ON BEHALF OF THE AUSTRIAN FEDERAL MINISTRY OF EDUCATION, SCIENCE AND RESEARCH AND KULTURKONTAKT AUSTRIA
COOPERATION BETWEEN SECONDARY VOCATIONAL
SCHOOLS AND BUSINESS COMPANIES THROUGH THE
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IMPLEMENTATION OF PRACTICAL TRAINING
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ABBREVIATIONS

MESTD – Ministry of Education, Science and Technological Development

KKA – KulturKontakt Austria

VET – Vocational education and training

PTBC – Practical training at business companies – includes practical training, exercises and block lessons that take place at companies

DE – Dual education

SMVET - School model of vocational education

C - Curriculum

SARS – Statistics Agency of the Republic of Serbia

IIE – Institute for the Improvement of Education

EU – European Union

INTRODUCTION

The Ministry of Education, Science and Technological Development (MESTD) and KulturKontakt Austria (KKA) conducted a survey at secondary vocational schools regarding the practical training that takes place through the cooperation between vocational schools and business companies. Only the so-called "school" model of vocational education was analysed, without analysing the specific characteristics of the dual model.

The long-term and essential overall goal of this survey was to ensure continuous improvement of the quality of vocational education in Serbia. Objectives were the review, analysis and critical assessment of the following:

- The scope of practical training at business companies (PTBC)
- The form of organisation of PTBC
- The predominant methods of PTBC implementation
- The relevance and effectiveness of certain forms and methods of PTBC implementation.

In addition to the above, the survey also focused on formulating recommendations for decision makers for potential improvements and clearer legal regulations in this field based on the analysis of the existing situation.

In order to gather the data required for the implementation of the analysis and reach the objectives of the survey, it was necessary to develop a special questionnaire. The questionnaire was developed and tested and, once the necessary corrections had been made, it was sent to all vocational schools in the Republic of Serbia. The questionnaire was filled out online.

It included the three most important forms of acquisition of practical skills in vocational education and training: practical training, block lessons and exercises, which indirectly also includes forms of summer and winter holiday work placements, where applicable. Those parts of the questionnaire, where the respondents provided additional explanations, ideas and proposals, also included other important aspects such as: career guidance and counselling, visits to companies, teacher trainings at companies, purchase of school equipment, etc.

This report also includes a review of certain legal implications regarding the planning and implementation of PTBC in the context of further development of vocational education in Serbia. Recommendations for decision makers were formulated for the purpose of improvements in this field. They particularly took into account the fact that the implementation of the Law on Dual Education will start in September 2019, which will introduce considerable novelties in the field of vocational education.

In addition to this, the long-term cooperation between MESTD and KKA implies that the survey findings will be used for further support to vocational schools and employers in the context of VET quality improvement and organisation of necessary trainings, procurement of school equipment, etc.

1. VET SYSTEM IN SERBIA

Based on the data of the Statistical Office of the Republic of Serbia (SORS), at the end of 2017/2018, there were 510 secondary schools (460 public schools and 50 private schools), out of which 111 were grammar schools, 310 were vocational schools, 40 were art schools and 49 were combined schools¹.

Around 25% of students attend general education schools, whereas around 75% of students attend vocational education schools. Given this ratio, Serbia ranks among the countries with the highest share of vocational education in Europe.

The following fields have the highest shares: economics, law and administration (13.3%), electrical engineering (10.9%), health and social protection (9.6%), mechanical engineering and metal processing (8.7%) and trade, tourism and hospitality industry (8.1%) 2 .

The planned number of educational profiles in the VET system in Serbia in the academic year 2018/2019 was 201. If we consider all education years, the total number of profiles in the VET system is around 230. Most of them are implemented through the so-called "school" model of vocational education and training (SMVET), which implies that the school can implement the practical part of the curriculum in cooperation with business companies. The cooperation takes place in different manners, to a larger or smaller extent, and within the framework defined by the Law on Secondary Education and the Law on the Fundamentals of the Education System.

¹ Statistical Office of the Republic of Serbia http://data.stat.gov.rs/Home/Result/11030104?languageCode=sr-Latn

² Statistical Office of the Republic of Serbia http://www.stat.gov.rs/en-US/oblasti/obrazovanje/srednje-obrazovanje

2. QUESTIONNAIRE CONCEPT

The questionnaire was designed in such a manner to include an analysis of different forms of practical training in cooperation with employers in the framework of the SMVET. It included questions regarding the implementation of: practical trainings, block lessons and exercises, summer and winter holiday placements. By ensuring separate parts of the questionnaire and answers to open questions, the analysis also included other important aspects, such as: visits to companies, teacher trainings at companies, etc.

The questionnaire consisted of three parts:

- 1. General data about the school and cooperation between the school and employers with 16 questions;
- 2. Implementation of the practical training at business companies (PTBC) with 14 questions, and every school submitted data for three profiles;
- 3. The quality of practical training implemented in cooperation with employers with an assessment that is based on the level of agreement with 12 statements. In this part of the questionnaire, school headmasters provided answers by selecting one of the offered options on the Likert five-point scale.

178 schools answered the questions from the questionnaire within the given deadline, and after removing several overlapping and incomplete answers, 168 vocational schools remained in the sample. The sample ensured a well-proportioned geographic and structural representation in terms of the type and size of schools.

The survey included educational profiles that schools assessed as relevant, both in terms of the number of enrolled students and the scope and quality of cooperation with employers. The sample included 124 profiles, and the structure of profiles from the sample by fields of work is shown in table 1. The same table also includes the ratio between the number of analysed profiles and the total number of profiles, based on which it may be seen that there is a proportionate number of profiles from almost all fields of work.

Field of work		Number of profiles in the academic year 2018/2019
FIEIG OF WOLK	Number of profiles	academic year 2016/2015

	in the sample	
Economics, law and administration	10	10
Electrical engineering	13	19
Geodetics and civil engineering	10	15
Geology, mining and metallurgy	5	12
Chemistry, non-metals and graphic design	12	15
Hydrometeorology	0	2
Culture, art and public information system	3	15
Mechanical engineering and metal processing	19	33
Provision of other personal services	4	4
Agriculture, food production and processing	12	16
Transport	6	16
Forestry and wood processing	5	9
Textile and leather industry	7	11
Trade, hospitality and tourism industry	9	10
Health and social protection	10	14
Total	124	201

Table 1. Number of educational profiles (academic year 2018/2019) and number of profiles in the survey sample

The answers that were gathered can be interpreted in various ways and give numerous insights and conclusions. Some of them exceed the scope of the survey and will be provided as a relevant source of data for the work on the new Education Strategy of the Republic of Serbia by 2030. The images and an analysis of answers are given below, including a series of comments and conclusions.

3.ANALYSIS AND DISCUSSION ABOUT DATA AND FINDINGS

3.1 GENERAL DATA ABOUT THE SCHOOL AND COOPERATION WITH EMPLOYERS

Number and geographical representation of schools

The sample included 169 schools and covered the whole territory of Serbia. In absolute terms, most schools from the sample are from the following districts: Belgrade, Zlatibor, Niš, Mačva, Zapadna Bačevina and Srem districts. In relative terms, i.e. if we analyse the share of schools from the sample in the total number of schools in a given district, the best participation was obtained in: Zlatibor district (88%), Braničevo district (78%), Podunavlje district (71%), Sjeverna Bačka district (71%), Zapadna Bačka district (69%), Mačva district (67%) and Niš district (61%), and the lowest participation was in Rasinski district (20%), Pčinjski district (25%), Kolubarski district (33%) and Južni Banat district (33%).

Representation of fields of work and educational profiles

Image 1 gives an overview of the representation of fields of work at schools. We can see that there is an almost equal number of schools with one, two or three fields of work (around 20%), whereas the number of schools with four or more fields of work is somewhat higher (around 16%).

As regards the number of educational profiles offered by schools from the sample, their range goes from 1 to 20. However, most schools offer between 4 and 8 educational profiles, which corresponds to the average size of the school and number of students.

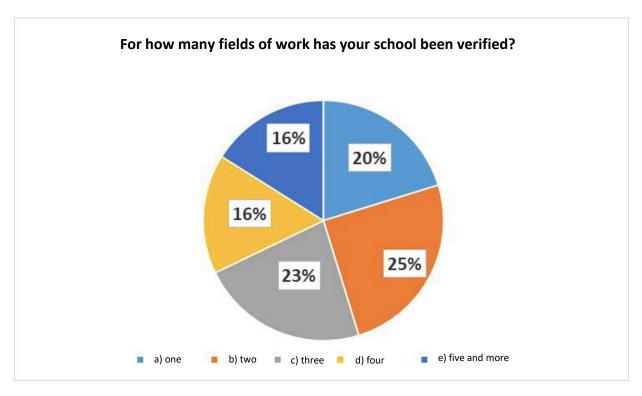


Image 1. Representation of fields of work at schools from the sample

Size of school – number of students and teachers

The number of students at schools from the simple varies to a great degree, namely from 98 to 1897, and the number of teachers ranges from 19 to 170.

The average number of students per school in the sample amounts to 561, and the average number of teachers amounts to 65. Although this is not the main topic of the survey, interesting ratios of students and teachers may be observed. In case of schools that have more than 800 students, the ratio of students and teachers is quite proportionate, whereas in case of smaller schools, which have less than 400 students, there is no obvious decrease in the number of teachers, which would be in proportion to the decrease in the number of students, as shown in image 2 and 3.

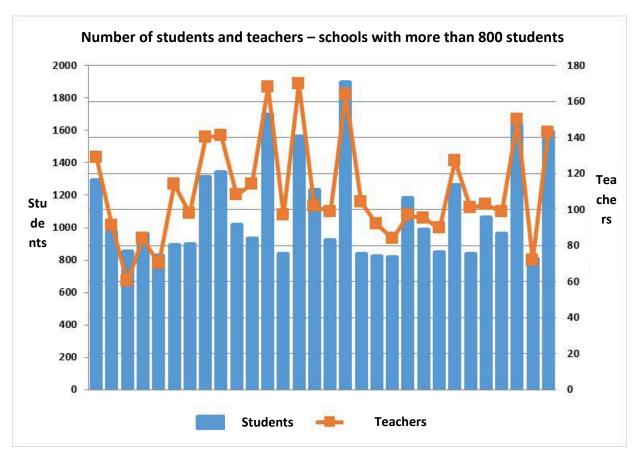


Image 2 Ratio between students and teachers for larger schools with more than 800 students

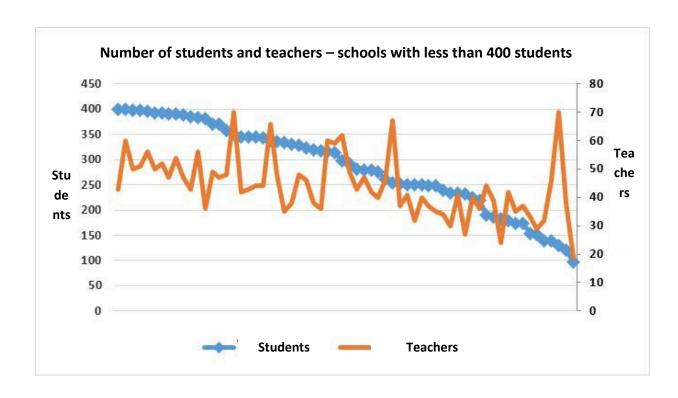


Image 3 Ratio between students and teachers at smaller schools with less than 400 students

School grades during external evaluation

Most schools in the sample received the grade 3 and an almost equal number of schools received the best grade 4 and the worst grade 1. This ratio approximately corresponds to the ratio between the grades in the overall system, so that the sample is representative also in this respect.

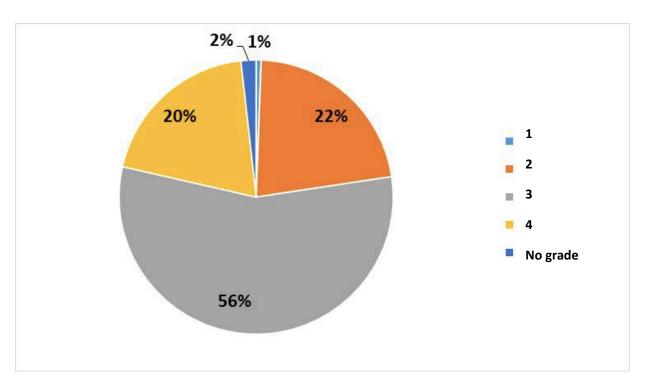


Image 4. School grade structure during external evaluation

Forms and way of cooperation between schools and employers

After having gathered some basic information about the schools in the first part of the questionnaire, we asked several questions about the cooperation between schools and employers and the manner in which cooperation takes place.

- When asked whether they cooperate with partners from the private sector (employers, business companies, handicraftsmen in the implementation of practical trainings, block lessons, exercises or other subjects related to the acquisition of practical skills, most schools gave an affirmative answer. Only one school (Medical Secondary School Ćuprija) explicitly stated that it did not cooperate with the private sector in this field. It is possible that, when medical schools interpreted this question, they did not consider the work at health institutions and other teaching institutions as a form of cooperation with employers. This will certainly be clarified during later direct contact with schools of this specialization or the workshop related to the presentation of survey findings.
- When asked about the number of partners with whom they have signed cooperation agreements, the schools stated that the number varied between 1 and 548, which was the case at a cosmetology school, Škola za negu ljepote, from Belgrade. Around 60% schools cooperate with less than 25 employers, and the average number of agreements that schools have with employers amounts to 28. Ten schools stated that the number of their partners was higher than 100. Schools that have more than 100 partners are mostly economics, hospitality and tourism, trade and civil engineering schools. In geographical terms, most of these schools are from Belgrade, but also from Leskovac, Kraljevo and Kula.
- Image 5 gives an overview of the manner in which schools implement practical training at companies in terms of the time schedule throughout the academic year. It also shows the distribution of schools' answers to this question.

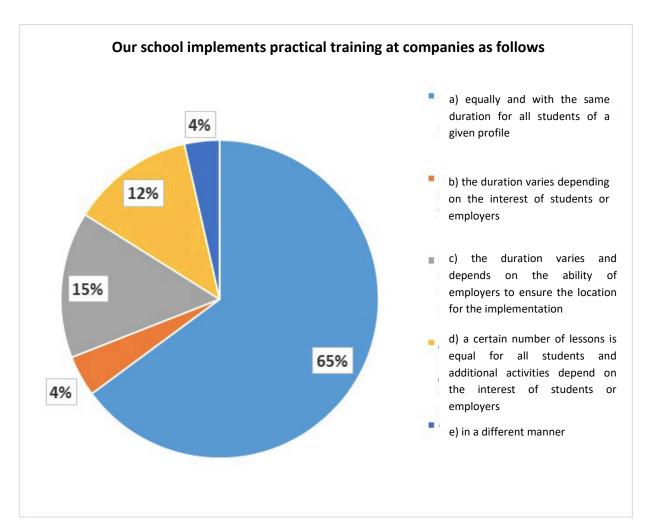


Image 5 Duration of practical training at companies

It may be observed that most schools (65%) provided an answer that indicates the effort to ensure identical learning and skill acquisition conditions for all students through practical trainings at business companies. However, as many as 30% of schools stated that the time that a student can spend at a company varies, in part also due to reasons related to employers, and in part due to a greater or lesser interest of students themselves in this form of knowledge and skill acquisition. In this respect, it would be extremely important to undertake additional surveys regarding cases of varying duration of practical training due to the inability of employers to offer a sufficient number of practical training spots (option c in the chart). Such cases were mentioned by around 15% of schools. The negative aspect of this might also mean lack of equal skill acquisition opportunities for students, which is one of the basic principles of fairness in education. A detailed analysis showed that 25 schools stated that practical training at business companies varies in terms of duration due to the inability of employers to ensure practical training placements. These schools offer various specialisations, but electrical engineering, chemistry and civil engineering specialisations dominate. Most of

these schools are located in smaller cities, which brings us to a crucial question: To what extent are enrolment policies and offers at the local level adjusted to the local economy structure?

• The question about the manner in which students learn during practical training is given in image 6 below.

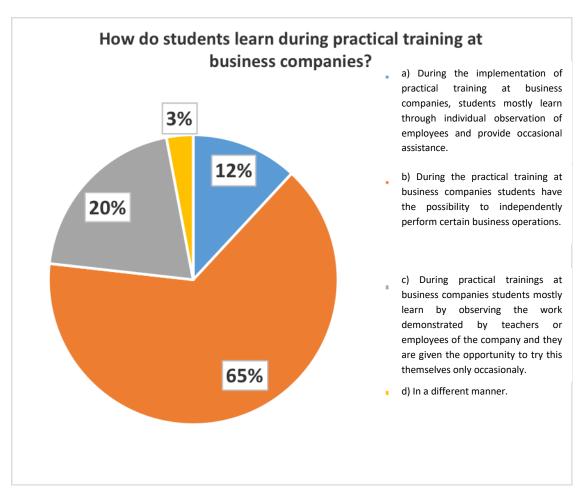


Image 6. Manner in which students learn during practical training at business companies

Most schools (65%) stated that during practical training students have the possibility to independently perform the foreseen work operations. 20% of them stated that during practical training students mostly learned by observing as a group the work demonstrated by a teacher or employee of the company and that they had the opportunity to try doing it themselves only occasionally, whereas 12% stated that they mostly learned through individual observation of employee's work, with occasional assistance.

Such a distribution is satisfactory in general. However, it is important to clarify the reasons as to why **around 30%** of schools provided the answer a or c, thereby indirectly showing that

there is a lack of an independent and active involvement of students in the process of learning during practical training. Insufficient activity (passiveness) of students during practical training can be interpreted in different ways and can have different causes. Consequences are generally very detrimental: insufficient acquisition of practical skills, lack of independence and insecurity regarding work, more difficulties in finding work and long-term unemployment as the final and most negative consequence.

The box below contains additional explanations provided by those schools that stated that the usual manner in which practical trainings take place at companies was the one in which students observe the work performed by a teacher or an employee of the company.

- Once they gain the trust of a certain employer, based on the competences they demonstrated, students are allowed to independently perform their work tasks.
- Students only have the opportunity to perform the simplest tasks in practice (filling out payment orders).
- In case of some educational profiles, students lack the necessary permits for the performance of duties (trail technicians and transport technicians), so that their practical training mostly consists of observation or work that does not involve trains, whereas in case of other educational profiles there are adequate conditions at schools and business companies, so that they are able to work independently.
- For security reasons, students have the possibility to participate in specific activities during practical training only occasionally.
- At some institutions, when it is safe, students work independently they mostly engage in laboratory exercises. In case of production companies, students mostly only observe the production process for safety reasons and participate in safer operations.

The first part of the questionnaire also contained some questions regarding issues in the implementation of practical training at business companies.

• In case of the question: What are the greatest problems you are encountering in case of practical trainings at business companies?, it should be stressed that a significant number of schools pointed out that there were interested and motivated employers in their area, but that it was not sufficient for the cooperation to take place and become successful. They stated that it seemed to them that employers expected certain incentives in order to

become more actively involved in this type of cooperation. As many as 33 schools stated that employers believe that they should receive incentives from the state in order to cooperate with schools, and 54 stated that employers were interested, but that they lacked human and material resources to provide full support. Also, it is necessary to carefully assess the fact that as many as 40 schools stated that their greatest problem was the fact that there were no employers in their area or that they were not interested in cooperation.

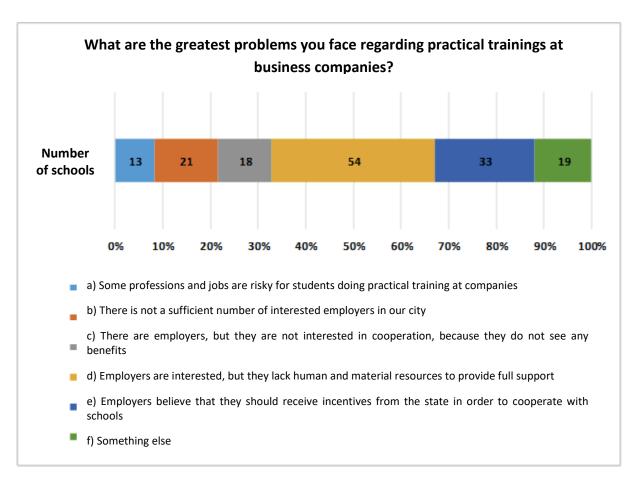


Image 7 Problems regarding the organisation of practical trainings at business companies

The final question in the first part of the questionnaire was an open-ended question: What should, in your opinion, be changed/improved or introduced as a novelty in order for practical training at business companies to function better?

Some of the most interesting answers, ideas and proposals were given below:

- Some elements in the letter of intent of employers should be financed by the state (e.g. training costs for mentors)
- The state should finance the students and practical training teachers during the first and

- second year, and employers should take over the financing during the third and fourth year.
- A standardised model regarding student safety during practical training by fields of work (using the dual model) should be introduced
- Employers should offer employment to the best students if they wish to do so
- A greater engagement of mentors would imply that companies would have to renounce their best worker so that he/she can transfer the knowledge to the students.
- Incentives for employers (funds).
- Students should be more independent in performing their work tasks.
- The employment regulation should be changed in such a manner that the education should not be limited to only a single profile and that employment can be found only in that field.
- Employers (especially those receiving funds from the budget of the Republic of Serbia) should be obliged to provide training placements for students from public schools as a matter of priority and enable them to use their resources.
- The greatest problem we are facing relates to individual banks given the fact that, although regional offices are willing to receive our students, head offices in Belgrade do not allow them to do so.
- Employers should be assisted in conducting a "reasonable" adaptation of individual workplaces for disabled persons so that they can also be used for practical training during vocational education of disabled students.
- Students from the trade school will not follow the dual model next year, because trade companies throughout the country refused to accept the obligation to pay students allowances. They believe that the costs are too high for this purpose. And they will anyway get students for practical training (which is not in compliance with the dual model) that they do not pay. Something should be done regarding this issue.
- Due to a large workload, employees lack time to work with students doing their practical training. Employers should be motivated, so that they also see the benefits they can have from cooperation.
- Employers should provide allowances to students for the work they perform during practical training in order to motivate them.
- Students doing practical training should receive allowances from the state.
- At some buildings where practical trainings take place, teachers are not allowed to be present.

All of the above should be seriously taken into consideration in order to improve practical trainings at companies and therefore also the quality of vocational education.

3.2 IMPLEMENTATION OF PRACTICAL TRAINING BY PROFILES

Representation of profiles and share of practical training at business companies

The second part of the questionnaire focuses on education profiles and the manner in which practical training is implemented, block lessons and exercises that enable students to acquire practical skills and are implemented in cooperation with employers.

Schools were asked to disregard dual profiles and focus on all other profiles implemented in the framework of the cooperation with employers of variable intensity. Every school was supposed to identify **3 profiles** with the largest number of enrolled students and the most comprehensive cooperation and answer the following questions:

- How many practical training lessons, block lessons and exercises per class are foreseen for this profile in the curriculum and
- How many practical training lessons, block lessons and exercises per class are implemented at companies in case of this profile.

The purpose of these questions was to identify commonalities and differences regarding the scope of practical training at some schools resulting from differences in the cooperation between vocational schools and employers and the level of autonomy they have.

This will also indicate which educational profiles have the greatest potential for the implementation of the practical training and whether some sector-specific peculiarities may be observed in this respect.

Out of the previously mentioned 124 profiles (table 1), we singled out 23 profiles that were most frequently mentioned by the schools and which we therefore mostly analysed. The group of 23 profiles encompasses 9 fields of work, and as regards the duration, 8 profiles are three-year education profiles and 15 are four-year education profiles.

The analysis methodology implied the calculation of the following elements for every educational profile based on the data that schools entered in the questionnaire:

- The average time (number of lessons) foreseen in the curriculum for practical training, exercises and block lessons;
- The average time (number of lessons) for practical training, exercises and block lessons at companies.

Based on this, we calculated the average percentage share of time (lessons) of practical training, exercises and block lessons for the relevant profile that take place at companies.

As may be observed in table 2, out of the 23 profiles that were mentioned, the largest percentage share of time (more than 50%) spent on practical training, exercises and block lessons (PTBC) is present in case of the following profiles: medical technician – nurse 79%, butcher 78%, car mechanic 66%, tourism, hotel and physiotherapy technician 61%, salesman 59%, culinary technician 57%, machinery maintenance technician 56%, and tourism technician and baker 55% respectively.

Field of work	Name of profile	Number of appearances in the sample	Average number of practical training lessons in compliance with the curriculum	Approximate number of practical training lessons at the company	Time share of practical training at the company
Mechanical engineering and					
metal processing	Car mechanic	26	1462	978	66
Trade, hospitality and tourism	Cook	26	1860	785	42
Trade, hospitality and tourism	Tourism technician	20	1378	720	55
Agriculture, food production and					
processing	Baker	19	1533	847	55
Trade, hospitality and tourism	Salesman	18	1343	832	59
Electrical engineering	Electrical engineering				
Agricultura food production and	technician for computers	14	1122	99	7
Agriculture, food production and					
processing	Butcher	14	1584	1237	78
Economy, law and administration	Financial administrator	14	987	335	41
Economy, law and	T manetar administrator	14	307	333	71
administration	Economic technician	13	800	116	18
Agriculture, food production and					
processing	Machine engineering technician	12	1648	581	37
Mechanical engineering and	Machine engineering				
metal processing	technician for motor vehicles	12	1413	739	56
Trade, hospitality and tourism	Waiter	11	1434	683	48
Health and social protection	Medical technician – nurse	11	4399	3503	79
Transport	Motor vehicle driver	9	754	237	32
Personal services	Hairdresser for women	9	1637	578	35
Economy, law and	manuresser for Women	9	103/	5/8	35
administration	Sales associate	9	1132	163	22

Trade, hospitality and tourism					
	Culinary technician	9	1746	964	57
Agriculture, food production and					
processing					
	Agricultural technician	9	1518	280	22
Transport					
	Road transport technician	9	943	268	30
Chemistry, non-metals and					
graphic design	Environmental protection				
	technician	8	1536	213	13
Trade, hospitality and tourism	Tourism and hospitality				
	technician	7	1634	1044	61
Health and social protection					
	Pharmaceutical technician	7	2655	561	22
Health and social protection					
	Physiotherapy technician	7	1821	1100	61

Table 2 Time share of practical training at companies for the 23 most frequent profiles from the sample

If we analyse the whole sample (all 124 profiles), irrespective of their frequency in the sample, the largest share of time of practical training, exercises and block lessons (PTBC) may be observed in case of profiles stated in table 3.

Field of work	Name of profile	Number of appearances in the sample	Average number of practical training lessons in compliance with the curriculum	Approximate number of practical training lessons at the company
Bank officer	1	1152	1152	100
Machinery maintenance technician	1	724	724	100
Oil and gas plant operator	1	1926	1926	100
Upholsterer and decorator	1	1306	1292	99
Milk processing operator	1	1575	1376	87
Welder	4	1337	1133	87
Gynaecology and obstetrics nurse	3	2198	1865	85
Car body mechanic	2	1743	1428	83
Sales technician	6	1158	939	82
Mining technician	2	699	539	79

Table 3 Profiles with the largest share of PTBC, irrespective of their frequency in the sample

It should be stressed that in most cases in which the percentage varies between 90 and 100%, the information was obtained from one school, except in case of profiles of sales technician,

welder and gynaecology and obstetrics nurse, in case of which 6, 4 or 3 schools respectively submitted the data.

Rhythm and distribution of PTBC

The questionnaire part related to profiles also included a question about the rhythm of PTBC throughout an academic year or years of education.

Schools were supposed to mark the sentence that describes best the real situation as an answer to the question: *Our school implements practical training at companies for this profile*:

- a) evenly during all years of education (every week) throughout the school year
- b) during all years of education, but not evenly (every week) throughout the school year
- c) mostly during final years of education evenly throughout the school year
- d) mostly during final years of education, but not evenly during the school year
- e) it is fully flexible and can be changed depending on the possibilities of the employer.

In case of this question, we observed that the two most frequent answers were the following ones:

- a) evenly during all years of education (every week) throughout the school year (39%)
- e) it is fully flexible and can be changed depending on the possibilities of the employer (28%) followed by less frequent answers:
- b) during all years of education, but not evenly (every week) throughout the school year (14%)

c and d) mostly during final years of education (19%)

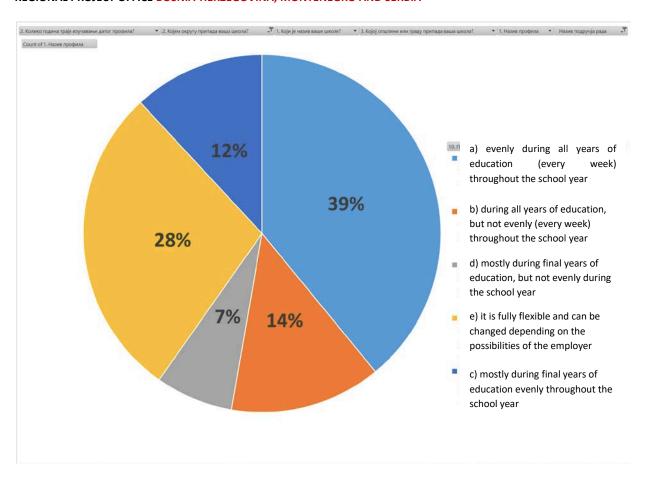


Image 8. Rhythm and distribution of PTBC

By observing the mentioned distribution, we may conclude that practical training at companies frequently takes place under unforeseeable circumstances, which reflect the reality of the market and business environment in Serbia. Having in mind the fluctuating conditions in the labour market, it is understandable why such a large number of respondents stated that the implementation of the PTBC is fully flexible and could be changed depending on the circumstances of employers.

In order to ensure a higher certainty of PTBC even in case of labour market uncertainties, amendments to the existing legal regulations should be considered. A good proposal would be the drafting of a special Rulebook on PTBC implementation, which would ensure clearer rules and stricter regulation of rights and obligations of all parties (students, schools and companies) regarding the planning and implementation of PTBC. The mentioned rulebook would also ensure that, in those cases when the cooperation between the school and the employer must be interrupted for valid reasons, students can efficiently obtain a new PTBC placement, so that the unforeseen difficulties have no negative impact on the quality of skills acquired by the student.

3.3 QUALITY OF PRACTICAL TRAINING AT COMPANIES

The third part of the questionnaire focused on the quality of PTBC implementation. The respondents were supposed to answer to which extent they agreed with statements related to quality by means of the Likert five-point scale with the following meaning:

- 1. I fully disagree,
- 2. I mostly disagree,
- 3. I neither agree nor disagree,
- 4. I mostly agree and
- 5. I fully agree.

The questionnaire contained 12 statements, and the overview of answers is given in picture 9, 10 and 11. Several conclusions regarding the answers to these statements are given in the text below.

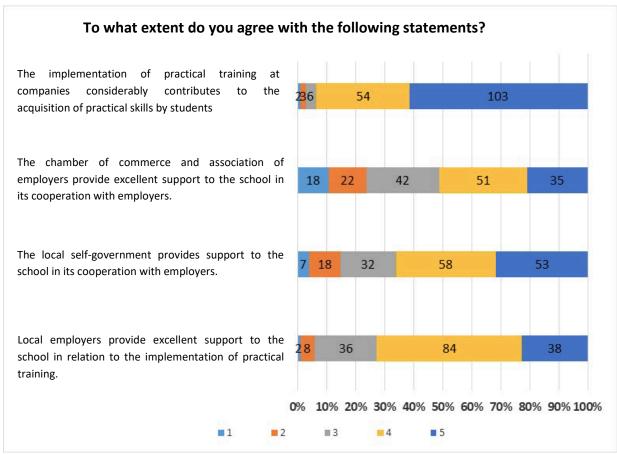


Image 9 Some aspects of the quality of practical training at companies

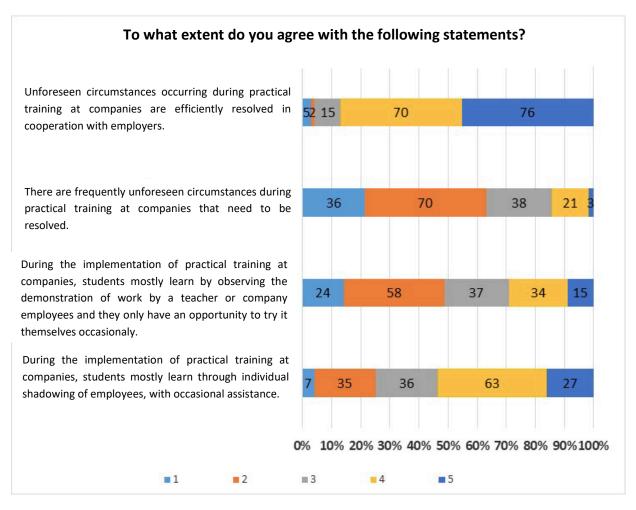


Image 10 Some aspects of the quality of practical trainings at companies

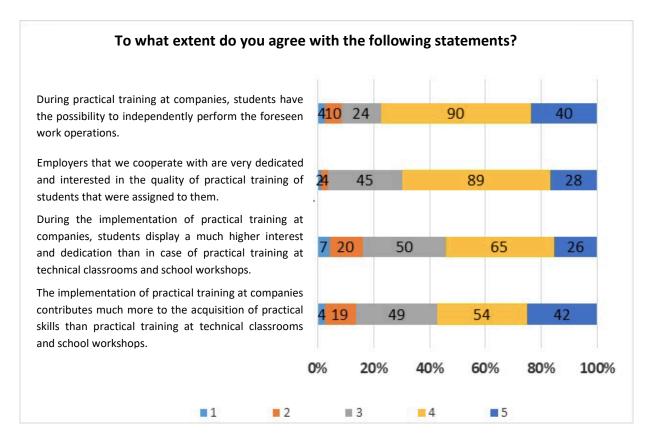


Image 11 Some aspects of the quality of practical trainings at companies

Quality of cooperation between schools and employers regarding PTBC

- As regards the questions related to the support that schools receive from their partners, it is evident that the greatest satisfaction is present in case of the cooperation with local employers. More than 70% of schools stated that they mostly agree or fully agree that the school receives excellent support from local employers in relation to the implementation of practical trainings. As regards the support schools receive from the local self-governance authorities, this percentage is lower and amounts to 65%, whereas around 50% of schools stated that they received excellent support from the chamber of commerce or association of employers. It should be stressed that around 15% of schools stated that the support by the local self-governance was not satisfactory, and 25% of schools stated the same in relation to the support provided by the chamber of commerce or association of employers. Around 5% of schools stated the same in relation to direct cooperation with employers. (image 9).
- As regards the statement that the implementation of practical trainings at companies significantly contributes to the acquisition of practical skills by students, there was an

enormous degree of agreement by most schools. More than 90% of schools stated that they mostly agreed or fully agreed with this statement (image 9).

However, if this statement is put into relative proportion to the practical training at technical classrooms and workshops at schools, the situation changes considerably. A considerably lower percentage of schools – 48% of them mostly agrees or fully agrees with the statement that the implementation of practical trainings at companies contributes to the acquisition of practical skills by students much more than the training at technical classrooms and workshops at schools (image 10).

A clarification of this difference would be an interesting topic and it should be considered during further consultations with schools during workshops and round tables. The clarification of these differences will also indicate the cause of the problem and ideas for the improvement of the current level of cooperation between schools and employers.

It is also interesting to compare the answers to two statements that relate to the interest of students and employers during practical training at companies (image 10). It seems that employers are more interested in this topic, at least having in mind the fact that 70% of schools mostly or fully agree with the statement: *Employers that we cooperate with are very dedicated and interested in the quality of practical training of students that were assigned to them*, whereas 55% of schools gave a positive answer to a similar statement: *During the implementation of practical training at companies, students display a much higher interest and dedication than in case of practical training at technical classrooms and school workshops.*

Also, in case of answers that imply a great or complete lack of interest in the implementation of practical training, better indicators are present in case of employers. Only 3 % of schools stated this in relation to employers, and as many as 15% of them stated this in relation to students (image 10).

Having in mind how important motivation is for successful learning, this topic should receive due attention in order to identify the reasons for the lack of interest in case of some students in practical training at companies, which is generally considered to be a more desirable and interesting form of learning.

 We also observed two positive aspects related to the planning of cooperation between the school and employers and ability to resolve unforeseen circumstances (image 11).

Only 12% of schools fully agree with the statement that *during the implementation of* practical trainings at companies there are frequently unforeseen circumstances that need to be resolved. On the other hand, almost 90% of schools fully agree with the

statement that *if unforeseen circumstances occur during the implementation of practical training, they are efficiently resolved in cooperation with employers.*

Such answers indicate that the cooperation of schools and employers is well-planned, maintained and that it constitutes a good basis for further strengthening of the quality of vocational education.

ON BEHALF OF THE AUSTRIAN FEDERAL MINISTRY OF EDUCATION, SCIENCE AND RESEARCH AND KULTURKONTAKT AUSTRIA

4. CONCLUSIONS AND RECOMMENDATIONS

As already stated, the data gathered during the survey make it possible to undertake numerous analyses and interpretations. We will focus on several of the most important ones.

- The scope of time that students spend in practical training at companies, including all years of study and consolidated for the field of work/profile.
- Degree of inclusion of students in practical training at companies, including also the question whether students have equal opportunities to participate in this form of learning.
- The correlation between the formats and scope of PTBC and quality of acquired knowledge and skills of students.
- Recommendations regarding amendments to laws and regulations that will improve the existing situation.
- Around 25% of students in Serbia attend general education schools, whereas around 75% of students go to vocational schools. Serbia thus ranks among countries with the strongest vocational education system in Europe.
- All vocational schools in Serbia confirmed that they cooperate with private sector partners. The average number of agreements that a school has with employers amounts to 28. Out of a sample of 168 schools, 10 of them stated that the number of their partners was more than 100.
- Most schools (65%) aim at providing every student with the same conditions for learning and skills acquisition through practical training at companies. However, as many as 30% of schools stated that the time that a student can spend at a company varies.
- Most schools (65%) stated that during practical training at companies, students had the possibility to independently perform the foreseen work operations, 20% of them stated that during practical training, students mostly observed in group the work performed by a teacher or mentor at the company, and 12% of them stated that they mostly learned through individual shadowing of employees with occasional provision of assistance.

- When speaking about the difficulties in the implementation of PTBC for specific profiles, a large number of schools pointed out that there were employers in their area who were interested and motivated to cooperate, but that it was not enough in order for the cooperation to take place and become successful. They stated that employers expected certain benefits in order to become actively involved in this type of cooperation. As many as 33 schools (20%) stated that employers believed that they should receive incentives to cooperate with schools, and 54 schools (32%) stated that employers were interested, but that they lacked human and material resources to provide full support.
- Practical training at business companies in smaller towns obviously frequently takes place under unforeseen circumstances. As a result, a large number of respondents (28%) stated that the distribution of practical trainings at business companies throughout the year was fully flexible and could be changed depending on the possibilities of an employer at a certain moment. In order to ensure a higher certainty of PTBC even in case of labour market uncertainties, amendments to the existing legal regulations should be made in order to ensure stricter obligations for all stakeholders (students, schools and companies) regarding the planning and implementation of cooperation. A specific proposal would be the drafting of a rulebook on PTBC implementation, which would be applicable to the so-called school model of vocational education implementation, i.e. would be applicable to the part of the system that is not included in the dual education model (DE).
- In case of most vocational education profiles, the curriculum provides for the possibility to implement part of practical training, exercises and block lessons (PTBC) at companies. The survey made it possible to obtain the average share of this type of training that takes place at companies for various profiles. We singled out the most frequently mentioned profiles and established that the profiles that have the highest share of practical training at companies are the following ones: medical technician nurse 79%, butcher 78%, car mechanic 66%, tourism and hospitality technician 61%, physiotherapy technician 61%, salesman 59% and culinary technician 57%. As regards fields of work, when all profiles from the sample are considered, the highest share of practical training have the following ones: mechanical engineering and metal processing 66%, geodetics and civil engineering 65%, trade, tourism and hospitality 63% and health and social protection 59%.
- As regards the motivation for the participation in PTBC, which has a significant influence on the quality of skills that are acquired during education, it seems that employers are more interested than students. 70% of schools mostly or fully agree with the statement: *Employers that we cooperate with are very dedicated and*

interested in the quality of practical training of students that were assigned to them, whereas 55% of schools mostly or fully agree with a similar statement: During the implementation of practical training at companies, students display a much higher interest and dedication than in case of practical training at technical classrooms and school workshops. Even in case of answers that imply a high or complete lack of interest during the implementation of practical training, better indicators are present in case of employers. Only 3% of schools stated this in case of employers, and as many as 15% of schools stated this in relation to students (image 10).

Having in mind substantial evidence regarding the importance of motivation as a factor of successful learning, this topic should receive special attention. It would be important to establish the reasons for the lack of interest and insufficient dedication of some students during practical training at companies, which, realistically speaking, cannot be expected.

Answers to some questions and additional comments of respondents shed a very positive light on the cooperation between schools and companies, indicating that PTBC is planned well and that the cooperation between schools and employers is maintained and improved, as much as this is possible under the circumstances. This may be concluded primarily based on the fact that only 12% of schools fully agree with the statement: *During practical training at companies, there are frequently unforeseen circumstances that must be resolved*. On the other hand, almost 90% of schools fully agree with the statement: *Unforeseen circumstances that occur during practical training at companies are efficiently resolved in cooperation with employers*. These are facts that constitute a good basis for further improvement of VET quality.

Strengthening the cooperation between vocational schools and employers is one of the most important topics for creating state-of-art educational policies in the field of VET. The quality of the labour force, on the other hand, is crucial for the development of economy, attracting investments and competitiveness of Serbia in the Balkans and beyond, in the EU. This report includes only part of the findings of the analysis of the survey conducted at vocational school in the Republic of Serbia, which focused on the cooperation between schools and employers in relation to practical training at business companies (PTBC) for the part of the system which is currently not included in the dual education model (DE).

We believe that the findings of this survey, just as the conclusions and recommendations made based on them, will be considered by all stakeholders. Such an approach would make it possible to improve practical trainings at companies, and thus also the quality and relevance of the VET in Serbia.

APPENDICES

1.THE QUESTIONNAIRE

About the project

For the purpose of improving the quality of vocational education in Serbia, the Ministry of Education, Science and Technological Development and KulturKontakt Austria are organising a survey about the implementation of practical training in vocational education, which is based on the cooperation between vocational schools and employers.

All forms of practical trainings implemented in cooperation with employers in the socalled school implementation model will be analysed. (We will not analyse cases of work-based learning at companies in those cases when they are implemented in compliance with the Law on Dual Education.)

The number of education profiles implemented in cooperation with employers is large (more than 150) and the survey will focus only on those profiles that have a significant number of enrolled students and in case of which schools have an active and important cooperation with employers.

Cooperation with employers can take place in various ways, such as through practical training, block classes, exercises, summer and winter holiday work placements, company visits, company-based teacher trainings, etc. We will try to include as many aspects of this cooperation as possible in the questionnaire.

Survey findings will be used to provide further support to vocational schools and employers in the development of the quality of vocational education through the organisation of necessary trainings, purchase of equipment for schools, etc.

Confidentiality

When filling out the questionnaire, you should enter the basic data about the school and provide precise and truthful answers to the questions. Please note that all information gathered in the survey will be treated confidentially and used exclusively for the purpose of drawing conclusions pertinent to further work and support that

KulturKontakt Austria is providing to the vocational education system in the Republic of Serbia.

About the questionnaire

This questionnaire should be reviewed and filled jointly by the school headmaster, teachers in charge of technical subjects, teachers in charge of practical training and teachers in charge of organising practical training at companies (coordinators of practical training).

- Filling out this questionnaire requires around 20 minutes.
- The questionnaire can be filled out only online.
- ➤ If there is an aspect of the questionnaire that is unclear or if you would like more information about the questionnaire or survey, please get in touch with Mr. Radovan Živković at radovan.zivkovic@mpn.gov.rs

ABOUT THE SCHOOL AND COOPERATION WITH EMPLOYERS

1. What is the name of y	your school?	(Please state the	exact name of the	e school.)
2. Which district does y	our school be	elong to? (Please	e state the name o	f the district.)
3. Which municipality the town or municipality.		your school be	clong to? (Please	state the name of
4. How many students a	and teachers	does your schoo	l have at the mor	ment?
	students			teachers
5. Which grade has you a circle as appropriate.)	ır school rece	ived in the exte	rnal evaluation?	(Please mark with
a) 4 received any g		c) 2	d) 1	e) It has not
6. For how many areas circle as appropriate.)	s of work ha	s your school b	een verified? (P	lease mark with a
a) one				
b) two				
c) three				
d) four				
e) five and mo	ore			
7. How many education year? (Please enter the re	-		nented at your s	chool this school
p	orofiles			
8. How many dual eduschool year and how ma	-	_	_	=

state the number of dual profiles and the total number of enrolled students at all classes)

	_ profiles	st	udents		
school year a	and how many	ucational profiles a students have been ual profiles and th	en enrolled in thes	e programmes? (Please
	_ profiles	s	tudents		
eraftsmen, e	tc.) in the imp	ith partners fron lementation of pra nich students acqu	ctical training, blo	ock classes, exerc	ises or
profiles? (Pla	ease mark with	a circle as appropi	riate.)		
		a) Yes	b) No	ntered into coope	ratio
11. With how	w many partr	a) Yes ners from the econ nmber of partners)	b) No	ntered into coope	ration
11. With howements? (Please	w many partrase state the nu partr implements tent that best de	a) Yes ners from the econ nmber of partners)	b) No nomy have you en	ne following way (Please
11. With howements? (Please 2. Our schoon ark the statemer)	w many partrase state the nu partrain partrain implements that best described in the content of	a) Yes ners from the econ umber of partners) ners practical training a	b) No nomy have you en nt companies in the nation with a circle	ne following way (or describe it in a	Please
11. With howements? (Please 2. Our schoon ark the statements ecific manner, a)	w many partrase state the number partraction in that best definition of the partraction o	a) Yes ners from the econ umber of partners) ners practical training a escribes the real situ	b) No nomy have you en nt companies in the same action with a circle equally with the same	ne following way (or describe it in a me duration	Please
2. Our schooners the statements? a) b)	w many partrase state the number partraction partraction that best defined for all students the duration value.	a) Yes ners from the econumber of partners) ners practical training a sescribes the real situation of a given profile econumber.	b) No nomy have you en at companies in the same at the interests of students.	ne following way (or describe it in a me duration lents or employers	(Pleas
2. Our school ark the statem ecific manner, a) b) c) pla	partr partr partr l implements ent that best de for all students the duration valuement a certain num	a) Yes ners from the econumber of partners) ners practical training a escribes the real situation of a given profile earies depending on the econumber of th	b) No nomy have you en not companies in the nation with a circle equally with the same the interests of students ally for all students	ne following way (or describe it in a me duration lents or employers f employers to en	(Pleaso inother

- 13. In which of the stated manners do students learn during the implementation of practical training at companies (*Please mark the statement that best describes the real situation with a circle or describe it in a different manner*)
 - a) During the implementation of practical training at companies, students mostly learn through individual shadowing of employees, with occasional assistance.

		_	•		•		ing at compa eseen work op		
	mostly	y learn	by obs	erving th	ne demo	nstration of	raining at co work by a t try it themse	eacher or	company
	d)	in	a	differ	ent	manner,	please	state	how:
14. Dep	_	on the			ve to th	e previous o and	question, plea methods	ase provid	de further learning:
					•	O	relation to t	0	
-		_	-				ot been ment		
	a) In o	case of	some	professio	ons and	tasks, the s	tay of studer	nts at cor	mpanies is
	b) In o	our towi	n, there	e are not	enough	employers i	interested in 1	practical	training
				ers, but t t meets th	•		ted in cooper	ation, bed	cause they
				nterested, o provide			ispose of su	fficient h	uman and
		nployers			they sl	nould recei	ve state sub	osidies in	order to
	f) Son	nething	else, p	lease stat	te what:				
	g) Son	nething	else, p	olease sta	te what:				
	imple	mentati	on of p	practical		_	ved or intro nies? (Please		
	a)								

IMPLEMENTATION OF PRACTICAL TRAINING IN CASE OF NON-DUAL PROFILES

The questionnaire text given below focuses exclusively on <u>non-dual</u> educational profiles and implementation of practical training, block lessons and exercises that enable students to acquire practical skills in cooperation with employers.

Please do not consider dual profiles anymore and focus on all other profiles that are implemented in more or less close cooperation with employers.

Please select **3 profiles** with the largest number of students and the most extensive cooperation with employers and answer the following questions (*please take a look only at SIDE B of the curriculum*).

PROFILE 1	
1name of field of work	name of profile
2. How many years does the a circle as appropriate)	ne education in case of this profile last? (Please mark with
a) 3	b) 4
3. Please state the total nu	umber of students in case of this educational profile
	students
· -	the curriculum? (Please state the number of lessons for duration of the profile)
a) First year practical training	lessons of
b) Second year practical training	lessons of

c) Third yearpractical training	lessons of
d) Fourth year (if applicable)practical training	lessons of
5. How many lessons of <u>practical training</u> (approximately) in ca are implemented at the company for all years of study? (<i>Please st lessons</i> .)	_
a) First yearpractical training	lessons of
b) Second yearpractical training	lessons of
c) Third yearpractical training	lessons of
d) Fourth year (if applicable)practical training	lessons of
6. How many <u>block lessons</u> does this profile entail for all ye compliance with the curriculum? (Please state the number of lessons)	•
a) First year	block
b) Second year	block
c) Third year	block
d) Fourth year (if applicable)	block lessons

7. How many <u>block lessons</u> (approximately) take place at companie profile for all years of study? (<i>Please state the number of lessons.</i>)	es in case of this
a) First yearlessons	block
b) Second yearlessons	block
c) Third yearlessons	block
d) Fourth year (if applicable)	_ block lessons
8. How many <u>exercise</u> lessons does the curriculum provide for in car for all years of study? (Please state the number of lessons.)	se of this profile
a) First yearlessons	exercise
b) Second yearlessons	exercise
c) Third yearlessons	exercise
d) Fourth year (if applicable)lessons	exercise
9. How many <u>exercise</u> lessons (approximately) take place at comp this profile for all years of study? (Please state the number of lessons.	
a) First yearlessons	exercise

b) Second year lessons	ar	_ exercise
c) Third year lessons	r	_ exercise
d) Fourth ye	ear (if applicable)	_ exercise
	of this profile, our school implements practical training at a the statement that is the best description of the real situate	•
	a) during all years of study evenly (every week) throughout the scho	ol year
	b) during all years of study, but not evenly (every week) throughout year	t the school
	c) evenly throughout the school year mostly for final years of study	
	d) mostly for final years of study, but not evenly throughout the scho	ool year
	e) the schedule is fully flexible and variable depending on the post the employer	ssibilities of
amounts t	cal training at companies in case of this profile during the fire. (Please mark the statement that is the best description of the with a circle or provide another specific distribution)	•
	a) less than 6 hours (a day) per week	
	b) 6 hours (a day) per week	
	c) 12 hours (two days) per week	
	d) more than 12 hours (two days) per week	
	e)	
amounts 1	cal training at companies in case of this profile during the set to: (Please mark the statement that is the best description with a circle or provide another specific distribution)	-
	a) less than 6 hours (a day) per week	
	b) 6 hours (a day) per week	
	c) 12 hours (two days) per week	
	d) more than 12 hours (two days) per week	
	e)	

13. Practical training at companies in case of this profile during the third year amounts to: (Please mark the statement that is the best description of the real situation with a circle or provide another specific distribution)
a) less than 6 hours (a day) per week
b) 6 hours (a day) per week
c) 12 hours (two days) per week
d) more than 12 hours (two days) per week
e)
14. Practical training at companies in case of this profile during the fourth year amounts to: (Please mark the statement that is the best description of the real situation with a circle or provide another specific distribution)
a) less than 6 hours (a day) per week
b) 6 hours (a day) per week
c) 12 hours (two days) per week
d) more than 12 hours (two days) per week
e)
PROFILE 2
1name of profile
name of field of work
2. How many years does the education in case of this profile last? (Please mark with a circle as appropriate)
a) 3 b) 4
3. Please state the total number of students in case of this educational profile
etudents

4. How many lessons of <u>practical training</u> does this profile entail for	all years of
study in compliance with the curriculum? (Please state the number of	f lessons for
every year depending on the duration of the profile)	
a) First year	_ lessons of
practical training	
b) Second year	_ lessons of
practical training	
c) Third year	_ lessons of
practical training	
d) Fourth year (if applicable)	lessons of
practical training	
5. How many lessons of practical training (approximately) in case of	this profile
are implemented at the company for all years of study? (Please state the	e number of
	ie minioer oj
lessons.)	ie mimoer oj
lessons.)	ie mimoer og
a) First year	
a) First year	
a) First year	
a) First yearpractical training	_ lessons of
a) First yearpractical training b) Second year	_ lessons of
a) First yearpractical training b) Second year	_ lessons of
a) First yearpractical training b) Second yearpractical training	_ lessons of
a) First year	_ lessons of
a) First year	_ lessons of _ lessons of
a) First year	_ lessons of _ lessons of
a) First year	_ lessons of _ lessons of
a) First year	_ lessons of _ lessons of _ lessons of

a) First yearlessons	block
b) Second year	block
c) Third yearlessons	block
d) Fourth year (if applicable)	block lessons
7. How many <u>block lessons</u> (approximately) take place at companie profile for all years of study? (Please state the number of lessons.)	ies in case of this
a) First yearlessons	block
b) Second year	block
c) Third year	block
d) Fourth year (if applicable)	block lessons
8. How many <u>exercise</u> lessons does the curriculum provide for in cator all years of study? (Please state the number of lessons.)	ase of this profile
a) First yearlessons	exercise
b) Second yearlessons	exercise
c) Third year	exercise

lessons			
d) Fourth ye	ar (if applicable)		exercise
		proximately) take place at co (Please state the number of lesse	_
a) First year lessons			exercise
b) Second year lessons	ır	······	exercise
c) Third year lessons	·	······	exercise
d) Fourth ye	ar (if applicable)		exercise
	• '	ool implements practical trai	•
	a) during all years of stu	udy evenly (every week) throughout	ut the school year
	b) during all years of st year	tudy, but not evenly (every week)	throughout the school
	c) evenly throughout the	e school year mostly for final year	s of study
	d) mostly for final years	s of study, but not evenly througho	ut the school year
	e) the schedule is fully the employer	flexible and variable depending	on the possibilities of
amounts 1	o: (Please mark the	anies in case of this profile do statement that is the best des canother specific distribution)	•
	a) less than 6 hours (a	day) per week	
	b) 6 hours (a day) per	week	

c) 12 hours (two days) per week

amoun	d) more than 12 hours (two days) per week e) ctical training at companies in case of this profile during the fourth yea ts to: (Please mark the statement that is the best description of the rea n with a circle or describe another specific distribution) a) less than 6 hours (a day) per week b) 6 hours (a day) per week c) 12 hours (two days) per week
amoun	d) more than 12 hours (two days) per week e) ctical training at companies in case of this profile during the fourth yea ts to: (Please mark the statement that is the best description of the rea n with a circle or describe another specific distribution) a) less than 6 hours (a day) per week
amoun	d) more than 12 hours (two days) per week e) ctical training at companies in case of this profile during the fourth yea ts to: (Please mark the statement that is the best description of the rea n with a circle or describe another specific distribution)
	d) more than 12 hours (two days) per week
	d) more than 12 hours (two days) per week
	c) 12 hours (two days) per week
	b) 6 hours (a day) per week
	a) less than 6 hours (a day) per week
Situatio	n with a circle or describe another specific distribution)
amoun	ctical training at companies in case of this profile during the third years to: (Please mark the statement that is the best description of the real statement that is the best description of the real statement.)
	e)
	d) more than 12 hours (two days) per week
	c) 12 hours (two days) per week
	b) 6 hours (a day) per week
	a) less than 6 hours (a day) per week
amoun	ts to: (Please mark the statement that is the best description of the real n with a circle or describe another specific distribution)
IZ. Pra	e) ctical training at companies in case of this profile during the second yea
12 D	2)

2. How many a circle as ap	•	ne education in case of this profile	e last? (Please mark with
	a) 3	b) 4	
3. Please star	te the total nu	mber of students in case of this e	ducational profile
		students	
study in com	pliance with t	practical training does the profil the curriculum? (Please state the ation of the profile)	
a) First year a			practical
b) Second yea training lesso		•••••••••••••••••••••••••••••••••••••••	practical
c) Third year training lesso		•••••••••••••••••••••••••••••••••••••••	practical
d) Fourth ye training lesso		ble)	practical
`	_	oractical training (approximately mpany for all years of study? (P	·
a) First year training lesso			practical
b) Second yea training lesso		•••••••••••••••••••••••••••••••••••••••	practical
c) Third year	r		practical

training lessons	
d) Fourth year (if applicable)training lessons	practical
6. How many <u>block lessons</u> does this profile entail for all compliance with the curriculum? (Please state the number of lessons)	
a) First yearlessons	block
b) Second yearlessons	block
c) Third year	block
d) Fourth year (if applicable)	block lessons
7. How many <u>block lessons</u> (approximately) take place at compaprofile for all years of study? (<i>Please state the number of lessons</i> .)	anies in case of this
7. How many <u>block lessons</u> (approximately) take place at comp	anies in case of this
7. How many <u>block lessons</u> (approximately) take place at compaprofile for all years of study? (Please state the number of lessons.) a) First year	anies in case of this
7. How many block lessons (approximately) take place at compare profile for all years of study? (Please state the number of lessons.) a) First year	anies in case of this block block
7. How many block lessons (approximately) take place at compare profile for all years of study? (Please state the number of lessons.) a) First year	anies in case of this block block block block

for all years of study? (Please state the number of lessons.)

a) First year lessons		exercise
b) Second year lessons	nr	exercise
c) Third year lessons	r	exercise
d) Fourth year	r (if applicable) exercise	e lessons
-	y <u>exercise</u> lessons (approximately) take place at companies in or all years of study? (Please state the number of lessons.)	1 case of
a) First year lessons		exercise
b) Second year	nr	exercise
c) Third year lessons	r	exercise
d) Fourth year	r (if applicable) exercise	e lessons
	f this profile, our school implements practical training at conthe statement that is the best description of the real situation with	-
	a) during all years of study evenly (every week) throughout the school	year
	b) during all years of study, but not evenly (every week) throughout tyear	the school
	c) evenly throughout the school year mostly for final years of study	
	d) mostly for final years of study, but not evenly throughout the school	l year
	e) the schedule is fully flexible and variable depending on the possit the employer	bilities of
	11. Practical training at companies in case of this profile du	iring the

first year amounts to: (Please mark the statement that is the best

	lescription of the real situation with a circle or describe another specific listribution)
	a) less than 6 hours (a day) per week
	b) 6 hours (a day) per week
	c) 12 hours (two days) per week
	d) more than 12 hours (two days) per week
	e)
amounts to:	I training at companies in case of this profile during the second year (Please mark the statement that is the best description of the real hacircle or describe another specific distribution)
	a) less than 6 hours (a day) per week
	b) 6 hours (a day) per week
	c) 12 hours (two days) per week
	d) more than 12 hours (two days) per week
	e)
amounts to:	I training at companies in case of this profile during the third year (Please mark the statement that is the best description of the real hacircle or describe another specific distribution) a) less than 6 hours (a day) per week
	b) 6 hours (a day) per week
	c) 12 hours (two days) per week
	d) more than 12 hours (two days) per week
	e)
amounts to:	I training at companies in case of this profile during the fourth year (Please mark the statement that is the best description of the real hacircle or describe another specific distribution)
	a) less than 6 hours (a day) per week
	b) 6 hours (a day) per week
	c) 12 hours (two days) per week
	d) more than 12 hours (two days) per week
	e)

QUESTIONS ABOUT THE QUALITY OF IMPLEMENTATION OF PRACTICAL TRAINING IN COOPERATION WITH EMPLOYERS

In the questions given below the term practical training is used for all forms of training that take place at companies – practical training, block lessons, exercises, summer and winter holiday work placement, etc.

To what extent do you agree with the following statements?		 I completely disagree I mostly disagree I neither agree nor disagree I mostly agree I completely agree 				
Local employers support the school in the implementation of practical training.		2	3	4	5	
The local self-government supports the school in establishing cooperation with employers.		2	3	4	5	
The chamber of commerce or the association of employers supports the school in establishing cooperation with employers.		2	3	4	5	
The implementation of practical training at companies contributes considerably to the acquisition of practical skills of students.		2	3	4	5	
The implementation of practical training at companies contributes much more to the acquisition of practical skills than practical training at technical classrooms and school workshops.		2	3	4	5	
During the implementation of practical training at companies, students display a much higher interest and dedication than in case of practical training at technical classrooms and school workshops.		2	3	4	5	
Employers that we cooperate with are very dedicated and interested in the quality of practical training of students that were assigned to them.		2	3	4	5	
During practical training at companies, students have the possibility to independently perform the foreseen work operations.		2	3	4	5	
During practical training at companies, students mostly learn through individual shadowing of employees and occasional assistance.		2	3	4	5	
During practical training at companies, students mostly learn in a group by observing the demonstration of work by a teacher or company employee and they have the possibility to try something themselves only occasionally.		2	3	4	5	
During practical training at companies, there are frequently unforeseen circumstances that must be resolved.		2	3	4	5	
Unforeseen circumstances that occur during practical training at companies are efficiently resolved in cooperation with employers.		2	3	4	5	

Please check whether you have answered all questions. Thank you for participating!