



Mind the gap: Europe's potential skills deficit

Future skill needs in Europe – Focus on 2020

Europe, potentially, faces a major skills problem in the near future. Over 20 million new jobs are expected to be created between 2006 and 2020. Another 85 million jobs will be available to replace people who retire or leave the labour market for other reasons. Although more jobs and more job opportunities are forecast, the working age population will fall by around six million.

While there is the possibility of oversupply in some areas, there is considerable evidence of increasing needs for, and even shortages of, people with adequate levels of qualification in many areas. The Lisbon employment rate target of 70 % by 2010 could prove to be far too low for 2020. In just over a decade an employment rate of around 74 % will be required to avoid a possible shortage in the workforce due to different occupational structures and potential skill gaps.

Europe needs to do more to anticipate changing skill needs. Information on skill needs at national level is no longer enough. A European labour market requires European-level information.

In March 2008, the European Council asked the European Commission for a comprehensive assessment of Europe's future skills requirements up to 2020, taking account of technological change and an ageing population, and to propose ways to anticipate future needs. To support the European Commission, Cedefop reviewed its medium-term forecast of occupational skill needs in Europe for 2015, published in February 2008 and extended the

time horizon to 2020 ⁽¹⁾. The forecast covers 25 EU Member States plus Norway and Switzerland (EU-25⁺). It analyses skill needs by broad sectors, occupational groups and broad qualifications levels and discusses possible policy implications.

Inevitably, the data are rather broad and should be treated with some caution. The skill needs forecast uses a model to project demand by occupation and qualification, and replacement demand. There are sampling problems and differences arising from the methods used to collect comparable data for European countries. However, the forecast brings important insights and added value to the limited knowledge about the likely future development of European labour markets. The model can also be used to make new forecasts drawing on new data and alternative assumptions.



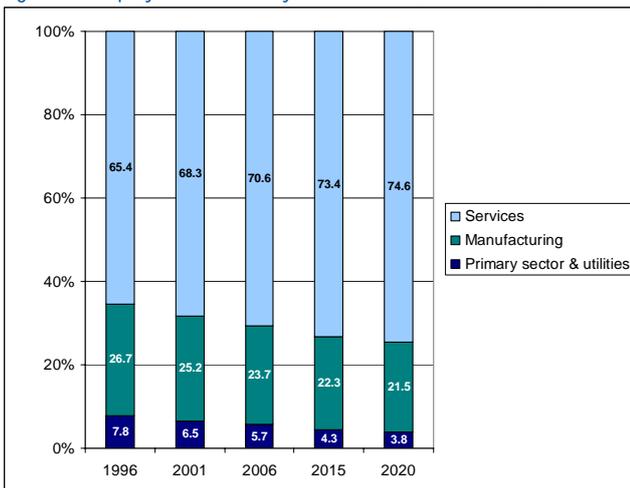
⁽¹⁾ Cedefop. *Future skill needs in Europe - Focus on 2020*. Luxembourg: Publications Office, 2008. Available from Internet: www.trainingvillage.gr/etv/Information_resources/Bookshop/publication_details.asp?pub_id=498

Employment trends 2006 to 2020

The general shift away from the primary sector (especially agriculture) and traditional manufacturing industries towards services and the knowledge-intensive economy is a trend likely to continue as a key feature in Europe over the coming decade.

The forecast 20.3 million additional jobs between 2006 and 2020 in the EU-25⁺ (EU-25 plus Norway and Switzerland) comes despite the loss of well over three million jobs in the primary sector and almost 0.8 million in manufacturing. Almost three quarters of jobs in EU-25⁺ in 2020 will be in services (Figure 1).

Figure 1: Employment trends by broad sector, shares in %, EU-25⁺



However, due to the need to replace people leaving the labour market, there will be significant numbers of job openings even in the primary and manufacturing sectors. It is important that policy-makers, education and training providers, guidance services and citizens are aware that these sectors will remain crucial components of the economy and viable sources of jobs.

Projected sectoral changes, as well as changes in how work is organised and jobs are performed, will significantly affect the occupational skills needed in the future.

However, the nature of many jobs and their skill requirements will change.

Polarised job growth: high-skill, low-skill

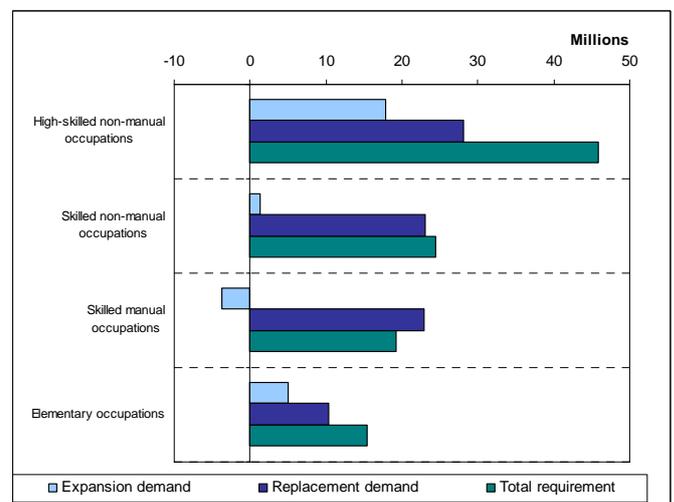
Currently, almost 40 % of people work in higher-level occupations such as management, professional work, or technical jobs. Expansion of high- and medium-level skilled occupations is expected to continue over the next decade.

An increase is also projected for some jobs requiring no or lower level skills such as elementary occupations, defined as jobs that consist of simple and routine tasks that require basic education to carry them out. In contrast, there will be fewer jobs for agricultural skilled workers, clerks and craft and related trades workers.

However, in all occupational categories projected job losses are more than offset by the estimated need to replace workers leaving the labour market (Figure 2). Even where employment is expected to fall, replacement demand estimates by occupation clearly indicate a significant number of job openings and demand for adequately trained people.

If trends continue, changes will lead not only to job growth at the higher level, but also at the lower-level of the job spectrum. Jobs at the lower level have low pay and poor terms and conditions. This polarises job growth with the medium-level occupational layer becoming thinner.

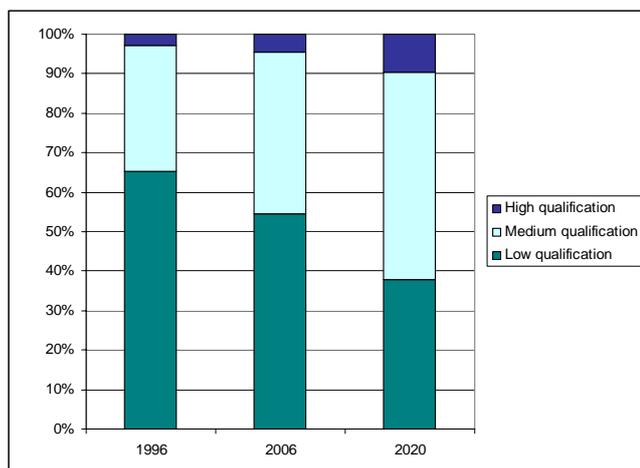
Figure 2: Demand by occupation, broad groups, projected change 2006-20, in millions EU-25⁺



Demand for higher qualifications

The forecast focuses on three levels (high, medium and low qualifications). The results highlight the general increase in qualification levels across most jobs and all occupational categories – including those at the lowest rung of the skill-occupation ladder. The forecast points to elementary jobs being increasingly occupied by workers with mainly medium qualifications (Figure 3). Consequently, at the broadest level, the projected changes are even more dramatic for qualification levels than occupations.

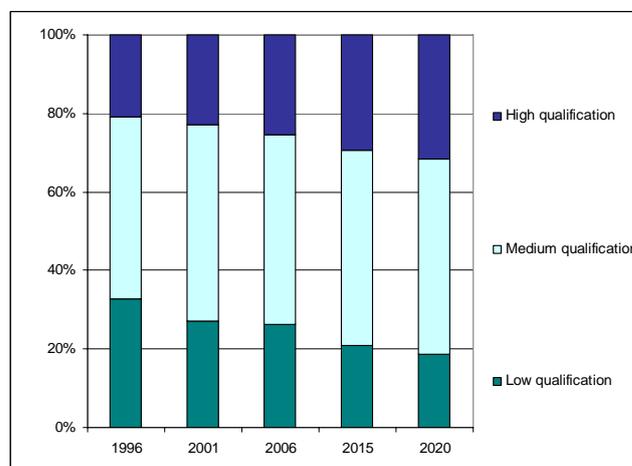
Figure 3: Changes in the composition of qualification levels of elementary occupations 1996-2020, in %, EU-25+



In total, the net employment increase in Europe of over 20 million jobs between 2006 and 2020 comprises increases of almost 19.6 million jobs at the highest qualification level (graduate and post-graduate qualifications, including vocational equivalents) and almost 13.1 million jobs at medium level (upper- and post-secondary level, especially vocational qualifications). This is offset by a sharp decline of almost 12.5 million jobs for those with no or low formal qualifications.

In 2020, 31.5 % of all jobs will need high qualifications and 50 % medium qualifications. Demand for low qualifications will fall from a third in 1996 to 18.5 % (Figure 4).

Figure 4: Past and likely future qualification structure of jobs 1996-2020, shares in %, EU-25+

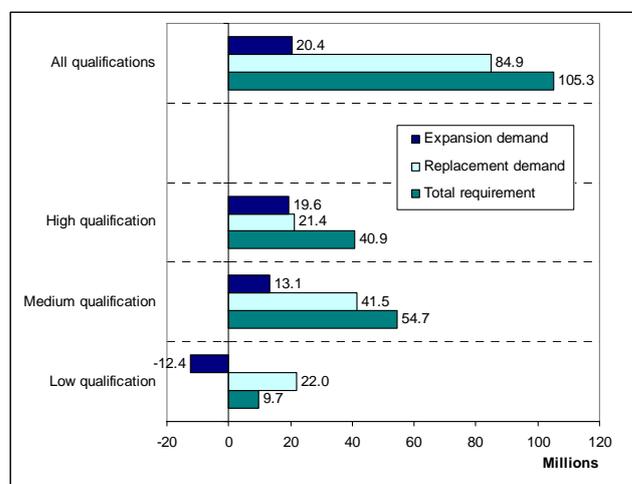


Job openings: a need for middle-level and vocational skills

Although most additional jobs over the period 2006-2020 will require high-level qualifications, most job openings (new jobs plus jobs open to replace people leaving the labour market) are expected to require medium-level qualifications, which traditionally include vocational qualifications.

Some 55 million, nearly 58 % of the forecast total of 105 million job openings, will be at medium-level. Many of these jobs will require vocational qualifications (Figure 5).

Figure 5: Total requirement by qualification level, projected change 2006-20, in millions, EU-25+





Of the remaining job openings, almost 41 million jobs may require high-level qualifications. Less than 10 million jobs will be open for applicants with no or low level qualifications. To meet this demand the current qualification structure of the workforce needs to change in the coming decade.

Policy implications

Based on these findings, overall demand for skills is likely to continue to rise. The young generation entering the labour market in the next decade cannot fulfil all the labour market skill needs. For Europe to remain competitive, policies need to be in place to ensure that the workforce can adapt to these requirements.

Europe needs a strategy to satisfy the demands of the service-oriented knowledge-intensive economy. People must be able to adjust their skills constantly to continual labour market change. This has implications for education and training and lifelong learning. A consistent and ambitious strategy is required that reduces the flow of early school leavers and drop-outs, establishes a comprehensive skills plan for adults/adult learning and which increases the supply of people trained in science and technology, as well as vocational fields. Education and training systems also need to be equitable to reach those who need to improve their skills, but often face barriers to participating in learning.

Skills obtained outside the formal education system, whether at work, during leisure time, or abroad, need to be visible and properly valued. It is important to validate and accredit people's knowledge, skills and competences, irrespective of how they were obtained, particularly those with low-level formal qualifications, older workers, people with a migrant background and returners to the labour market. Otherwise, we waste skills, failing to make the best use of those we have. Common European tools, principles and mechanisms developed in the Education and training 2010 work programme need to be part of such packages.

However, education and training measures alone cannot solve the potential problem of a major skill shortage in Europe.

Projected occupational change requires Europe to maximise the employment potential of its workforce. This has implications for employment, enterprise, migration, mobility and social policies in Member States. Employment and social policy measures need to be more flexible to provide more support for those needing to change their job. Bringing more women into the labour market and longer working lives are crucial measures for Europe's sustainable future. Given the shrinking workforce across the EU and trends in workforce demand, intra-European mobility will not suffice. The potential role of migration from outside the EU needs careful examination.

The forecast results emphasise the need for policy-making to initiate measures in time to prevent, or at least alleviate, risks of skill mismatches (shortages as well as surpluses). There is a need to understand in more detail working conditions, skill and competence requirements and profiles of both precarious and knowledge-intensive job segments. Uncertainties remain about specific developments in demand for occupations and qualifications, among which is how supply and demand interact. From a policy viewpoint, it is important to know if a skill mismatch is temporary or transitory (short-term labour market frictions that disappear after some time) or a long-term phenomenon requiring targeted action.

To answer these and other questions Europe needs to invest in further research and analysis on the early identification of skill needs.

Cedefop is supporting this process. It will regularly update and improve data and methods of forecasting skill demand and supply, working closely with country experts. Currently, Cedefop is carrying out a forecast of future skill supply and an analysis of possible imbalances between supply and demand. Results are expected early in 2009.

