

Skills and Competence Requirements for Career Starters

The Point of View of Employers concerning most future needed and actual existing competences of youth in a longitudinal comparison study 2008 - 2017

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Summary: The challenges at the transitions from school to work contain different dimensions. A decisive prerequisite for successful transitions is the good educational foundations of young people, on which a high-quality apprenticeship training, esp. in highly technical training occupations, can build up. The view of the training companies which competences are particularly important for which apprentice VET occupations is an essential orientation. Authentic and differentiated assessment by companies and trainers to what extent young people have the necessary competences for vocational training from upstream education is a base for future-orientated measures, especially based on a long-term-perspective over ten years. Purpose of this study is not to copy a concept like "Ausbildungsreife" but the results should be used as a tool within a comprehensive occupational orientation and career development process to support smooth transition processes from school into world of VET in companies and labour market.

Keywords: competence requirements, skills, career starters, view of employers

Introduction

In many highly industrialized countries of Europe, a shortage of skilled workers is noticeable. This has different reasons, both quantitative and qualitative. Demographic change reduces the supply of labour, especially of Youth, the trend towards school and university education reduces the demand for apprentice places in companies. It is often articulated in training companies that applicants for apprenticeships do not have the necessary educational prerequisites necessary for successful dual apprenticeship training.

Numerous studies and publications exist describing skills and competencies needed for the future world of work (European Commission 2018, OECD 2018, World Bank 2019). PISA and other international comparative studies provide evidence of the overall performance of education systems, including its development challenges and deficits. However, these data do not allow specific conclusions on individual ways of young people from the initial

education system to further vocational training in a particular occupation in a particular company.

In order to enable as many young people with different educational conditions and levels of performance to succeed from school to further education, we need data from the authentic perspective of companies that refer to specific occupations and specific areas of education.

The main purpose of the presented survey is to provide data and information out of the authentic view of enterprises in different areas of occupation about needed competences and skills in specific professions.

The purpose of this study is not to copy a concept like "Ausbildungsreife", the results should give support for students, teachers, parents, trainers in companies, entrepreneurs used as a tool within a comprehensive occupational orientation and career development process to support smooth transition processes from school into world of VET into companies and labour market.

Methods and research design

The present survey is an innovative follow-up to a study carried out 10 years ago, which at that time - in this form for the first time in Austria and Europe - captured the importance and extent of competences of young professionals from the view of training companies (Marterer & Härtel 2017).

Basically, the survey followed the concept, which was applied 10 years ago, first in a study in Styria, which was then extended to a representative number of federal states in Austria. The first investigations in 2008/2010 took place within the framework of a project funded by the European Social Fund. The current survey was carried out at the suggestion and on behalf of the Federation of Austrian Industry, Styria and the Styrian Economic Chamber by the Styrian Association for Education and Economics, based on the great interest for updating the outcomes 10 years ago to recent situation.

The aim was to achieve the greatest possible comparability over the 10-year period, while at the same time taking into account new aspects, in particular competences in the field of ICT and intercultural competences.

The core of the survey represents a twofold question for companies:

- What significance does knowledge, skills and competences in different apprenticeships have?
- What knowledge, skills and competences in your estimation, do applicants bring along?

These questions were asked for the fields of competence Mathematics, First language - German, English, Information and Communication Technologies ICT as well as for Personal and Social Competences.

Not only "headings" were requested, but also five to thirteen detailed parts of these fields of competence, whereby, where possible, reference was also made to the content of school curricula.

In order to enable a differentiated interpretation of the results based on sufficient case numbers, occupations with comparable requirement profiles were combined in agreement with the partners in seven "occupational clusters". These clusters each contain between 10% and 20% of the evaluable answers, thus allowing meaningful distinctions to be made as to the significance and the existence of competences required in the respective occupational field. Detailed evaluations of the apprenticeships can be made in accordance with existing case numbers

The survey took place from January 25, 2017 to February 21, 2017, with one reminder.

The questionnaire was sent to approximately 3.000 company addresses provided by the Economic Chamber (WKO) Styria. The response was 246 evaluable answers, that is 8%. The proportion of size and sectors of the responding companies corresponds approximately to the real situation in the province Styria.

The number of apprentices trained in the responding companies corresponds to 40% of the total population of all apprentices in the 3000 companies contacted and more than a quarter of the total number of Styrian apprentices, which ensures a high degree of representativeness of the results of the survey.

The answers relate to a total of 27 apprenticeship occupations. More than 80% of the most frequently chosen apprenticeship occupations are covered by the survey. The answers of each company refer to one chosen apprenticeship.

Results

Results are presented in Graphics and text, see examples, available in <https://www.dieindustrie.at/aktuelles/2017/bildungsanforderungen-an-berufseinsteigerinnen/> (in German)

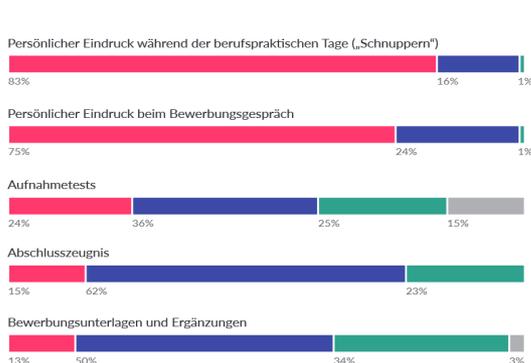


Figure 1: Criteria for access

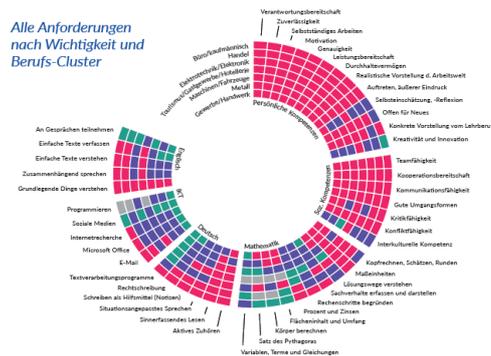


Figure 2: Needed competences in occupations

This two Graphs are examples for quite differentiated and specific outcomes of the survey, in both directions:

- Differences and specific needs and demands in various occupations
- Changes and new challenges in a ten year perspective

In general, the main challenges remain to be similar, with additional aspects concerning intercultural and ICT topics

In a specific view some core results of the survey are:

- In the competence domains “mathematics” and “first language” the need of competence remain high, partially increasing,
- The identified competences of applicants remain low, with differences between sectors and occupations
- The identified competencies in foreign language (English) increases significantly, but, in the same extent, the need in practice increased

- In the area of ICT applicants for apprenticeship seems to bring more competencies than expected – a chance for common development.
- Key competences overall in all occupations are personal and social competencies, like motivation, cooperation, teamwork etc. - first of all: to know, what ones want and what ones start to do.

That is a responsibility for all concerned persons and groups, to work on common processes, based on that scientific results, to bring together world of school and education and world of work to support good transitions from initial education to further processes of work based learning and innovative vocational apprenticeship training in companies and enterprises.

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