CEDEFOP

European Centre
for the Development
of Vocational Training

CEDEFOP'S EUROPEAN SKILLS INDEX: NEW TOOL FOR INFORMED POLICY-MAKING

How skills systems perform: unlocking the mystery

Why a new tool?

Cedefop's European skills index (ESI) makes understanding and analysing the performance of skills systems, within and across EU Member States, possible for the first time.

It addresses key questions. Where do we stand? What do we need to improve? How are we doing compared to others? How have we progressed?

The answers to these questions can help Member States as they work towards the EU's overall common economic and social goals. Europe's skills base is seen as a major driving force in the endeavour to create more jobs and inclusive and sustainable growth. But it is not just people's skills and competences, attainment and training opportunities that count. Other aspects also matter: how smoothly they move into the world of work; how many and which groups of the population are economically active; and how well their skills match demand and are used. Skills development, activation and matching: it is these three aspects that make up a country's skills system.
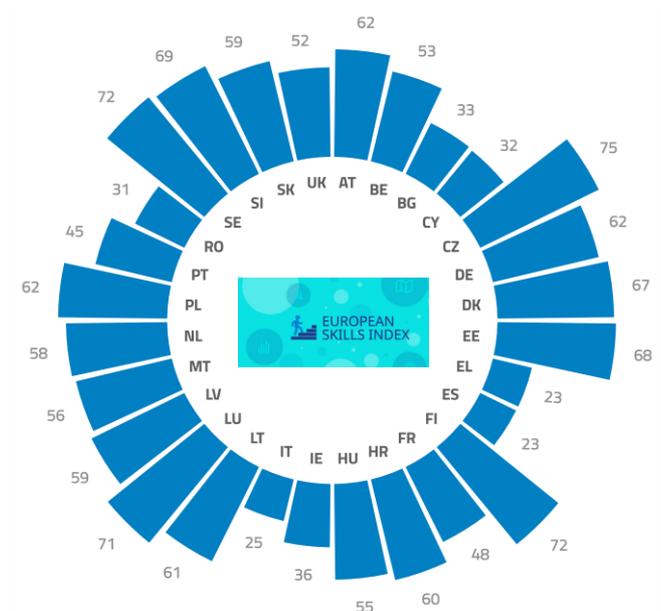
Skills systems are complex. How well they perform depends largely on their capacity to respond to external drivers affecting skills supply and demand, currently and in the future. Countries need to monitor how their education and training and labour market policies address the needs of their economies and societies.

The European Commission monitors countries' progress in economic and social policy domains. Various indicators have been used to inform policy-making. The social scoreboard ([1]), for instance,

supports the European Pillar of Social Rights and its goal to create fair and well-functioning labour markets and welfare systems. It tracks trends and performances across Member States in related areas, to help narrow disparities and improve social outcomes.

But, to date, there has been no single measure to assess and compare how well skills systems perform. Nor are there any easy answers to the question of how they can be made more effective. To fill this gap, Cedefop – with its interest in the interaction between skills development and work – has developed the ESI. Shedding more light on skills systems, the ESI will contribute to better-informed policy discussions. It will also, in consequence, add a key element in support to countries' work on the goals of the social rights pillar.
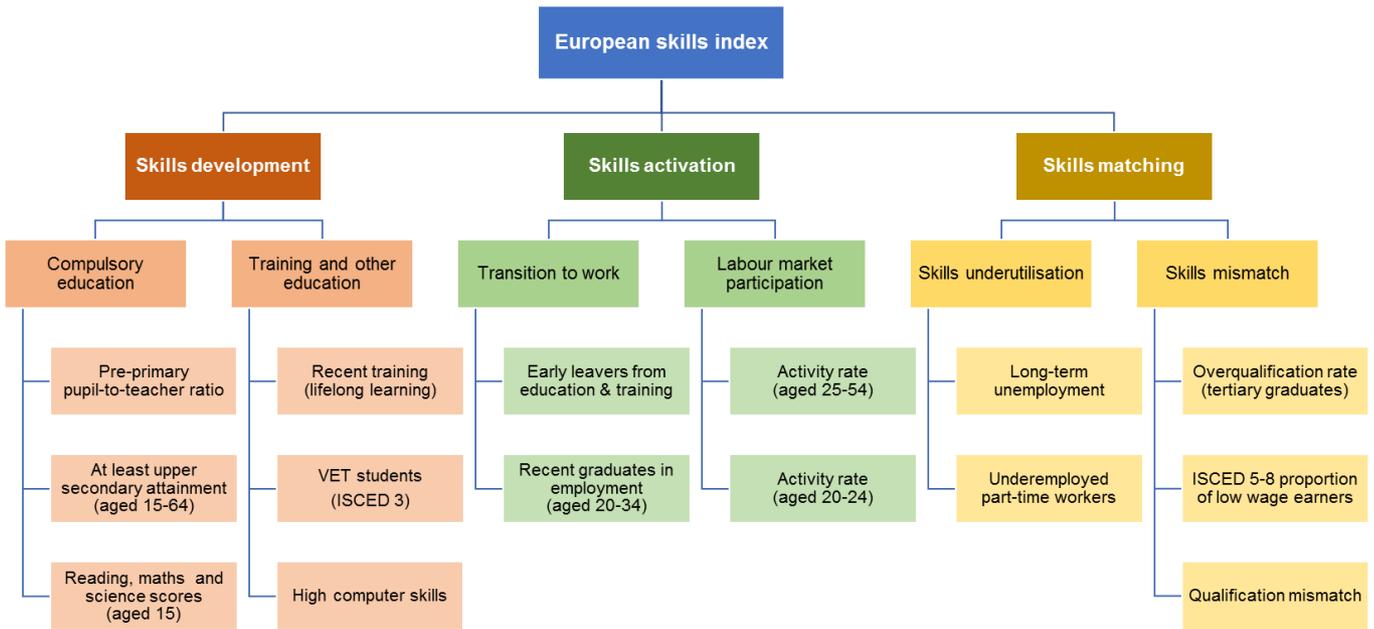
FIGURE 1: **ESI** OVERALL SCORES

Source: Cedefop (2018).

([1]) https://composite-indicators.jrc.ec.europa.eu/social-scoreboard/; http://ec.europa.eu/social/main.jsp?catId=1226&langId=en.

FIGURE 2: EUROPEAN SKILLS INDEX STRUCTURE

Source: Cedefop (2018). European skills index.

ESI: what's in it for policy-makers

The ESI is a monitoring tool, providing a snapshot of how countries' skills systems perform. It depicts a complex reality in a single measure. Its structure reflects the mesh of policy areas that influence performance (see Figure 1). It is based on indicators that have proved relevant for this purpose from data sets such as the European Union labour force survey and OECD's PISA ([2]). The index shows at a glance how a country performs across all of these.

In a concise, intuitive manner, it helps countries understand what is driving their results. It indicates scope for improvement and guides them to the areas they need to focus on. ESI can also be used to shed light on the relationship between various external factors and the outcomes of a country's skills system for its economy and citizens. It promotes dialogue among different actors from education and training, employment, economic and social policy domains.

As it shows the differences in performance across countries, the ESI aids benchmarking and encourages and supports policy learning.

As a time series is established, the ESI will help to fill an important gap by gauging relative improvement levels. This way it will not only aid monitoring individual country progress, but will also enable policy-makers and experts to keep an eye on how others develop.

How the ESI works

The overall index score summarises a country's performance in the different ESI components. To compute it, all indicators are made comparable to one another: countries' actual indicator values are scaled and normalised in relation to an ideal performance. The range 0-100 is used to do this. The ideal performance, 100, is set close to the best result achieved by any of the EU-28 over a seven-year period based on indicator-specific criteria. The indicator scores are averaged, first to form the sub-pillar and then the pillar scores which are used to calculate the overall index.

The ESI shows not only the performance of a country's skills system as a whole in relation to the one scoring highest or lowest, but also for each pillar, sub-pillar and indicator. The higher the score, the better the performance. The gap between the score and 100 indicates the scope for potential improvement. It is this gap which matters for analysis.

Cedefop has developed and piloted the ESI in consultation with national experts. The European

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([2]) OECD programme for international student assessment.

Commission's Joint Research Centre ([3]) audited the ESI method and confirmed that is statistically sound.

Skills development

Skills activation

Skills matching
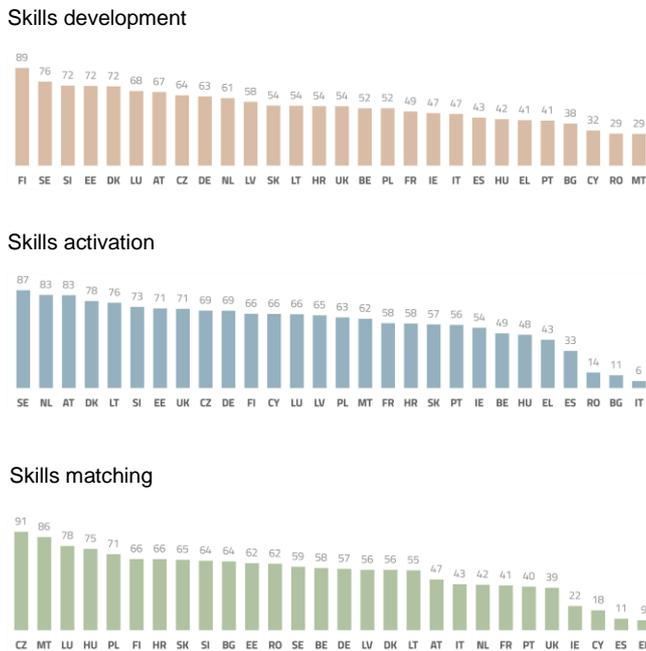
Source: Cedefop (2018). European skills index.

What the ESI indicates

The overall index reveals where countries stand. No Member State reaches, or comes close to 100 (see Figure 1). The Czech Republic scored highest (75), followed by Finland, Sweden, and Luxembourg (above 70), if we rank countries based on 2016 data. Together with Slovenia, Estonia and Denmark, these countries form the top 25% with results above 67. Half of the countries, mainly from western, central and eastern Europe, achieved scores in the mid range from 45 to 62. The remaining 25%, most from the south and south-east, scored below 45. There is scope to improve for all countries, even those with the best results.

However, a closer look shows why the Czech Republic is in the lead; why others with a strong vocational education and training (VET) sector are not in the top group; and which dimensions they may want to strengthen. It is in the pillars where we can find relevant clues, as countries perform differently in each of them (Figure 3).

([3]) The European Commission's science and knowledge service https://ec.europa.eu/jrc/en

The Czech Republic nearly hits the target for the matching pillar, compensating for lower results in skills development and activation, where it achieves the same level as Germany. Sweden's overall rank is mainly rooted in its top scores in skills development and activation, making up for a considerably less strong one in matching. If Sweden wants to close the gap with the Czech Republic, this is the pillar it may want to work on.

Countries in the top group are within or close to the top 10 in all pillars. Countries ranked lowest overall, tend to have low scores across the board. No clear trend is evident in the medium range. Disparities are generally wider in activation and matching than in skills development.

Following the ESI thread

To detect what affects the pillar results, and overall score, positively or negatively, requires digging into the next level of the sub-pillars and indicators.

Looking at the Swedish case in more detail, we can see a comparatively low score, even in the strong skills development pillar of its share of VET learners. Qualification mismatch, however, reveals itself as its weakest spot. A closer look at Austria's and Germany's matching pillars may also trigger reflections on their qualification mismatch scores.

Analysing the reasons behind ESI results at all levels is an exercise worth engaging in to inform policy-making, as the work of Greek experts proves (see Box 1). In the past few years, Greece has been working to set up a skills anticipation system to inform education and training policy. It is also currently participating in Cedefop's support programme to strengthen skills governance. Together with its ESI analysis, these initiatives are important steps towards improving the performance of its skills system.

ESI and context: piecing together

The ESI points to the mix of factors required to improve a country's skills system. But, as with all statistics, the ESI only tells part of the story. The clues and hints it provides must be considered in their specific country contexts. This is essential for meaningful comparison, policy conclusions and mutual learning.

Box 1: ESI, A BRAINTEASER FOR POLICY-MAKING

A group of senior stakeholders analysed Greece's ESI scores in all areas to draw up proposals for policy intervention. The following examples draw on their analysis.

Within skills activation, a good score was achieved in not leaving education and training early. While this may be partly linked to the situation in the labour market, it reveals people's firm belief in the gains of education. Thus, modernising some aspects of the education system is expected to benefit weaker areas.

An area that needs reviewing is reading, maths and science, which was revealed as the weakest link in the country's compulsory education score. To address its primary causes, the group considered essential actions: reshaping curricula to embrace critical thinking, knowledge application and the use of new technologies; focusing more on the quality of study material; increasing teacher autonomy and introducing frequent assessment.

The country performs comparatively well in high-level computer skills. This good result is attributed to post-secondary/tertiary-level programmes.

Proposals were made to address the low score in VET participation: stronger focus on anticipating skill needs; involving employers in VET governance; revising VET offers; and strengthening information and guidance.

NB: Cedefop supported the work of this group.
Source: European skills index scores for Greece: reasons behind and policy proposals. Discussion paper of working group Education and Employment. Friedrich Ebert Foundation.

Returning to the Swedish example and its low share of learners in VET, it is useful to know that this area is already being addressed. Recent policy measures aim to reinforce participation, not least by promoting apprenticeship and encouraging increased participation of employers in programme design.

The context also needs considering if we we want to understand what the Czech Republic does better than other countries in skills matching. Its manufacturing sector is stronger than the EU average; two thirds of upper secondary learners attend VET and employers tend to recruit people with VET qualifications in their field. In contrast, the UK, for instance, has a strong services sector, where such industries are among the least regulated. Due to frequent changes, the value and relevance of VET qualifications have not always been very clear and the share of higher education graduates is higher than that of the Czech Republic. If we add to this that the UK labour market is dynamic and that ESI scores summarise the situation of its four countries, we see that context is as important as the ESI flag.

As the ESI captures the development of scores over the years, it will not only help Member States assess if the steps taken have led to better results; it will also indicate where further action is required to support continuous improvement of their skills systems. It is country-specific expertise and thorough analysis utilising the ESI framework that will enable Member States to understand better how their skills systems work and evolve over time.

Find out more:

http://www.cedefop.europa.eu/en/visualisations/eu-skills-index

or

http://skillspanorama.cedefop.europa.eu/en/indicators/making-skills-work-index3

ESI displays are available across the EU-28 and allow generation of overviews by pillar and country down to indicator level. Brief country fact sheets accompany the visualisations.