Regional Meeting of the New Education Forum

Enhancing the European Labour Market
Who we are

We organise international summits on innovative education and vocational learning, which allow us to advocate and build alliances in realization of the idea of an effective labour market in the European Union.

We find solutions enabling the youth to become active members of their communities and to contribute to the society by effectively entering the labour market. High quality and complexity of these models should be promoted and where possible also adapted in the EU Member States and their Regions.

We find, evaluate and promote solutions to:

- difficulties of employers resulting from shortage of qualified employees
- ineffective formal education, especially in the scope of vocational learning
- transformation gap resulting from communication and industrial revolution.

We work with:

- regional, national and European governments
- global corporations
- the European institutions
- academic institutions and research centres.

Our actions:

- building alliances, which enhance the European labour market
- advocating for introduction of effective learning methods improving employability
- providing ground for evaluating and promoting solutions in the scope of innovative education and vocational learning and training
- making recommendations for the European institution and cooperating with them on improvement of labour market policies and influencing national and regional governments as to their implementation.

Regional Meeting of the New Education Forum

About CIE

Annual New Education Forums

Presenting effective learning models on international level: Regional Meetings

Bringing renowned experts and influential institutions from the Member States to Regions

European level summits on education and vocational learning

Alliances

Advocating
On November 17th and 18th in Brussels, the New Education Forum 2016 introduced Recommendations regarding necessary educational changes. Key stakeholders of the learning process supported them: academia, business community, trade unions, research institutions and decision-makers at the European level. They also advised to organize meetings in the European Regions to bring ideas of the Forum closer to local authorities.

Here in Turin we call for actions addressing transformation gap resulting from communication and industrial revolution. We hope our cross-sectorial meeting will provide concrete solution helping generations comprehend and cope with arriving challenges. This is why our international panellists will concentrate on the practical tools for the Piedmont Region, Italy and the European community.

Commencing today in Turin, the 2017 Regional Meetings are scheduled next in Edinburgh, Poznan, Brussels to double in number in 2018. By 2020 we count on participation of all Member States. Once a year – during the annual New Education Forum – the stakeholders will report the results of implementing particular methods at the regional level. And we hope to see you there.

As Jerzy Buzek, Member and former Chair of the European Parliament and also the Honorary Ambassador of NEF says: “The Forum serves as a truly conducive space for international expertise and decision-making, but most of all, for stakeholders to share their experiences and ideas”. We welcome all the participants and hope the first Regional Meeting in Turin will fulfill its potential and your expectations as well.

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Joanna Bochniarz  
President  
Center for Innovative Education
Foreword

The EU Member States face global revolution of nanotechnology, sharing economy, constant communication and connectivity, Industry 4.0, Internet of things, smart working and decarbonisation. They bring changes to how our societies function in professional as well as in private spheres. Unfortunately constantly occurring technological transformations not necessarily have an impact on the learning process of the young Europeans.

The biggest industrial sectors of the European Union are undergoing structural changes. It is our role to adjust to them. Furthermore, industries’ workforce is aging and mismatches between employers’ expectations and youth’s career choices are growing. They also result in lack of qualified employees observed in all Member States. Education, especially in the scope of vocational learning and training is therefore of key importance in this process.

This is why meetings such the one we are having today are particularly important, because they bring practical solutions to where they are most needed – our Regions. With the contribution of experts from eight different EU countries, we will be able to discuss how to best address a key European challenge: enhancing our labour market. Participation of employers will - on the other hand – give the possibility to analyse which ideas are the most crucial to Piedmont and Italian business.

Each panel topic of the Turin Regional Meeting aims at reframing vocational learning and training and each is crucial for this process to succeed. I count on all our guests to give valuable contribution into the discussions and for recommendations of the Turin Regional Meeting to reach European institutions, while also strengthening and improving VET across the EU.

Brando Benifei
Member of the European Parliament
It is a pleasure to welcome all participants of the Regional Meeting at the seat of UniCredit - Turin. The city is called the birthplace of political and social movement consolidating different states of the Italian peninsula and I am glad it also brought us together to commence a series of Regional Meetings within the New Education Forum.

Topic of today’s meeting is very pertinent and big international Companies changes occurring on the labour market. We aim at meeting the challenges brought by digitalization and other factors of global revolution.

The Turin Regional Meeting gives the opportunity to contribute to these important changes by sharing different experiences in the scope of human capital development and through usage of innovative digital methods of learning.

Today’s meeting also gives us opportunity to learn from others. Thanks to research analysis from four different institutes all participants will better understand and become prepared to the labour market changes.

Shortage of qualified employees forces companies to look for diverse solutions to this problem. So, it is very important sharing methods, which are being successfully applied in other Member States. Examination by experts and business community will deliver answers whether their adjustment and further implementation is possible in other European regions. For a large international employers such as UniCredit this outcome is especially valuable.

I hope your stay at beautiful Turin will be fruitful in terms of delivered knowledge, new acquaintances as well as picturesque city impressions.

Sertac Yeltekin
Senior Vice President
Head of Corporate Learning
UniCredit
Regional Meeting of the New Education Forum

Program

UniManagement
(meeting room Agorà), Via XX Settembre, 29, Turin

May 22nd
19:00 Welcoming dinner

May 23rd
9:00 Welcoming statements from the hosts

- Sertac YEltEkin, Head of Corporate Learning, UniCredit
- Jorge GIMENO, CEO, the Center for Innovative Education (CIE)

9:15 Working table regarding promotion of vocational learning and training

- opening speech by Brando BENIFEI, Member of the European Parliament
  In times of profound change for industry driven by digitalization (IoT, Industry 4.0, smart working, sharing economy), vocational training has a key role to play. In order to avoid that digital disruption will cause a massive loss of jobs, VET must be improved and reframed to address in first instance skills mismatch. Taking into account the differences among Member States, the task of the European institution is to promote harmonization and to strengthen VET across the EU.

- Sandra D’AGOSTINO, Struttura, “Sistemi e servizi formativi”, INAPP
  My contribution to the NEF debate depicts the Italian context of the labour market, in comparison with the other European countries, and analyses the main differences among the Regions even in the light of the recent economic crisis. Then, some indicators of skills mismatch in the Italian labour market are presented, extracted from the most recent literature. The unemployment, especially in relation to young people, is indeed a problem the Govern has been trying to mitigate with the approval of the Jobs Act reform. The VET system is going to play its part in this strategy, even if the indicators of participation in the lifelong learning system in Italy are not so good in comparison with the other European countries (but improving).

- Krzysztof ŚWIERK, Principal, VET Schools Center
  The human capital has a great importance for economic development of each region. To have sustainable developmental economic strength, regions should absolutely adapt the vocational learning to labour market needs. One of the necessary conditions is providing the suitable quality and number of educated specialists.

To support these tasks it is necessary to take up the appropriate activities in the education area. What effective tools should be used in the process of making vocational training pathways more attractive? What factor can guarantee the success in the profession choices in the future from students’ and their parents’ perspective?

- Sigfrido PILONE, Engineer, Director of the Foundation ITS Aerospace and Mechatronics
  The presentation illustrates the efficient Vocational Training system applied in Scuola Camerana, an historical VAT Center in Turin with the results achieved in above 60 years of activity. Some parallels with the ITS System (the Italian model of high school) are also provided.

- Joanna BOCHNIARZ, the President, Center for Innovative Education
  The European Union experiences shortages qualified employees. In the same time vocational schools in many Member States are undergoing crisis situations with resulting from their unpopularity, mismatches in proposed courses and lack of apprentices. The presentation will refer to the issue of addressing parents’ prejudice toward VET and manners of overcoming it. It will also provide information on the methods used by vocational schools to promote themselves and obstacles they have to overcome in order to succeed in this important task.

10:45 Coffee break

11:00 Working table on raising awareness of soft skills significance in the education process

- opening speech by Mercedes BRESSO, Member of the European Parliament
  As Europeans, we need to consider education as one of the priorities for the next future. In the global competition, with emerging new players on the international scale, we should use all the opportunities offered by different EU policies and have them working together. A better coordination and more synergies between different funds should be envisaged, as for example the opportunities given by regional and cohesion policy, but also the new opportunities of the Investment Plan for Europe.
The complexity and instability of the overall system of the labour market have produced job instability. In this scenario, it becomes fundamental to adapt to jobs, maybe different from the possessed qualification and/or skills and competences. It is no longer sufficient to be exclusively specialized (specific technical skills – so called hard skills), but it has become crucial to go beyond hard skills with the so-called soft skills or cross-sector skills. The aim of this presentation is to describe the technical path to define skills within the Italian National Qualification Framework (NQF) and, in particular, to identify soft skills or cross-sector skills adequate to cover Italian qualifications.

**Claudio MASOTTI**,<br>Vice President, European Parents’ Association<br>Skills and competences that need to be included into the education pathway are the ‘soft skills’ or non-cognitive skills, such as critical thinking, decision-making, problem solving, the ability to collaborate in a team, the ability to plan, organize and prioritize work, as well as communication skills, especially verbal communication and obtaining and processing information, that are considered more basic and much more difficult to obtain at a later age.

**Giorgio POSSIO**,<br>President Spesso Gaskets Srl, President Lean Education Network, VP Piccola Industria Confindustria<br>The presentation illustrates the innovative teaching method developed by Turin’s Lean Education Network, its applicability to a wide variety of institutions, including VET, and the results achieved in the last six years: Lean Education and Training today is widely used in work-study alternation schemes, as it provides a cost-effective and sustainable tool to introduce students, in a simple and enjoyable way, to the values and methods of the modern enterprise.

**Ellen DOHERTY**,<br>General Teaching Council, Scotland<br>At present in Scotland there is a keen focus on supporting and developing young people to reach their full potential. This vision for young people is supported by policy and practice at a national, local and school level. A key contributor to this agenda is the teaching workforce and the approach it adopts to supporting and developing skills for learning life and work. The presentation will outline some of the pedagogical approaches, which have been used and their impact.

**Regional Meeting of the New Education Forum**

**Program**

12:30 **LUNCH BREAK**

13:30 **Working table on development of quick learning pathways**

- **opening speech by Daniele VIOTTI**,<br>Member of the European Parliament<br>We shall not consider wide unemployment, the lack of welfare and of perspectives for the future as economic issues: they are social issues. No social security generates hate and fear. European Union must fight against poverty through investment plans (with the help of Member States) aiming to rebuild the fabric of the society.

- **Sertac YELTEKİN**,<br>Head of Corporate Learning, UniCredit<br>UniCredit, with 45,000 employees in Italy, is among the top five players in the Italian labour market in terms of attractiveness for talents. The Bank is implementing the Transform 2019 initiative with an impact on overall organizational asset, workforce planning and business focus. In this context, many challenges lie ahead in human capital development: how to preserve the skillset of the workforce in view of large workforce mobility and how to prepare the next generation of managers. Digital learning can act as an important enabler to face these challenges.

- **Stefano SERRA**,<br>Chief Executive Officer Teseo - Clemessy Italy, President Camerana Professional School, President Foundation ITS Aerospace & Mechatronics and Robotics Protocol<br>Significant issues need to be addressed now if Europe is to keep up with its competitors around the globe. These include questions about digital infrastructure, cybersecurity and data sharing, regulatory environment and industry standards. The most important pillar for enabling and sustaining Europe in this challenge is leveraging on sustainable quick learning pathways scalable across all EU countries. Such quick learning pathways have to steer the trajectory of youth unemployment and the new skills required by the current workforce due to the Industry 4.0 pervasive impact on industry.

- **Reinhold WEISS**,<br>Professor, former Vice-President & Research Director at Bundesinstitut für Bildungsberatung (German research institute)<br>The complexity and instability of the overall system of the labour market have produced job instability. It becomes fundamental to adapt to jobs, maybe different from the possessed qualification and/or skills and competences. It is no longer sufficient to be exclusively specialized (specific technical skills – so called hard skills), but it has become crucial to go beyond hard skills with the so-called soft skills or cross-sector skills. The aim of this presentation is to describe the technical path to define skills within the Italian National Qualification Framework (NQF) and to identify soft skills or cross-sector skills adequate to cover Italian qualifications.

15:00 **Closing speech from the hosts**

- **Sertac YELTEKİN**,<br>Senior Executive Head of HR, UniCredit<br>- **Joanna BOCHNIAZ**,<br>President of the Center for Innovative Education
Regional Meeting of the New Education Forum

Speakers

Brando BENIFEI
Member of the European Parliament. He is the European Federalist, one of the youngest MEPs and is from La Spezia, Italy. He has been chair of European affairs for the Young Democrats and Vice-President of ECOSY (youth organization of PES) for 4 years and was part of the PES working group, which originally drafted the European Youth Guarantee.

Sandra D’AGOSTINO
Researcher at INAPP (l’Istituto Nazionale per l’Analisi delle Politiche Pubbliche – National Institute for Public Policy Analysis). Since 1996 she was a Researcher at ISFOL, which became INAPP in 2016. After having directed the Unit “Methodologies and Tools for Skills and Transitions” for 5 years, last February 2017 she was appointed as head of the Unit “VET Systems and services”.

Joanna BOCHNIARZ
President of the Center for Innovative Education. She is co-founder of Konkordia and advisor to its network. Previously she was the President of the Roman Czernecki Education Foundation (2010-2015) and a business lawyer at the international law firm Chadbourne&Parke (1994-2009). Since 2004 she is a creator of educational programs addressed to teachers and students. She has obtained her Master degree from the Law and Administration Faculty of the University of Warsaw and she is an ESADE Business School alumni.

Ellen L DOHERTY
Director of Education, Registration and Professional Learning at the General Teaching Council for Scotland. She graduated from the University of Glasgow with an Honours Degree in English Language and Literature. Prior to appointment as Director she held the following posts as (i) Adviser of English, Classics and Drama – North Lanarkshire Council, (ii) Senior Education Officer (Personnel) – North Lanarkshire Council and (iii) Senior Education Officer (Professional Learning) – GTCS.

Manuela BONACCIO
Technical Researcher at INAPP. Since 2008 she is a Technical Researcher in INAPP (l’Istituto Nazionale per l’Analisi delle Politiche Pubbliche – National Institute for Public Policy Analysis, ex ISFOL), carrying out national and international actions in the field of developing the Italian Qualifications Framework (NQF) within the European Qualifications Framework (EQF) and ECVET (European Credit System for Vocational Education and Training) principles and specifications.

Mercedes BRESSO
Member of the European Parliament. She is a member of the Progressive Alliance of Socialists and Democrats group. Since 2014 she has been serving on the Committee on Regional Development and on the Committee on Constitutional Affairs, where she serves as her parliamentary group’s coordinator.

Jorge GIMENO
CEO of the Center for Innovative Education. He is also a co-founder of Konkordia and its former CEO. His specialization is international relations and the creation of consortia. He has obtained a Master degree in Management and Marketing from the ESIC Business School and he is an ESADE Business School alumni.

Claudio MASOTTI
Vice President of the European Parents’ Association. He joined AGeSC (Italian Parents Association of Catholic Schools) in 1994 as president of the school committee. He joined EPA in 2010 representing AGeSC as its full member. In April 2016 he was elected as one of EPA Vice Presidents. Professionally he is a Project Manager at IBM responsible at global organisation level.
Regional Meeting of the New Education Forum

Speakers

Sigfrido PILONE
General Manager at Scuola Camerana, An Engineer, graduate of 1989 from the Polytechnic of Turin. He then experienced, as industrial entrepreneur, the hybridization of Artificial Intelligence concepts to automatic systems and people management. Later he became head of production in a medium-sized company of luxury writing articles, and then head of marketing at Scuola Camerana, the VET centre founded by Turin’s Industrial Association, Mechanic/Mechatronic Group and Chamber of Commerce.

Giorgio POSSIO
President at Spesso Gaskets Srl; President of Lean Education Network, VP Piccola Industria Confindustria. He is an entrepreneur in a SME since 1988. As the President of the Lean Education Network in Turin, he developed a Lean training programme for several thousands of company managers, employees and school students.

Stefano SERRA
Vice President of Piccolindustria. In 2008 actively participated in the start-up of the Piedmont innovation cluster MESAP; in 2010 he was elected to the Board of Piccolindustria in Turin. Apart from being Vice President of Piccolindustria in Turin, he is a member of the Piedmont Board of Piccolindustria, member of the General Council Federmeccanica, AMMA and of Unione Industriale of the Turin.

Krzysztof ŚWIERK
Director of the Vocational Learning Centre. Formerly related to industry, he worked for the VW AG group. Since 2015 he has been the director of the Agricultural Schools Practical Training Centre in Kaczki Średnie in Poland. Since 2014, he is also a member of ECVET (European Credit System for Vocational Education and Training) Expert Group Poland. He is a coordinator and author of many national and international projects on occupational competences for labour market needs.

Daniele VIOTTI
Member of the European Parliament. Born in Alessandria, he represents Italy’s Democratic Party (member of the Party of European Socialists) in the North-West constituency. He is currently co-president of LGBTI intergroup and a member of the Committee on Civil Liberties, Justice and Home Affairs. He has always been a civil rights activist working on the equality issue for the LGBTI community.

Reinhold WEIB
Professor. From 2005 to 2017 he was Deputy President and Head of Research of the Federal Institute for Vocational Education and Training („BIBB”) in Germany. His research is focused on initial and continuing vocational training, company training and personal development, labour market and economics of education.

Sertac YELTEKIN
Senior Vice President, Head of Corporate Learning, UniCredit. He is currently the Head of Corporate Learning in UniCredit covering managerial and technical training at Group level. Sertac has previously covered managerial roles in the UniCredit Group as Head of Projects & Advisory in CFO Area in 2009 and as Head of Business Performance Management at Pioneer Global Asset Management in 2008.
Vocational Skills Week is a week of activities in Brussels and across Europe to celebrate vocational skills in order to encourage more people to pursue vocational studies, and to showcase how EU co-operation and tools can help. The first European Vocational Skills Week, held in 2016, was a huge success. Nearly 1,000 events and more than 700,000 people got involved across Europe. Five Members of the College were involved in launching the Week in their home countries or at events in Brussels. There was a strong engagement from MEPs and from social partners.

The connection with citizens was often at very local levels, through factory-floor events to open houses, conferences and competitions. Social media achieved multi-million online reach and events were picked up well in local press. All events were connected with a common European branding and promoted through the European Commission website.

The second edition of the week will be held 20-24 November 2017. We aim for 1500 associated events/activities at local and regional levels involving at least 1 million citizens - a video invitation and some background info is at http://ec.europa.eu/social/main.jsp?langId=en&catId=1261&newsId=2754&furtherNews=yes

Brussels-based events will include the ‘European Pact for Youth’ closing Enterprise-Education summit celebrating the achievements of our mobilisation of businesses to open up 100,000 apprenticeship and other opportunities for young people (initiative launched by Presidents Juncker, Schultz and Tusk). http://www.csreurope.org/pactforyouth

‘Making Vocational Education and Training a first choice’ is one of the 10 actions of the EU’s Skills Agenda (CWP 2016); Vocational Skills Week is part of this. Apprenticeships and vocational skills are also prioritised in the European Commission’s 2017 Work Programme. New initiatives include an ‘ErasmusPRO’ for cross border apprenticeships and vocational studies and a Quality Framework for Apprenticeships, developed in co-operation with social partners, to be launched this year.
Promoting Vocational Learning - research of the Center for Innovative Education

The herein Report is based on two research studies conducted in 2016 and 2017 with engagement of the Center for Innovative Education. They both regard vocational learning and training: its assessment by parents of teenagers and ideas for VET promotion among teachers of vocational schools.

I Parents’ view on vocational learning and training

The 2016 research was commissioned by the Polish Confederation of Employers of the Automobiles and Manufactured Goods Industry (Związek Pracodawców Motoryzacji i Artykułów Przemysłowych) and conducted in quantitative study part by Millward Brown research institute and in qualitative study part by our Center. The Center for Innovative Education was also responsible for drafting survey questions, open questions surveys, research analysis and for the overall supervision of this research.

The research conducted by Millward Brown was realized in Poland with usage of CATI (Computer Assisted Telephone Interviewing) and CAWI (Computer Assisted Web Interviewing) methods. The surveys respondents were a countrywide representative group of 1,080 adults, whose children (in total 1,313 students) are between 13 and 19 years of age. Below is part of the research results and analysis included in the report “Effective Education”.

Parents’ opinions on vocational schools varied dependently on the level of education parents had and are generally a positive one. The results show that opinions on vocational learning and training depend on several factors. Parents with higher education more often admit that vocational schools constitute a valuable alternative for professional career development. However the same group of parents more often shared opinion that students with lower grades attend vocational schools.

Picture no. 1 | Parents’ opinions on vocational schools divided by parents’ education: Total N=1,080 parents, percentage of people agreeing with opinion, having elementary school education/vocational N=464, 2 level education N=369, higher education N=247)
We also asked parents if they would send their child to vocational school if they were to make such decision now, regardless of the place where their child studies presently. Almost half of the parents (46%) declared such will.

Decision on sending a child to vocational school depends on different factors. Negative opinion is often seen among persons whose children are already in high schools and did not take vocational learning, parents of higher education, on managerial positions, with higher income, having smaller family. Student's achievements at school also correlate with decision on possible sending the child to vocational schools: parents of children with lower grades are more willing to send them to vocational schools. Children's gender plays a little difference determining parents' decision as to sending them to vocational schools: only when the replays are divided into 4-scale answers the response “definitely yes” is significantly more often given by parents of sons. Almost one out of five parents whose children are presently studying at vocational school would not send his/her son to such school if the decision were to be made in the time of survey.
Parents’ response to question: “Would you send your child to vocational school, independently of the fact where your child studies now, if you were to make such decision today?”. Detailed response: Total N=1,080 parents.

<table>
<thead>
<tr>
<th>Total</th>
<th>Yes (%)</th>
<th>No (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>46%</td>
<td>54%</td>
</tr>
<tr>
<td>Middle school</td>
<td>46%</td>
<td>54%</td>
</tr>
<tr>
<td>High school</td>
<td>38%</td>
<td>62%</td>
</tr>
<tr>
<td>Technical school</td>
<td>49%</td>
<td>51%</td>
</tr>
<tr>
<td>Other vocational school</td>
<td>47%</td>
<td>53%</td>
</tr>
<tr>
<td>Other secondary level school</td>
<td>53%</td>
<td>47%</td>
</tr>
<tr>
<td>Elementary / vocational education</td>
<td>53%</td>
<td>47%</td>
</tr>
<tr>
<td>2 level education</td>
<td>47%</td>
<td>53%</td>
</tr>
<tr>
<td>Higher education of parent</td>
<td>32%</td>
<td>68%</td>
</tr>
<tr>
<td>Income of less than EUR 750</td>
<td>56%</td>
<td>44%</td>
</tr>
<tr>
<td>Income between EUR 750 and 1250</td>
<td>42%</td>
<td>58%</td>
</tr>
<tr>
<td>Income between EUR 1250 and 1750</td>
<td>39%</td>
<td>61%</td>
</tr>
<tr>
<td>Income above EUR 1750</td>
<td>36%</td>
<td>64%</td>
</tr>
<tr>
<td>Family of 2</td>
<td>40%</td>
<td>60%</td>
</tr>
<tr>
<td>Family of 3</td>
<td>46%</td>
<td>54%</td>
</tr>
<tr>
<td>Family of 4</td>
<td>44%</td>
<td>56%</td>
</tr>
<tr>
<td>Family of 5 and more</td>
<td>56%</td>
<td>44%</td>
</tr>
<tr>
<td>Director, company’s managerial officer</td>
<td>31%</td>
<td>69%</td>
</tr>
<tr>
<td>Freelance job, professional (lawyer, doctor)</td>
<td>34%</td>
<td>66%</td>
</tr>
<tr>
<td>Owner of private company</td>
<td>40%</td>
<td>60%</td>
</tr>
<tr>
<td>Public officer, lower level officer</td>
<td>42%</td>
<td>58%</td>
</tr>
<tr>
<td>Physical worker, farmer</td>
<td>55%</td>
<td>45%</td>
</tr>
<tr>
<td>Housewife / on maternity leave</td>
<td>55%</td>
<td>45%</td>
</tr>
<tr>
<td>Unemployed</td>
<td>56%</td>
<td>44%</td>
</tr>
<tr>
<td>Pensioner, annuitant</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Other, without job</td>
<td>22%</td>
<td>78%</td>
</tr>
<tr>
<td>The child is a good student</td>
<td>40%</td>
<td>60%</td>
</tr>
<tr>
<td>The child is an average student</td>
<td>54%</td>
<td>46%</td>
</tr>
<tr>
<td>The child is a poor student</td>
<td>54%</td>
<td>46%</td>
</tr>
<tr>
<td>Child’s gender: girl</td>
<td>46%</td>
<td>54%</td>
</tr>
<tr>
<td>Child’s gender: boy</td>
<td>48%</td>
<td>52%</td>
</tr>
</tbody>
</table>
Among the most important reasons, for which parents would decide to send their children to vocational school, the most important is advantage of learning a concrete profession (68%) and ease of acquiring a job after finishing such school. Only one out of ten parents stated that there is a higher level of education in vocational schools.

We asked parents who would not send their children to vocational schools, what are the reasons for them doing so. The most important factor pointed out by them was lower level of education provided by such schools. Secondly parents argued that local enterprises were not engaged in vocational learning and training.

This factor is important in the light of building reputability of vocational schools with participation of companies and we will refer to it in the 2017 research described further on. Only 5% of parents were afraid of what other people might think if their child were to attend vocational school.

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>Learning concrete profession</td>
<td>68%</td>
</tr>
<tr>
<td>Easiness at finding job after graduating from such school</td>
<td>55%</td>
</tr>
<tr>
<td>Good opinion on surrounding vocational schools</td>
<td>21%</td>
</tr>
<tr>
<td>Engagement of local enterprises in vocational learning</td>
<td>18%</td>
</tr>
<tr>
<td>Higher level of education</td>
<td>10%</td>
</tr>
<tr>
<td>A lot of information available on vocational schools in surroundings</td>
<td>8%</td>
</tr>
<tr>
<td>Other arguments</td>
<td>4%</td>
</tr>
</tbody>
</table>
We also asked parents of teenagers about their overall aspirations for their children’s educational career and professional career choices.

**Picture no. 6 | Parents’ opinions on their children’s educational and professional careers, Total: N=1,080.**

The above results show that level of frustration of Polish parents is quite high in terms of schools not preparing the youth to enter the adulthood and find them educational and professional career paths. On the other hand, 39% of parents feel that children should stay in schools as long as possible continuing their education on the third level, despite the fact that less than 1/3 of them believe that schools provide assistance in making future career choices.
II Teachers’ view on promotion of vocational learning and training

Between January and April 2017, the Center for Innovative Education conducted qualitative study among 96 teachers of five Polish vocational schools. The schools were chosen among those located in disadvantaged areas: small towns and villages of less than 15,000 inhabitants and unemployment exceeding 22% (highest unemployment amounted to 27%).

In the surveys extended by in-depth interviews we asked about:

• Practiced manners the vocational schools of questioned teachers use to promote themselves.
• New ways worth introducing, which could enhance such promotion.
• Decision makers: do young people decide by themselves on which secondary education they should choose, or is such decision undertaken together with parents?
• Best arguments for persuading the youth and their parents toward vocational learning and training.
• What are the biggest obstacles for effective vocational school promotion?
• What is the influence of cross-sectorial promotion on particular vocational school’s promotion?
• What are the risks of engaging business in promoting VET?
• How can enterprises be encouraged to engage in VET promotion?

Teachers of vocational schools in great majority (over 79%) shared view that parents are participating in their children’s decision making as to their further educational-professional career paths. This result has its implication as to the manners vocational schools promote themselves and new ways of their promotion suggested by teachers.

Picture no. 7 | Presently used manners of vocational promotion, Total: N=96, open answer questions.

- Other: 67%
- Web page: 38%
- Social media: 49%
- Open days at vocational school: 51%
- Education fairs: 87%
Teachers feel that their vocational schools should invest more in promoting themselves in the media. They also feel that the biggest obstacles for their schools’ promotion lie in negative approach of the surrounding environment. When asked what are the arguments for such opinions the teachers pointed out that due to demographic decline in Poland there is a negative competition between high schools and vocational schools.

“In the small local community there is a big influence on circulating opinions. Stereotypes about the school obscure the image of the school” (Olsztynek4).

Another obstacle for the young people’s choosing vocational schools is lack of proper preparedness of the middle school students. The youth at this stage doesn’t have basic knowledge on the local labour market. It is not provided at middle schools nor do the parents give it to their children.

“There is a lack of decision making among middle school students as to choosing secondary school and often these are random selections” (Kaczkisrednie5).

Teachers at vocational schools see a lot of arguments to encourage teenagers to choose vocational learning and training. Most commonly they point out advantages of modern didactic base, patronage classes organised with particular employers – companies from surrounding environment and well-chosen profiles of classes. These lead to possibility for the youth to become financially independent, gain job and become apprenticeship.

When asked about influence of cross-sectorial promotion on particular vocational school’s promotion 96% of teachers responded that it has a very positive effect on such promotion (with 4 persons abstaining and no negative answers to this question).

“I do not have an opinion because until now I did not observe any advantages” (Olsztynek13).
The teachers are open for collaboration with companies in the following manners:

1. Open days and other joint events with companies’ participation.
2. Participation of business representatives at meetings promoting vocational learning.
3. Organisation of practical workshops addressed to students of elementary schools.
4. Company’s aid in furnishing vocational schools with proper equipment and machinery.
5. Enterprises publishing their data on recruitment and employment strategies for the upcoming years.
6. High quality of apprenticeships, internships, placements.
7. Patronage classes and other joint projects with companies’ and school’s participation.
8. Scholarships for the best students.
9. Workshops for teachers with employees of the companies.
10. Accessibility of teachers to research work conducted by enterprises in the scope of technologies and production efficiency.
11. Cooperation with companies in the scope of promotion materials: films, posters and leaflets.
12. Loyalty packages for students in the form of further development pathways.

Another way of promoting vocational schools is to conduct it among parents of potential students. Teachers argued that parents rely on stereotypes and lack imagination of job posts, even those offered in their surrounding environment. By engaging companies in vocational schools promotion parents may gain idea of their children’s potential future professions. Through the acquired knowledge they may serve the youth with facts based advice in the scope of career decision-making.

“Parents are totally unaware on how production lines actually look like presently” (Wieluń 3).

Recommended teachers proposed the following manners of promoting vocational learning and training among parents of their potential students:

• Companies participating in meetings with parents in the middle schools.
• Enterprise allows for its company’s image (logos, colours, brochures) in the scope of its’ cooperation with school, sponsorship.
• Company’s events for its employees include presenting possibilities of vocational learning for future co-workers.

• Joint projects between business and school strengthen position of the school in the eyes of parents.
• Trade fairs at which possibilities of vocational learning are presented.
• Scholarships and apprenticeships for the best students organised by the companies.

“Cooperation with companies should have a positive influence on promotion of the vocational school as long as these companies are interested in hiring our graduates” (Kaczki Srednie35).

Recommendations

1. Regional, national and European level governments should invest in campaigns showing vocational learning and training as a valuable pathway for the youth. Due to stereotypes surrounding VET governments should invite companies to better explain changes in production and services. Financial independence of VET graduates and sometimes also students should be emphasized.

2. In order to make vocational learning and training more popular among the youth, parents of teenagers should be engaged in the decision making process of their children. They should be more aware of the working conditions in enterprises, especially of the surrounding environment. They also should be made aware of the changing labour market, which results from i.e. digitalisation, immigration, 24h communication.

3. Vocational schools’ teachers should deeply understand that their mission is for the young people to effectively enter the labour market. They should emphasize value of financial independence and possibility of obtaining job after or even during studying at the vocational school.

4. Vocational schools should spend more effort on gaining strong cooperation with business. Through trust built on cooperation, which is fruitful for both sides, schools gain powerful allies in joint projects as well as in promotion of vocational learning and training. Teachers of vocational schools should learn more about business environment to know what are powerful arguments for the company’s engagement in education.

Teachers of vocational schools should spend more time closer to companies. Through such enterprise-based training they are more likely to understand business decisions of employers, productivity processes, preparedness of employees and internal organization in the company. Without such practice teachers may lack working attitude and serve a negative example for VET students.

Author: Joanna Bochniarz,
President, the Center for Innovative Education
The Scottish Model  
- Learning for Sustainable Development

It is a fact that the citizens and employees of tomorrow are at this very moment in the schools and classrooms of today. This simple but obvious fact places a huge responsibility on society and in particular on those supporting and delivering education to get it right for every young person and maximise their life chances; it also offers a numbers of challenges not least ensuring that the educational provision offered is of the highest quality; and it provides an opportunity to be creative and innovative in educational thinking, planning and practice.

Setting the Policy Context in Scotland

Presently in Scotland there is an interesting alignment and cohesion of both political policy and educational policy and practice. At all levels be that at political, national, regional, organisational and/or school levels it is agreed that:

- the development of skills is essential to learning and education to help young people to become successful learners, confident individuals, responsible citizens and effective contributors,

- the skills and attributes, which children and young people develop should provide them with a sound basis for their development as lifelong learners in their adult, social and working lives, enabling them to reach their full potential.

At Scottish Government level a number of key policies have been developed and implemented, which have at their heart the principles of attainment, achievement and skills development. These principles are best exemplified, firstly by Curriculum for Excellence.

Curriculum for Excellence offers:

- a single curriculum framework across 3-18 years
- greater choice and opportunity for young people
- young people achieving broad outcomes both through subject teaching and more cross-subject activities
- all teachers responsible for literacy, numeracy, health and well being
- more skills-for-work options for young people
Secondly the central policy, Developing the Young Workforce - Scotland’s Youth Employment Strategy, published in December 2014 sets out the Scottish Government’s intention regarding the creation of a world class education system to reduce youth unemployment by 40% by 2021. This seven year national plan looks to improve the options on offer for young people, and reduce unemployment to levels of the best performing countries in Europe.

More recently the government has published an ambitious National Improvement Framework – Achieving Excellence and Equity December 2016. Within this policy 4 priorities have been identified

- Improvement in attainment, particularly in literacy and numeracy

Having developed an ambitious policy framework, which has at its heart the needs of young people, consideration had to be given as to how policy could be successfully translated into practice. It is here that the role of the teaching workforce was and remains critical. It is a well-recognised internationally that, the foundations of successful education lie in the quality of teachers and their leadership. Teaching Scotland's Future December 2008.

The Role of the General Teaching Council Scotland

The General Teaching Council Scotland is the regulatory body for teaching in Scotland. All teachers have to register with the GTCS before they are able to work in a school. As part of teacher professionalism, teachers have a set of professional standards, which they must adhere to in the course of their work:

- the Standard for Full Registration,
- the Standard for Career Long Professional Learning and
- the Standard for Leadership and Management.

It is these professional standards, in conjunction with the principles of the national curriculum, which help to develop in the young people in Scottish schools, a wide range of skills for learning, life and work.

Central to and running across all the Professional Standards are the three key principles of; values, leadership and learning for sustainability. Teachers in Scotland as part of their every day planning and practice are asked to embed learning for sustainability into their classroom. This simply means bringing the world into the classroom or going beyond the classroom in order that their students can see their learning in a meaningful context.

The purpose of adopting this approach is to stimulate students to ask questions, analyse, think critically and make informed decisions. The result is a move away from a teacher centred approach to a student led approach and from rote learning to choice, participation and increased levels of engagement. Furthermore embedding learning for sustainability into classroom practice encourages the teacher to promote participatory learning, higher order thinking skills, and lifelong learning skills, which are locally relevant and culturally appropriate.

The One Planet Report of 2012, when looking at the impact of learning for sustainability approaches, states engaging in activities related to learning for sustainability allows young people to “build the values, attitudes, knowledge, skills and confidence needed to develop practices and take decisions, which are compatible with a sustainable and equitable world”.

• Closing the attainment gap between the most and least disadvantaged children
• Improvement in children and young people’s health and well being
• Improvement in employability skills and sustained, positive school – leaver destinations for all young people.
Quite simply young people begin to understand that learning for sustainability is WHO WE ARE and can help us develop ourselves and our society in to who and what we want to be.

The question is how is this achieved on an everyday basis? Firstly teachers make effective use of what already exists - the curriculum. Be it language, maths, science, history or geography the teacher provides exciting, relevant and challenging contexts for learning. It is in this way that the learning is seen to have a value and that the skills and knowledge acquired are able to be transferred.

This principle of setting meaningful contexts for learning using the formal and informal curriculum is one, which is established from the very earliest of stages of education. Throughout the curriculum be that at the early learning stage or at the more senior stages values are nurtured, attitudes and behaviours, skills and attributes supported and developed in order that young people through their educational journey are able to actively contribute to their own education and the education of others.

One key benefit of adopting learning for sustainability approach is that it fosters and encourages interdisciplinary learning. It is not a question of simply looking at one subject in isolation but rather it is looking at learning and knowledge from a much wider perspective. This means that teachers require to speak with teachers about how they can bring learning together to meet the needs of their students. It is also about working with external partners who bring with them that real world dimension into the classroom or who can offer opportunities for young people to experience life and work beyond the classroom. In this way the classroom begins to replicate life where it is essential to see the connections and make the connections. Equally this approach offers enhanced and enriched learning experiences where young people can begin to see where they can contribute to and fit in with their society and culture.

Interdisciplinary learning also brings with it the opportunity for students to work together collaboratively and cooperatively. Here they can think and talk together, discuss ideas analyse and solve problems without the constant mediation of their teacher. Peer education is an approach, which empowers young people and which draws on the positive strength of the group. The students become active players in the educational process rather than passive participants of a set message.

This active learning in practical tasks engages and challenges children using real life situations. This can and indeed should include outdoor learning where students are transferring and applying skills and learning across contexts with the community and world, in which they live becoming a learning environment. In tandem with enriching the learning experience, digital technology can also enhance teaching. If used appropriately, digital technology can act as a powerful and engaging tool for educators that can teach students and enhance what they already do so well. We live in a highly digital world so why would it not be an important part of how our students learn?

It is through learning for sustainability that our students experience personalisation and choice, freedom and accountability and a greater sense of the wider world, its issues and their role and ability to influence it and others.

It is essential that education is not seen as a separate part of life, but indeed life is used to educate our young people today and provide them with the wide range of skills that we need and indeed do not as yet know we need for tomorrow.

Using learning for sustainability as the scaffold, around which we weave educational experiences we are able to develop our students into confident individuals who are resilient and challenging, effective contributors who can debate, communicate and discuss; responsible citizens who have developed their own set of values and who show courage; successful learners in both acquiring knowledge and developing a set on flexible skills in order that they can contribute to society, its economy and its future.

And just something to remember;

“The quality of an education system cannot exceed the quality of its teachers”

Muireann Sheehan and Peter. E Childs

Author: Dr. Ellen Doherty
Matching demand and supply for training contracts in the dual system

1. Matching demand and supply: a political task

The dual system of apprenticeship training is market driven. Companies decide about their participation, the volume of training, the professions and they decide, which applicants finally get a training contract. These decisions normally don’t come up to the needs of society and the interests of the school-leavers. Matching between demand and supply of training contracts within the dual system is therefore a major issue.

In Germany, the main political actors in this process are the federal ministries (especially for education, economy and labour) the responsible ministries in the Länder, the national employment agencies and business organisations like chambers of trade and commerce, chambers of craft trades, employer organisations and – as well – trade unions. All together are discussing the situation on the training market and possible instruments to bring demand and supply together so that all youngsters who are willing and able to finish an apprenticeship training have a chance to start. Company-based training has a clear priority in realizing this aim.

On federal level the Federal government is discussing training strategies together with the partners of the “National Alliance for Initial and Further Training”. Besides the Federal government (BMWi, BMAS, BMBF and integration commissioners), the employment Agencies (BA), business and industry groups, unions and Länder governments are members of the Alliance. They agreed upon the common goal of strengthening dual vocational training and establishing the equivalence of company-based and academic training. Besides the national level also alliances in the Länder and as well on the regional level are supporting the matching process. For example: they organize vocational fairs to inform school-leavers about professional profiles, they support internships, they inform about training offers and they support SME’s in organizing training.

A legalized forum of co-determination has been established with the main board of the Federal Institute for Vocational Education and Training (BIBB). The Board is a legal organ and the executive body of BIBB. It also acts as a statutory advisory body of the federal government. It gives advice in fundamental matters regarding vocational education and training. Representatives of employers, trade unions, Germany’s federal states and the federal government work together on the board, with each group having an equal share of votes.

Each year the Federal Ministry for Education and Science (BMBF) publishes the national VET report. The report describes the situation on the training market, analyses structural tendencies, makes a projection of the situation in the ongoing year and describes political programmes and instruments in the field of VET. The board of BIBB discusses and comments the national VET-report and gives own recommendations. In completion and parallel to the national VET-report, BIBB publishes the VET Data report with additional statistical and empirical data.

Federal government as well as ministries in the Länder have launched diverse programmes to assist and support the matching of supply and demand. The national VET-report gives an overview on political aims, instruments and programmes. Important programmes are – for example – focussing on the:

• organisation of vocational orientation in secondary schools (BOP),
• implementation of assistant structures for SME’s (JOBstarter),
• organisation of assistant courses for apprentices with a weak performance in part-time vocational training schools (ausbildungsbegleitende Hilfen),
• information and consultation of drop-outs from higher education about VET and the
• support of VET for adults with no professional degree (Nachqualifizierung).

The federal government as well as the governments of the Länder also support companies, especially SME’s, through different instruments and programs. Most important is the financial support of inter-company training centres. They offer training courses which complete the training within companies as many companies are not able to fulfil the requirements of the training regulations. For example: when they have specialized on a narrow program of products or services they maybe can’t train apprentices in a wide range of professional tasks. In this case they have the possibility to cooperate with other companies or to send their apprentices to training courses in inter-company training centres.
2. Matching Process: interests versus needs

The training period within the dual system starts in August or September. Big companies normally start their recruiting process for apprentices already one year in advance. The matching process is organized in a way that school leavers of the following year send their application together with CV and certificates from school to a company and apply for a training contract. Companies themselves check the application and invite potential candidates to the recruiting process. For example: They test competencies in German or Mathematics, they interview applicants and they invite them to an internship. Big companies organize the recruiting of new apprentices professionally and with sophisticated instruments, for example like an assessment centre.

Small companies make their choice on the basis of a few and simply to handling instruments. They normally invite applicants to an interview and offer an internship of one or two weeks to check whether they are suitable for a training. When both sides agree, a training contract is signed, in which rights and duties of companies and apprentices are stipulated. The training contract formally is a working contract with special obligations following the Vocational Training Act. The signed contract is send to a responsible body (normally a chamber of craft trade or chamber of industry and commerce) where the contract is officially registered.

Even when the training period has started the matching process is still going on. It is possible to sign a training contract also in the first month of the ongoing training period. School leavers who were not successful in getting a training contract until August have the opportunity to sign a training contract also in the last month of the year. Employment agencies and responsible bodies are engaged in this period with different actions to support the matching process.

The first month of the training period give both parties – companies as well as apprentices – the opportunity to check their choice. The trial period can last up to four month. When apprentices are not satisfied with the profession or the working conditions in the company they can quit the contract. Vice versa the company also has the right to quit the contract if the apprentice is not motivated enough and doesn't fulfill the expectations and requirements. After this trial period companies are not allowed to quit the contract without serious reasons.

The whole training period of two or three years can also be seen as a testing period. Apprentices can test the chosen profession, while companies are able to test the apprentices before they offer them a regular working contract for a qualified job. About 70 % of the successful apprentices continue working in their company.

3. Indicators: matching results

A good result of the matching process would be when all applicants for an apprenticeship training finally get a contract in the preferred profession, region and company. This is of course an ideal, which is difficult to realize. While companies decide upon the volume of their training and the professions of training contracts on their specific needs, school-leavers have their own preferences and expectations. Both normally differ.

The national VET-report describes the situation on the training market by different indicators. Most relevant are the number of concluded and recognized training contracts, the supply-demand-ratio and the placement rate. The indicators show – in general – fairly good matching results. But of course: applicants as well as companies have to be flexible. Applicants for example have to accept other professions than primarily preferred and they maybe have to move to another city. Companies have to accept applicants with a weaker performance than preferred and they maybe have to offer additional services to make their training attractive.

Concluded and recognized training contracts

On the basis of the Vocational Training Act (BBiG), the supply of training places is recorded as the number of newly concluded training contracts plus training places registered by employment agencies as still unfilled. Demand is calculated on the basis of the newly concluded training contracts and the unplaced applicants registered with employment agencies.

In 2016 more than 520.000 new training contracts have been concluded between apprentices and companies (see chart 1). They refer to nearly 330 generally accepted professions. This number of training contracts was nearly as high as in the year before. Comparing with 2009, when nearly 582.000 new contracts had been registered, the number was clearly lower in recent years. There are two main reasons for this decrease. Due to the demographic development the number of school-leavers with a basic or medium qualification, which are traditionally the main group applying for a vocational training, is much lower. In addition: the number of youngsters with a university entrance qualification is much higher than it was in the past. Traditionally most of these young men and women decide to start studying at a university or university of applied sciences.
Enhancing the European Labour Market

To cover their demand of qualified personnel companies had to recruit apprentices for a dual training from school-leavers with a lower degree and weaker performance. Youngsters who were not successful in getting a training contract in the past and therefore had decided to continue schooling within the so-called transition sector got a greater chance for a training contract. The transition sector represents a mixture of different types of schools and courses in which pupils have the possibility to improve their competences, to achieve a higher (general) degree or to achieve a basic vocational qualification. To achieve a fully recognized vocational qualification graduates from the transitional system need a vocational training in the dual system.

Supply-demand-ratio

At the beginning of the new training period in 2016 a total number of 520,331 new training contracts were concluded nationally. Together with training contracts which had been offered but couldn’t find an interested and / or qualified applicant (43,478) the total volume of training supply in 2016 was 564,809 places.

According to the legal definition, there was a demand for 540,881 training places. This figure is based on 520,331 newly concluded training contracts and a number of 20,550 applicants who were not successful in getting a training contract and were at the beginning of the training period still looking for a contract.

The ratio of supply and demand gives an aggregated information to the situation on the training market. A ratio under 100 shows a shortage of supply. A ratio over 100 shows that there are more offered trainings than applicants and that companies couldn’t find apprentices for their offers. During the last years the situation on the training market has improved. The (legal) ratio of supply and demand went up from 101 in 2009 to 104 in 2016 (see chart 2).

The legal definition of supply and demand has been criticized as both figures only give a rough, but not precise information of the situation on the training market. A revised definition of the demand has therefore been suggested by colleagues from BIBB. Data of the revised definition are now also published in the national VET-report. It includes also those applicants who succeeded to find an alternative training, for example in the transition system, but still are interested in an apprenticeship training. As the calculated demand is higher than in the legal definition, the figures of the revised supply-demand-ratio are lower.

But the tendency remains equal: Both figures show an improvement in the period between 2009 and 2016.
Placement rate

The computed placement rate (EQI) calculates the proportion of those youngsters registered as interested in training to those who were recruited into dual vocational training. In 2016 the placement rate for Germany was 65. It was a bit higher in the west than in the east.

The placement figure of 65 can’t be interpreted in the way that only two of three youngsters were successful in getting a training contract. It’s just an indicator to show who much youngsters were interested in an apprenticeship training at the end of their schooling as an option for their career development. As they have different options they later often decide to go to school to achieve a higher degree, to study at a university or to start with a school-organized training in the health-sector or in social professions. Between 2009 and 2016 the placement rate first increased from 65 to 68 and later decreased back to 65. Looking on whole period the placement rate was fairly stable.

Chart 3: Placement rate (2009 – 2016)

Increasing number of students

Since 2013 the number of youngsters starting in the higher education sector is bigger than those starting with professional training in the dual system. While the percentage of students in the age group was 35.6 % in 2006 it climbed within a few years up to 55.6 % in 2011. Over last years this share has stabilized on this level.

Dramatic shift in the number of students as well as in the share of the age group has caused intensive public and scientific debates. This development has been interpreted as indicator for a serious crisis of the dual system. It could finally shrink to a qualification system for a minority of youngsters, focussing on some craft and industrial professions and attractive only for school-leavers with a low performance. The increasing share of students could on the other hand lead to shrinking quality of academic studies.

Chart 4: Students in the tertiary sector as percentage of the age group (2000 – 2016)
The sorrows are justified but critics overestimate the real developments. To get a clear picture additional information should be considered:

- It is necessary to have a look on all entrants to VET. Besides actually 520,000 new training contracts within the dual system there are about 200,000 entrants to school-organized professional trainings. In the health and social sector this kind of training is dominant. Putting dual and other kinds of vocational training together there are still much more starters in vocational training than to higher education.

- Dual apprentice training lasts between two and three years, with a maximum of three and a half years. To finish studies in higher education five or six years are necessary and usual. Comparing graduation rates the VET-system has still much more successful graduates than higher education.

### Increasing educational background in VET

In 2016 27.7 % of new apprentices were qualified to enter higher education. Compared with the past years the formal level of qualification has grown (see Chart 5). 42.7 % of trainees with newly concluded training contracts had an intermediate school leaving certificate. 26.7 % had a secondary general school certificate and 2.8 % had no secondary general school certificate. The figures also show that an apprenticeship training is

- open for school-leavers with different degrees as there is no formal obligation to have a special degree,
- of interest for an increasing number of qualified school leavers with university entrance degree (Abitur).

Apprentices with a higher formal degree nevertheless have a lower share than graduates with this degree in the total age group.

The main reason for this development is generally updating of the educational attainment of all school-leavers in the past. Meanwhile 51 % of the age group achieve the university entrance degree. The motivation to choose an apprenticeship training are different. Some are interested in a special profession and want more practical learning. Others want to achieve professional competences as a solid basis to start studying. This is very common for economic or engineering studies. A third group is unsure about their future plans. To start with a vocational training gives time to make experiences in a specific profession and to better identify interests, options and pathways. Besides we have to consider an increasing number of drop-outs from university. They are looking for alternatives and often they start with an apprenticeship training to have better opportunities for a qualified job. And vice versa: companies are nowadays interested in recruiting apprentices from this group.

### Chart 5: Schooling background of trainees with newly concluded training contracts, 2009 to 2014

<table>
<thead>
<tr>
<th>Year</th>
<th>without any degree</th>
<th>with basic degree</th>
<th>with medium degree</th>
<th>with university entrance degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>26.7</td>
<td>27.7</td>
<td>42.7</td>
<td>20.3</td>
</tr>
<tr>
<td>2014</td>
<td>26.1</td>
<td>26.2</td>
<td>42.8</td>
<td>25.3</td>
</tr>
<tr>
<td>2013</td>
<td>26.9</td>
<td>29.5</td>
<td>43.0</td>
<td>21.0</td>
</tr>
<tr>
<td>2012</td>
<td>28.8</td>
<td>30.6</td>
<td>42.3</td>
<td>24.0</td>
</tr>
<tr>
<td>2011</td>
<td>29.9</td>
<td>31.9</td>
<td>42.1</td>
<td>23.1</td>
</tr>
<tr>
<td>2010</td>
<td>32.1</td>
<td>32.1</td>
<td>42.9</td>
<td>21.0</td>
</tr>
<tr>
<td>2009</td>
<td>33.1</td>
<td>30.1</td>
<td>43.0</td>
<td>20.3</td>
</tr>
</tbody>
</table>

### 5. Challenges: growing mismatch – retreat of SME’s – segmentation

The dual apprenticeship system has in fact to face different challenges. Most important are a growing mismatch between supply and demand, a reduced engagement of companies in training and last but not least the segmentation of applicants.

**Growing mismatch:** In 2016 more training places remained unfilled than in the years before. At the same time a growing number of applicants were still looking for a training place at the beginning of the training year. Matching problems persist as one of the central challenges for policy makers. Analyses of the training market show mismatches due to vocation, qualification and as well to regional criteria.

- **Vocational mismatch:** Some professions are of high interest for youngsters, others are not. For example: Companies have big problems to find adequate applicants for their trainings as restaurant specialist, butcher, salesperson, plumber, baker, scaffold or cook. Attractive professions are for example: animal keeper, media designer, visual marketing designer, print media designer, biology laboratory technician, IT-systems electronics technician, photographer, tourism and leisure agent, event manager.
Regional Meeting of the New Education Forum
Matching demand and supply for training contracts in the dual system

6. Reform: Permeability and attractiveness of training

- **Qualification mismatch:** Though the formal level of educational degrees is better now than ever before companies complain about the competences of school-leavers. Besides a lack of competences in German and mathematics they comply about a lack of social attitudes and competences. As they are responsible for a successful training they don’t want to give applicants a training contract which don’t fulfil their standards.

- **Regional mismatch:** Due to the economic and demographic structure the relation between supply and demand is quite heterogeneous in regional perspective. There are regions with a lack of training places or applicants. And there are regions with a lack of training places and applicants at the same time.

**Less companies provide training:** 20% of all companies with at least one employee for whom they pay social insurance contributions were offering training in 2016. This is the lowest rate ever. Responsible for this drop are the smallest companies (with less than 20 employees). This must be seen in the context of increasing difficulties of smaller companies in filling training places. Training and working in bigger companies normally is more attractive for school-leavers.

**Segmentation of applicants:** the opportunities of school-leavers in getting a training contract depend on their school performance, their educational attainment as well as on individual and social characteristics. School-leavers with a poor performance in school, with the basic degree (Hauptschulabschluss), with migration background or with handicaps have problems to find a company which is willing to sign a training contract. A great challenge for the next years will be the integration of young refugees to the VET-system and the labour market. Until now most of them are attending language courses, general or vocational training schools. Only few succeeded to get a training contract.

The dual system of VET is neither a unique system nor an inflexible system. The common basis are the regulations laid down in the Training Act. Main pillars are the organisation of learning in companies and part-time vocational training schools, the definition of professional standards and the participation of business organisations in the governance of the system. This system was able to tackle a number of challenges in the past. It will also be able to find answers to the challenges of the future. The main actors of this system – as mentioned above – are already discussing and implementing instruments for a better matching, for example to better integrate young refugees with a perspective to stay in Germany in dual training. It is also quite clear that it is necessary to keep the attractiveness of vocational training.

An important message for the equivalence of higher and vocational education came from ”Germany’s Qualification Framework” (DQR): higher vocational degrees, like “Meister” or “Techniker”, have been put on level six. They now have the same ranking like bachelor-degrees. Some higher vocational degrees have even been put on level seven which is the level of the master-degree. The message is that it is possible to reach the same qualification level via higher education or via vocational qualification.

Indeed there is need for a continuous reform. Common efforts are necessary to secure quality, to realize more permeability and to keep the vocational education attractive. Elements of a reform are – for example – the creation of attractive professions, the integration of additional courses in dual training for the most qualified and motivated apprentices as well as a better support of continuous training throughout working live. Besides companies have to think about their strategies for recruitment and development of their personnel. When academics finally have a higher job security and get the leading positions this is a clear signal for employees, that their children should have an academic degree.

**Sources:**
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