.7. The culture of lifelong learning should also reflect to society short and long-term needs. For example, national government initiatives or collective agreements could provide employees with the right to one or more paid days per year to participate in professional job-related training. Companies need effective support to strengthen and finance their strategies for upskilling and reskilling their workforces to encourage innovation. **The European social partners in their work programme 2022–2024 intend to conduct a project on skills matching.**

3.8. Hanushek (2016) <sup>(14)</sup> suggests that the quality of basic skills is key and that more higher education without good basic skills does not pay. Additional years in higher education do not have as great an effect as additional years in basic education.

3.9. Although one of the methods of measuring the quality of one's education includes the number of years of schooling, in recent years the quality of education and the rate of employability have been more important than the number of years of schooling as the school systems and quality of education varies not only between countries, but also within the same country <sup>(15)</sup>.

---

<sup>(11)</sup> <https://www.cedefop.europa.eu/en/themes/matching-skills-and-jobs>

<sup>(12)</sup> According to Eurostat data mean monthly earnings of employees with higher education (ISCED level 5–8) is 48 % higher than mean monthly earnings of employees with higher education (ISCED level 3–4). Additionally, in 2021 employment among those with upper secondary and post-secondary non-tertiary education was 71 %. In comparison, in the same year, the employment rate of those who had tertiary education was 84,9 % on average in the EU-27. [https://ec.europa.eu/eurostat/databrowser/view/EARN\\_SES18\\_23/default/table?lang=en](https://ec.europa.eu/eurostat/databrowser/view/EARN_SES18_23/default/table?lang=en)

<sup>(13)</sup> OJ C 504, 14.12.2021, p. 9.

<sup>(14)</sup> Hanushek, E.A., (2016), Will more higher education improve economic growth? Oxford Review of Economic Policy 32, No 4, pp. 538.

<sup>(15)</sup> Hanushek, E.A., (2016), Will more higher education improve economic growth? Oxford Review of Economic Policy 32, No 4, pp. 538.

3.10. The EESC hopes that ILAs will promote the development of employees' abilities in the right direction, i.e., according to the needs of the labour market and the abilities of the employee. We should not forget the wishes, needs and responsibility of the individuals themselves. Employee self-growth can contribute to employee satisfaction and productivity.

3.11. Investing in human capital is a fundamental investment that can be used by multiple employers. ILAs will give adults more opportunities to engage in training, and also provide the opportunity to keep track of their training attendance history and content with the possibility to be used by multiple employers. France is the only Member State where such training accounts are created and are operated on the basis of cooperation between employers and trade unions. However, it is not enough to have such learning accounts, there must be information about such an opportunity and how to access it and counselling must be provided. Moreover, in connection with training accounts, there are also challenges in how to bring training closer to the needs of the labour market that should be considered.

3.12. Lifelong learning and skills development is an essential element for economic growth and social cohesion. Learning can happen in different environments be they formal, non-formal and informal education spaces, which are equally important and have a positive impact on individuals. However, it is important to distinguish between transversal skills and specific job-related or technical skills. Therefore, it is essential to continue strengthening the role and profile of VET to further develop dual systems to also train people in basic, transversal and STEM skills. Although specific job-related skills are necessary for the labour market, general skills can be those that raise a person's motivation and self-confidence in such a way that indirectly influences the results of their work for economic development. Both types of skills complement each other and contribute to the overall development of an individual.

3.13. The involvement of social partners is essential to promote the involvement of adults in education and training, for example through ILAs in France or skills funds in Denmark or education leave in Belgium. However, social partners can include a reference to the employee's right to training at the company level in the negotiations of collective agreements. Social partners are very important, but unfortunately, especially in non-formal education, there is a lack of structured social dialogue and in some countries educators are mostly self-employed, in some cases with inappropriate working conditions and without the possibility to unionise. It is not only an issue of how to improve working conditions of education providers and their staff but also in terms of the quality they deliver. It is also related to funding, because education in some countries is mainly project based, but does not receive social benefits or infrastructure.

3.14. CSOs play a significant role in delivering non-formal education. In addition, CSOs play a role not only in the implementation of non-formal education, but also in its promotion, especially among youth organisations but also in reaching those who are hard to reach and further away. Nowadays, non-formal education and training is becoming more popular, especially among young people. It has also been the preferred form of education for adults with a negative experience of formal education. Consequently, the recognition of non-formal education should be generally promoted, especially for young people.

3.15. Local authorities and all different learning providers are also important stakeholders. It is evident that education works where all stakeholders work together — local authorities, social services, housing services, employers and social partners' organisations which know who needs training. Therefore, lifelong learning community centres could be a beneficial instrument. These exist in some Member States and should be promoted and funded across Europe using available EU and national financial instruments. Another good example is the 'cités des métiers', which are multi-level public-private partnerships at local level that support upskilling and reskilling of the workforce <sup>(16)</sup>.

3.16. The EESC calls for attention to be paid to small and medium-sized companies, as they have fewer opportunities to educate their employees. However, the situation is not clear-cut, because with the support of EU structural funds, small and medium-sized companies are also supported through associations that create special educational programmes. These opportunities must be better mainstreamed across Europe, better communicated to SMEs and better exploited.

<sup>(16)</sup> <https://lilplatform.eu/news/briefing-paper-community-lifelong-learning-centres/>



#### 4. Return on investment and productivity

4.1. Considering that education is increasingly considered an investment for people, the desire to empirically measure the return on investment is logical. Therefore, investments in human capital should be promoted for all parties involved — the state, employers and adults themselves. Public investment should increase labour productivity, while addressing such issues as demography.

4.2. People working in the ICT sector earn almost 37 % more than those working in the education sector <sup>(17)</sup>. Although the investment in learning opportunities could be equivalent, and take into account such parameters as the time invested in learning, income not earned during study, study expenses, wage premiums during the COVID-19 pandemic, etc., the return on investment in the first case, calculated per euro, is significantly higher than in the second case.

4.3. Looking at the gender breakdown, the employment rate is more compressed than the wage rate, i.e. the wage rate for people with both secondary education and higher education is slightly above 32 % on average in the EU, which reflects very high inequality between women and men <sup>(18)</sup>. Despite the fact that there are 5,4 % more women with higher education than men with higher education, on average in the EU women's wages are 79 % of men's wages <sup>(19)</sup>.

4.4. 'The European economy loses over 2 % of productivity per year due to a mismatch of skills, according to a recent study commissioned by the European Economic and Social Committee. This means a loss of 80 euro cents for each hour of work. The situation will get even worse in the future due to demographic trends and ongoing technological developments, if no reforms are undertaken' <sup>(20)</sup>. The success of industrial development and growth is determined by the quality of human resources. Studies show that education has a direct effect on labour productivity, which in turn causes a chain reaction, i.e., the increase in labour productivity impacts the overall performance of an industry. From the labour market perspective, investments in education should focus on the sectors that give the highest returns.

4.5. Higher wages encourage young people to acquire higher education and further training. According to the OECD, the wage gap has increased over time, which is also influenced by technological developments and globalisation <sup>(21)</sup>.

4.6. Sustainable competitiveness can be achieved through investments in people; in 2020 employers spent around 1,5 % of total labour costs of all enterprises on education and training, which is 0,2 % less than in the previous research year (2015). The Netherlands (2,4 %), France (2,1 %) and Ireland (1,9 %) should be mentioned as leaders, in comparison with Greece (0,3 %), Latvia, Poland and Romania (0,6 %). According to the abovementioned Council Resolution Member States are invited to enhance effective liaison between the relevant ministries as well as with stakeholders, such as social partners, businesses, non-governmental organisations and CSOs in the workforce in order to promote competitiveness, with a view to improving coherence between policies on adult learning and broader socioeconomic policies. Financing approaches based on the shared responsibility of public and private stakeholders can help and intensify resources <sup>(22)</sup>.

4.7. The European Skills Agenda sets strengthening sustainable competitiveness as one of its priorities. 'Skills and lifelong learning are crucial for long-term and sustainable growth, productivity and innovation' and research highlights that educational credentials have an even stronger impact on productivity than on wage costs. Research findings suggest that

<sup>(17)</sup> Author's estimation based on Eurostat data: [https://ec.europa.eu/eurostat/databrowser/view/EARN\\_SES18\\_20\\_\\_custom\\_7099054/default/table?lang=en](https://ec.europa.eu/eurostat/databrowser/view/EARN_SES18_20__custom_7099054/default/table?lang=en)

<sup>(18)</sup> Mean monthly earnings by sex, economic activity and educational attainment [https://ec.europa.eu/eurostat/databrowser/view/EARN\\_SES18\\_23/default/table?lang=en](https://ec.europa.eu/eurostat/databrowser/view/EARN_SES18_23/default/table?lang=en)

<sup>(19)</sup> Population by educational attainment level, sex, age and degree of urbanisation (%) [https://ec.europa.eu/eurostat/databrowser/view/EDAT\\_LFS\\_9913\\_\\_custom\\_6585685/default/table?lang=en](https://ec.europa.eu/eurostat/databrowser/view/EDAT_LFS_9913__custom_6585685/default/table?lang=en)

<sup>(20)</sup> <https://www.eesc.europa.eu/en/news-media/press-releases/skills-mismatches-eu-businesses-are-losing-millions-and-will-be-losing-even-more>

<sup>(21)</sup> OECD, 2021, Does Inequality Matter? <https://www.oecd.org/wise/does-inequality-matter-3023ed40-en.htm>

<sup>(22)</sup> According to Eurostat Sweden (7,34 %), Denmark (6,86 %), Belgium (6,81 %) and Finland (6,27 %) spent most on education (public expenditure from pre-primary to tertiary) as % of GDP, while Romania (3,14 %), Croatia (3,80 %), Hungary (3,83 %) and Luxembourg (3,84 %) spent the least on education as % of GDP.

hourly profits increase on average by 6,2 % in the long run (3,4 % in the short run) if the fraction of highly educated workers within a firm increases by 10 % (and is compensated by a proportional decrease in the share of low-educated workers) <sup>(23)</sup>.

4.8. At a time when technology is changing rapidly, the best way to keep up with the times is to acquire knowledge in the workplace. Employers should be encouraged to develop or further improve company skills strategies so every employee has the interest, responsibility and motivation to be involved in upskilling or reskilling.

4.9. The OECD estimates that approximately 30 % of cross-country variation in aggregate labour productivity can be explained by the level of skills used by workers in their jobs, meaning that both stronger proficiency and maximising the use of those skills in the workplace are important for productivity.

4.10. According to results obtained in Spain, a 10 % increase in secondary education leads to a 1,5 % increase in economic growth, while an increase of 10 % in tertiary education increases economic growth by 0,9 %, if all other factors remain unchanged <sup>(24)</sup>.

4.11. According to the 2019 Going for Growth publication, the highest share of reform priorities (16,9 %) by policy area in OECD countries were related to human capital, leaving behind such priorities as product market regulation, competition, openness to trade and foreign direct investments (14,9 %), tax structure and efficiency (10,4 %) <sup>(25)</sup>.

4.12. The EESC believes that, although economists have long considered skills to be the cause of productivity growth and the engine of economic growth, further research is needed on how to achieve even greater growth of industries based on investments in skills and knowledge.

4.13. The EESC believes that strong partnerships between governments, regional and local authorities, education and training providers, companies and social partners, CSOs and public employment and social services can result in the right skills that are needed in the labour market. Following the new European Skills Agenda for sustainable competitiveness, social fairness and resilience the EESC recommends an action plan to properly implement its twelve proposed actions to address the main solutions needed to respond to the current challenges.

Brussels, 25 October 2023.

*The President*  
*of the European Economic and Social Committee*  
Oliver RÖPKE

<sup>(23)</sup> Rycx F., Saks Y., Tojerow I. *Does Education Raise Productivity and Wages Equally? The Moderating Roles of Age, Gender and Industry*, 2015. IZA discussion paper. <https://docs.iza.org/dp9043.pdf>

<sup>(24)</sup> Marquez-Ramos, L. and Mourelle, E. (2019), *Education and economic growth: an empirical analysis of nonlinearities*, Applied Economic Analysis, Vol. 27 No 79, pp. 21–45, <https://doi.org/10.1108/AEA-06-2019-0005>

<sup>(25)</sup> Going for Growth 2019 Executive Summary.