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BLOG:

Skills2Capabilities – Vocational Education: Adapting to a Dynamic Working Life

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Vocational education programs need to be relevant to their respective labour markets. This means that the content of these programs must change over time as the tasks in the occupations and jobs they qualify for change, for example, due to new technologies. If not, they will gradually lose their relevance. However, it can also be argued that vocational education programs should not only respond to the short-term, expressed needs of the labour market but also provide students and apprentices with a broad base of knowledge and skills that can be useful in the labour market, either now or in the future.

Comparative study: An international comparison

Fafo and the University of Warwick have written a comparative report on changes in selected vocational education programs at the upper secondary level. We compare how the content of vocational education programs has changed in England, Germany, Austria, Norway, Korea, and Italy over 20 years.

The report is based on country reports written by collaborating universities and research institutions within the Horizon Europe-supported project Skills2Capabilities. We have analysed vocational education programs for industrial mechanics, healthcare workers, logistics, and ventilation technicians.

Differences in pace of change between countries

Significant differences exist between countries regarding how often and how much the content of vocational education programs changes. Some countries have systems that respond very quickly to changes in the labour market, with frequent changes to curricula. In contrast, other countries have systems that are slower, often with less detailed curricula. To some extent, this slowness is intentional in these countries. In many countries, the curricula for vocational education programs have become more open and general than before. This provides flexibility to adapt the training in individual schools and training companies. It also allows for flexibility over time in the sense that training can be changed without the curriculum changing significantly. Countries like Norway, Germany, and Austria all have such built-in "inertia" in the system. These countries also have vocational education programs that provide a broad competence base and are based on an understanding of an occupation in the labour market. Austria has also introduced modules, i.e., dividing the training into basic modules, main modules, and specialisation modules, where specialisation can take place within the framework of a broader vocational qualification.

Other countries have a much higher pace of change in their vocational education programs. England is an example in our study. Vocational education programs in such countries quickly adapt to signals of changing competence needs in the labour market. This is also intentional and reflects a desire for a responsive education system, although the result is that the English system is more fragmented than probably originally intended. Changes in the content of subjects occur through a decentralised process for changing vocational education content where groups of companies come together in "trailblazer" groups to propose new education programs and changes to these. These groups are initiated by the companies and approved by a public body (IfATE).

Advantages and disadvantages of different systems

The disadvantage of the English system is that the pace of change becomes too high, both in the system as a whole and in individual apprenticeship standards. In addition, the programs can become too focused on short-term needs. The disadvantage of the system in Norway, Germany, and Austria is that changes can be too slow, and the danger is that it will affect the relevance of the programs. There are nuances between the three countries. Social partners have a stronger role in Germany and partly in Austria than in Norway. Nevertheless, the systems in all these countries require a degree of consensus between companies, between the social partners, and with these and the education authorities to achieve changes. Therefore, education programs have changed more slowly. The logistics program is an example of a program that has changed little in several countries. In Germany, the curriculum has not changed since 2003, with seemingly negative consequences for the program's relevance. In other subjects, however, these systems succeed in making important changes to the content of the programs, for example, in the case of the industrial mechanics program in Germany.

Vocational training in Italy and Korea

Italy has a state-led system for its national vocational education programs, where companies and social partners have comparatively little influence and a more complex system for regional vocational education programs. In the healthcare field, initiatives have been taken to change the training, but there has been little success in achieving changes in the content over time. In the logistics field, a new logistics education program was established at the regional level in 2011, while schools have some leeway within the existing curriculum. Korea has undergone major changes in its vocational education system over the past twenty years. Here, the national authorities have created a "map" or classification framework on top of a complex vocational education system through the so-called NCS system (National Competency Standards) to try to improve the vocational education and training system.

At the same time, there is also a system of national technical qualifications (NTQ), which is only partially coordinated with the NCS system.

Changes have occurred in the content of education, but these are not always well linked to the qualifications demanded in the fields of work. Companies and social partners have generally had relatively little influence on changes in vocational education in Korea (and partly in Italy), in contrast to the other countries in the study.

Unexpected findings at the occupational level

Comparisons at the occupational and vocational level reveal clear differences between occupations, with partly unexpected results. In the industrial mechanics subject, we see many of the same changes in the incorporation of new technology in the vocational programs in both England and Germany, even though they have completely different systems for changing vocational programs. In England, the system has been able to implement new technologies and maintain stability in the core content of the occupation despite the many changes in the vocational education and training system as a whole. In other subjects, such as the healthcare subject, changes in education go in different directions in different countries, even though all countries face the same demographic changes that put pressure on the health and care sectors. The system at the national level sets clear guidelines but does not determine what happens at the occupational or individual program level; this is determined by how the actors use the leeway within each system.