

Péter Farkas: Needs analysis-Tools for increasing apprenticeships in Hungary

For the past decade the number of young people learning a trade in apprenticeship has been increasing in Hungary. In the schoolyear 2014-2015 this number reached 50 thousand, which is 55 per cent of students studying in the vocational training year of vocational schools. Recently it has been expressed in various documents that until 2020 the number of students participating in apprenticeship should be increased significantly, to 70 thousand.

In the past few years 22-23 per cent of students completing elementary school successfully went on to vocational schools. The number of students in the 9th grade, also taking into consideration those repeating a year and entering from secondary school is over 30 thousand, however this number decreases by about 30 per cent by the 10th grade, in 2015 it was **20,500. Therefore increasing the number of students concluding apprenticeship contracts is only possible by increasing the attractiveness and efficiency of vocational school training.**

The other issue in our project is to develop tools which are able to assess values generated in apprenticeship training. In Germany, Austria and Switzerland values, profit generated have been evaluated and compared to the costs of training for decades. It is also taken into consideration that in case the apprentice is employed further, costs related to hiring new employees and their adaptation can be saved. A significant part of the costs is made up from wages paid to the student, which, in German-speaking countries are set forth by collective agreements. In Germany and Austria students produce two thirds, three quarters of the costs in practical training, while in Switzerland the value produced by students is slightly higher than the costs of employers, probably because in Switzerland there are sectorial vocational training funds, which cover certain cost elements. According to surveys in Austria, Germany and Switzerland, by also taking the costs of hiring new employees into consideration, the costs of the apprenticeship contract return for the training enterprise, if the student is employed further.

Comparing Hungary, Austria and Switzerland is useful, because in these three countries students are relatively young (15-16 years) when the apprenticeship contract is concluded.

In Germany, the Netherlands, Denmark and the United Kingdom the majority of youths is older than 18 when they conclude an apprenticeship contract. From September 2015, in Hungary it is also possible to conclude an apprenticeship contract in adult training, therefore it is useful to review the apprenticeship contract system in the United Kingdom, Denmark and the Netherlands besides the models in Switzerland and Austria. This is especially important for funding. In Hungary the extent of the apprenticeship wages is regulated by a decree, there are no sectorial collective contracts. **In Great Britain, the wage of the apprentice is defined in connection with the minimum wage, and its extent varies depending on the student being a minor, or older than 18.**

In Hungary recently there has been no research on values generated by apprentices on one hand because of the misinterpretation of ILO legislation on child labour, and considered apprenticeship as training, not as work, partly because the majority of students entering the secondary school after the successful accomplishment of elementary school are the weakest

performers, who enter training with gaps in knowledge according to the competence tests in 8th and 10th grade, and are not prepared to perform tasks at a workplace.

These difficulties appeared in all European countries. The solution is a set of harmonized measures, detailed as follows:

- transformation of the final stage of elementary school, defining output requirements, emphasis in teaching is on the completion of mathematical, linguistic and scientific requirements.
- Career orientation and preparation for learning a trade in the final stage of elementary school or the bridge programmes between general education and vocational education and training. In Austria and Denmark the first one-year “general education” bridge programmes appeared in the second part of the sixties, which offered an opportunity for youths performing normally for career orientation, to get to know several trade groups and to improve general core skills and acquire experience at the workplace. In the Netherlands and the UK the “general education” bridge programmes were integrated into the last two years of compulsory schooling.
- In the eighties bridge programmes were established in vocational and adult education and training, partly to allow disadvantaged persons to catch up and those who could not enter dual training also landed there. In the bridge programmes we can also find students who are suitable to participate in dual training and receive basic vocational training preparing to perform a job, therefore when they conclude an apprenticeship contract, they are suitable to perform value-generating work.

In Hungary, the majority of students entering vocational schools belong to the weakest one quarter of students accomplishing elementary school successfully. The data of competence tests from the 8th grade clearly indicated the problems, however the reform of the final stage is postponed, and the indications were not taken into consideration when the requirements were developed. Recently, the introduction of elementary school with nine grades has been put on the agenda.

The nine-grade elementary school was introduced in most EU countries, except for states accessing the EU in 2004, in the seventies. It was probably introduced because the five working day week was established. The elimination of school on Saturday, with shorter teaching period on the last workday of the week meant a 12-14 per cent decrease in the complete teaching time frame. By introducing the 9th grade, this lost time could be repaired.

The timeframe to teach subjects related to innate skills (e.g. singing, P.E.) is scarce, there is hardly any career orientation, the aims of the bridge programmes are not clear and they are practically missing. The daily workload of students is high, they are unmotivated, and the weakest one fifth hardly develops in the seventh and eighth grades.

The attractiveness of apprenticeship contracts is low. The wages made by students are low. Daily workload is high even in vocational schools. **The majority of VET students, almost 60 per cent commute to school**, and their burden is increased by the time spent on travelling. Due to the lack of career orientation and preparation for learning a trade drop-out rates are high in the ninth grade, and the drop-outs are replaced by students arriving from secondary schools. One third of the time frame is spent on general education subjects, the time to be spent on practical training is low.

Let us compare the Hungarian practice with European ones. Taking into consideration that a significant area in extending apprenticeships could be vocational education and training in adult education, we will not limit our comparison to present Swiss and Austrian examples only.

Dual training mostly prevails in **German-speaking** countries. In Germany, where apprenticeship has a monopoly, training forms within the school system often do not provide a qualification equivalent of dual training, and almost two thirds of the year acquires a qualification in apprenticeship. In Germany in several trades, e.g. administrative, financial, tourism sectors, where in Hungary training is pursued in secondary vocational schools, studying is only possible in apprenticeship, however the proportion of the school sector is also increasing. The German system is characterized by a wide range of bridge programmes on offer. One reason for this is the high proportion of disadvantaged persons, the other is that student wages are high, their average value was 826 EUR in 2015.¹ Employers mostly conclude contracts with students, who produced about two thirds or three quarters of their training costs in the framework of apprenticeship.

In Switzerland, where elementary school lasts 9 years, 12.8 per cent of school-leavers entered a bridge programme in 2012. In the first grade of secondary schools 65.2 per cent students participated in dual training, 7.4 per cent in school-based VET, and 27.4 per cent in general training.² The Swiss dual VET also covers the whole employment system, including administrative, financial, etc. sectors. The extent of student wages is similar to that in Germany. For participants of dual training both general and vocational learning paths are open. The former is pursued in parallel with vocational training and in the form of preparation for the secondary school-leaving examination (**Berufsmaturität**), while the latter offers wide-scale **master craftsman** training in adult education.

According to a 2009 survey, the cost of dual training was 5.3 bn Swiss francs, while the value generated by apprentices was 5.8 bn. This survey showed the value generated by apprentices in Switzerland covered the costs of apprenticeship training.

The institutional system of general education and vocational education and training in Austria is very similar to the Hungarian system. In the upper grades of elementary schools part of the students attend grammar school. After the completion of the eighth grade, students can pursue their studies in an institution similar to grammar schools and secondary vocational schools in Hungary, in vocational training schools, or in a polytechnic programme preparing for a one-year vocational training. Apprenticeship contracts can be concluded following the completion of the polytechnic programme or the first grade of a vocational training school or a vocational secondary school. About 40 per cent of students enter dual training.

¹ <https://www.bibb.de/de/37586.php>

² Berufsbildung in der Schweiz – Fakten und Zahlen 2015

<http://www.sbfi.admin.ch/berufsbildung/index.html?lang=de>

In Austrian VET, student wages are similar to those in Germany or Switzerland. In 2013 the average age of participants in dual training in the first training year was 16.5 years. The age was affected by the schooling age of 7 years, the studies lasting for 8+1 years and the proportion of students leaving other types of vocational schools.³

Similarly to Switzerland or Germany, in Austria the proportion of students with a migrant background is increasing steadily. In the eighth grade, one fifth of students are from immigrant families. In vocational education and training, their distribution is quite varied according to training form and trade. In order to integrate migrant students, new, differentiated and high quality bridge programmes have appeared.

The large-scale acceptance of the dual training model is improved by the fact that when the conditions were set, the needs of employers and training plants organizing practical training, students participating in the programme, the improvement of employment rates and the state supporting competitiveness in economy were all taken into consideration. **Employers**, who cover the costs of practical training **consider it important that the value generated by the students covers a significant part of their costs.** They expect students, who are suitable to acquire a trade and produce value within the framework of practical training. They consider it is important **to improve the quality elementary schools and similar institutions, and to receive unambiguous information about the performance of the school and the students.** We also know that besides Austria, Germany and Switzerland the proportion of dual training is also significant in the Netherlands, the UK, Denmark and Norway. Information can be obtained about the quality of the school via various **assessments and examinations** after the termination of various educational stages. An example for this is the **Bildungsstandards**, tests taken immediately after school-leaving age. **The examination closing general education** which mostly serves to allocate students to various schools types takes place in Germany, France, the UK, and the Netherlands and in certain provinces of Switzerland. In Austria, the introduction of a final examination and increasing the compulsory schooling age to 18 are being considered.

In the dual system, the cooperation of schools, the company and school training workshops and training centres taking over practical training which cannot be inserted into production has changed. The **dual** system is considered to be **trial** or tri-partite in more and more countries. In vocational education and training in the construction trade in Germany practical training in the first year is usually pursued in the training workshop maintained by the Chamber and funded by the sectorial vocational training fund. Students of Siemens in Vienna, visited by a delegation of the the Hungarian Ministry of Human Capacities three years ago, in the first year or eighteen months of training do not practice in production, but mostly in the workshop.

For employers, not only trainability and suitability of students, but **the length of working hours** is also an important condition. **In Austria and Switzerland the time frame for general education is three hours a week, while in Germany it is four hours.** The rest of general education is integrated in vocational theoretical training, mathematics into vocational calculations, IT, foreign languages, science are taught as vocational subjects in accordance

³ IBW: Lehrlingsausbildung im Überblick, <http://www.sbf.admin.ch/berufsbildung/index.html?lang=de>

with the needs of the given trade. **In Austria and Switzerland vocational training takes four days a week, in Germany in dual training three days and a half.**

In Germany we can calculate with 3 or 3 and a half training years, in Austria and Switzerland with 3, in certain cases 4. The school year lasts 40 weeks. In dual training there is no uninterrupted summer practice, and the student is entitled to a definite summer **holiday**. In several EU member states it can be observed that a significant proportion of participants in vocational education and training, including dual training is older than 20. In all the countries, except for Belgium, there is no upper age limit to conclude an apprenticeship contract. The average age of students in vocational education and training is especially high in Germany, the Netherlands and the UK.

Dual training is probably the cheapest form of vocational training for young adults, as apprenticeship wage covers basic living costs. **The apprenticeship wage and costs of practical training are mostly covered by the value generated by the students, thus state expenditures are limited to bridge programmes preparing for enter into dual training and 10-12 hours of vocational theory and general education in schools.**

In the UK, in the framework of the Access to Apprenticeship scheme launched in 2011, which helps early school-leavers between 18-25 years of age, who do not participate in education, vocational training or employment to enter training 10,000 persons are involved in apprenticeship each year.⁴

Different from the practice in German-speaking countries, the apprenticeship wage does not depend on sectorial agreements and the training year, but on the national minimum wage, also depending on the student's age.

The national minimum wage from October 1, 2014⁵

Age	21 years or older	18 – 20 years	under 18	Apprentice wage*
Hourly rate	£6.50	£5.13	£3.79	£2.73

*The 2.73 GBP hourly wage is paid to apprentices between 16-18 years of age, and apprentices older than 19 in the first year of training. The apprenticeship wage is paid during the time of practical training (for at least 30 hours a week) and the weekly day in school (5 hours). Taking into consideration the hourly rate from October 2014, a student between 16-18 years of age is paid $2.73 \times 35 = 95.55$ GBP a week, while a student over 21 $6.5 \times 35 = 227.5$ GBP a week.

Apprenticeship can be pursued on three levels. (Intermediate, advanced, higher level)

Apprenticeship contracts can be more popular if we take into consideration the interests of students when the conditions of the training are set. Students are mostly interested in studying good quality, competitive trades, where besides workplace needs their trainability, capability to hard work, teaching aspects are all taken into consideration, and where they are paid an apprentice wage. In dual training in the German-speaking countries, the Netherlands and Denmark and in apprenticeship in the UK both an appropriate student wage and the setting and monitoring of conditions improving training quality are guaranteed. In Germany young people living in disadvantaged conditions can receive social

⁴ Country Report UK 2012 10. old. http://libserver.cedefop.europa.eu/vetelib/2012/2012_CR_UK.pdf

⁵ <https://www.gov.uk/national-minimum-wage-rates>

benefits (BaFöG) stipulated in legislation besides the student wage. The regulation of dual training has changed continuously for the past fifty years. Development is continuous, e.g. Austrian initiatives to introduce modular training to improve competitiveness, where students after a wide-scale vocational basic training can acquire two branch qualifications and a further built-on qualification in the framework of an apprenticeship contract with increased term, or the skilled worker school-leaving examination models in Switzerland and Austria. Students failing the vocational final examination in Germany have the opportunity to prolong apprenticeship contracts, thus prepare for the repeated exam, the examination times are announced by the examination organizers, so finding a place to take the exam is easier for the student. Preparation for the examination can also be helped by examination preparatory courses organized independent training centres funded by employment services.

A basic principle of dual training is that catch-up is not done in the vocational training year, although the employment agency in Germany provides small group support programmes for those the financially disadvantaged in vocational training as well, but in bridge programmes.

An important condition of dual training is the conciliation and cooperation between employers, e.g. chambers, sectorial organizations (e.g. construction industry, catering, automotive or electro-technical organizations), authorities, government stakeholders, municipalities, and using the principle of subsidiarity in their work. On the website of the Swiss Under-secretariat of Education, Research and Innovation besides the examination requirements and training programmes of qualifications we can also find the vocational organization and its contact entitled to develop the given qualification.⁶

Based on the information above, we can only draw careful consequences for the developers of Hungarian vocational training. To sum up, we would like to draw the attention to four development areas, which are especially important to improve the efficiency of present apprenticeships and training in vocational schools and to increase the number of participants in dual training.

- Employers expect students who are suitable to acquire a trade and to create value within practical training. The first condition is the appropriate general training of students entering vocational training, their considerate choice of a career path and have not only information but experience concerning the given qualification, and they should be suitable for value-generating work.
- The next condition is to increase the timeframe of practical training at the workplace to 3.5-4 days per week.
- The attractiveness of dual training is increased when the apprentice is paid appropriate wage for their value creating work, which is set in the UK compared to the minimum wage, or the extent of which is German-speaking countries or other EU member states is similar.

⁶ <http://www.sbfi.admin.ch/bvz/grundbildung/index.html?lang=de>
http://www.sbfi.admin.ch/bvz/grundbildung/index.html?detail=1&typ=efz_all&lang=de&item=1214&abfragen=Abfrage+du_rchf%C3%BChren

- It is also important to develop teaching culture, harmonize vocational theoretical and practical training, understand and develop competence-based training and its toolset, and the in-service vocational and teaching training of entrepreneurs and their employees participating in practical training. (Master craftsman training and teaching modules of the master craftsman examination)

Extension of dual training requires a systemic approach, the processing and analysis of the present Hungarian situation and foreign practices, and international cooperation in developments. We should not forget about peculiar Hungarian conditions, the four disadvantaged regions of Northern Hungary, the Northern Great Plain, the Southern Great Plain and Southern Transdanubia, and the changes in the proportion of Roma youths. Our conditions are much less favourable than the conditions in the countries presented above.

Last, but not least the increase of apprenticeship contracts is a complex development task, and it can only be realized by the actual cooperation of general education, the economy, vocational education and training and foreign partners.

In parallel with a project aiming to increase the number of apprenticeship contracts in September 2016 **a new vocational secondary school model** will be launched, which allows students finishing vocational school, similarly to the earlier Berufsmatura programme in Austria, to prepare for the baccalaureate in a new two year programme. It is possible that the second stage of the new secondary vocational school will be built on the existing “secondary school for trade school leavers” programme, existing today.⁷

The aim and the conditions of the two project and their success are the same. The condition of the aim and success is to improve vocational school training and its prerequisites, e.g. the final stage of elementary school or the introduction of the nine-year elementary school, career orientation, development of bridge programmes, transformation of the general education structure in vocational schools adjusted to European practices, and increasing the proportion of workplace practice.

In Europe the **apprentice** (in German: Lehrling or Auszubildende) **performs value-creating work, and for this is paid an apprenticeship wage, which is in proportion with the value generated**, and covers the subsistence costs of the students and guarantees the attractiveness of dual training. **This is dual training.** Building a similar system for young people of 14-15 years of age, concluding an apprenticeship contract may take several years, however in vocational training in adult education can be established in a relatively short time.

⁷ http://kerettanternv.ofi.hu/13_melleklet_szik/index_szik.html