

System participation of trade unions in the area of apprenticeship: opportunities and threats in the time of digitalization

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Introduction

At present, trends of Industry 4.0 are greatly influenced by the requirements imposed on education and all its segments. It particularly concerns specialized education, which prepares participants for professional life. Challenges lie particularly in the speed and depth of changes, which bring a need of new skills, new skills combinations and quick ageing of skills that would be adequate with them. The system of initial education, that means typical school education administered by the state, is quite rigid, and any changes often actually show in the horizon of decades, which makes the challenges of Industry 4.0 even more acute. It will be essential for the pupils and students to get to understand at school that their education does not finish by leaving school and it is not regarded compulsory fixation of some amount of facts but it is rather a lifelong process of fulfilling the opportunities that will come up on future labour market within specific profession segment and any related ones.

On national level, there are many conceptual documents produced in the last decade, the aim of which is larger or smaller changes in the system of education towards the challenges. The real effect on a level of quality of school graduates and their preparedness for labour market is, however, not visible yet. There is a still stronger voice of employers who face great discrepancy in practise - between skills they need for their operation and what Czech labour market offers. So far, trade unions have not been active on the same level in the areas, even though their activity in the area of specialized education is important, at least as representatives of interests and rights of (future) employers and balancing a dominant influence of employers the interests of who, no matter how beneficial they are for the development of economics and supporting employment, form just one part of a complex system.

The study presented is processed according to the instructions of the Association of independent trade unions, and its aim has been to map the opportunities and threats for the system participation of trade unions in apprenticeship education in the context of the Industry 4.0 trends. In the Czech Republic, education programmes with apprenticeship certificates (previously apprenticeship programmes) form an integral part of specialized system of education as such. [They](#) are usually provided by integrated secondary schools that have specialized programmes with maturita examination at the same time. A relatively new thing in Czech education system, which is getting popular, involves programmes where it is possible to get apprenticeship certificate as well as maturita. All students of specialized education programmes have practical education, which may take place in cooperating companies. To assess the possibilities of the work of trade unions in this area, it is not too purposeful to separate the apprenticeship programmes from professional education, as from the system point of view, practically the same mechanisms and structures apply to them. This is the reason why the study presented

often uses the term specialized education without distinction of programmes with maturity and those with apprenticeship certificate. There are also frequent comments about the overlap towards lifelong education, as gradually interconnecting education levels and freeing strict borders between the individual segments of education is clearly a trend, which will form a look of education programmes and institutions in future. At the same time, bringing initial specialised education and education in businesses together may be a domain where particularly businesses may find a great potential of their own contribution.

Processing the study was based on a large research and secondary analysis of home and foreign literature as well as other resources, particularly including research reports and data published on specific topic. At the same time, the processor used his own experience and the investigations and analyses carried out so far, particularly in the area of Industry 4.0 requirements of skills and education, a part of which was, besides other things, a large amount of personal dialogues with company managers and other experts on the problematics. There were 8 in-depth telephone calls made as a direct base to process the studies presented, with professionals who had experience in education and considering a possible role of trade unions.

1. Challenges of Industry 4.0

The term 4th industrial revolution is used more and more often. It is not only a continuing trend to implement modern technologies into all areas of economics and human life, but a combination of more interconnected technological trends, thanks to which there are ongoing continuous qualitative changes in economy and society functioning. Information technology, cybernetic-physic systems and systems of artificial intelligence significantly change all fields of economy.

But what distinguishes the so-called 4th industrial revolution from the existing development of information technologies, which continuously goes on from the mid-20th century? Particularly the connection of virtual cybernetic world with the world of physical reality and consequently, important interaction of the systems with the whole society, called cybernetic-physical-social revolution.

1.1 Impacts of digitalization and automatization on labour market

As a result of Industry 4.0, productivity of work shall increase and labour market will go through some essential changes in the structure and organisation of work. A rate of job positions disappearance due to digitalization and automatisisation is a frequent question, however, research and estimates do not reach the same conclusion so far. A number of job vacancies with a low qualification in industry and other branches is likely to change, particularly in professions with routine work. There will be some extent of replacement of the medium or highly qualified work. The decline will concern particularly the tasks that can be easily standardized and algorhythmized. On the other hand, the least replacable are those professions that require specific human soft skills besides high qualification, such as empathy, creative invention, and those based on personal contact with other people - its replacement by an automat would not be considered desirable. There are also many professions with low qualifications which, with the current state of technology, can be automatized, however, the process would be quite complicated and expensive. An example could be cleaning of indented area or delivery service where massive investments into technologies replacing workforce would not be too profitable for businesses.

Many new job positions will definitely appear with further technological trends as well as new professions and work actions. Nevertheless, it cannot be estimated for sure in what extent and in which areas. The need of the ICT professions is going to increase significantly, not only in the sector of ICT services but also in the whole spectrum of economic branches. A demand for highly qualified work will grow, e.g. in the area of research and development, technical customer service, evaluation and analysis of customers' needs etc. Due to an increasing level of individualization of products and

services, we will need workers able to interconnect the needs and wishes of a customer with individualized finalisation of a product or service, with greater space for consultancy work, where they will assist the customer with his selection. A demand of professionals from the area of creative industry and design is expected to increase.

The area of industrial production goes through deep changes, and for a long time, a great necessity to develop new workforce competencies is brought forward. There will be a higher demand of professions connecting mechanical engineering and general technical skills with the knowledge from informatics, electronics, cybernetics, mechatronics and robotics, particularly designers and constructors of the built-in systems, designers and constructors of real time management applications, etc. Wider use of newly developed devices will go together with a demand of professions that will take care of their maintenance and assembly, software management etc. On the other hand, in the branches where the level of robotization is currently very high (e.g. automobile industry), a demand of the professions is likely to be full already, and we can rather expect employment decrease, strengthened by expected decrease in the demand due to coronavirus crises.

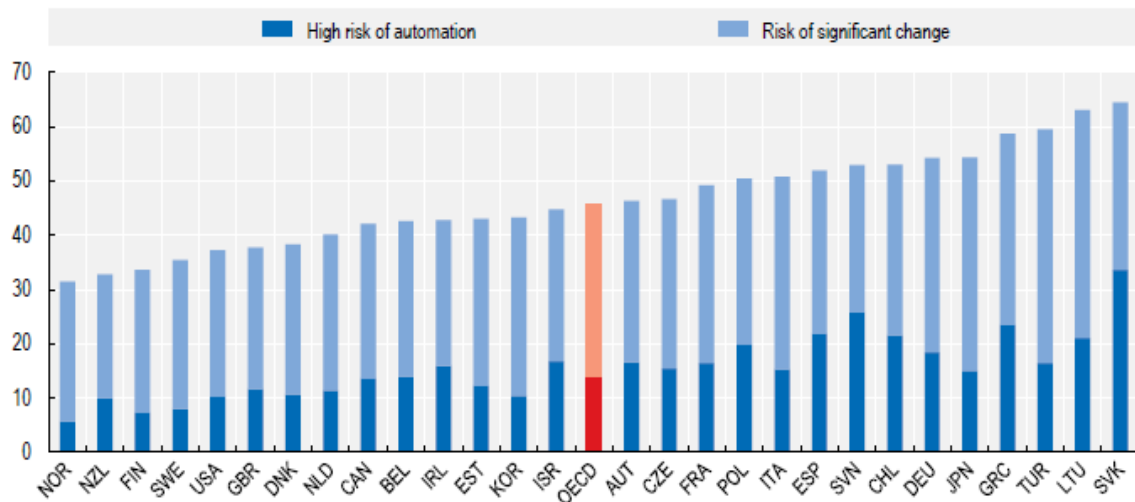
Some analyses state that the character of current technological progress can replace a much greater extent and much wider scale of activities than in the past, therefore a decline in the number of job positions can be expected and new ones will not be able to match them. According to a classic study of Frey and Osborne, due to automatization and robotization, as much as 50 % job positions in traditional branches is at risk¹. However, there are also different analyses, according to which negative technological impacts on employment are overestimated. The studies assume that flexibility of professional changes and multiplication effects to create job positions will balance the consequences. According to OECD which analysed data from a large investigation of adult skills PIAAC² about work in individual professions, in the next 10-20 years, there will be about 14 % professions at risk in the OECD countries and another 32 % will go through changes. The estimates are much lower compared to the estimates of the above publication of Frey and Osborne. According to OECD, the Czech Republic has approximately average level of threat concerning job positions – 15 %, that is around 780 thousand. Around 30 % positions will go through great changes, (over 1 560 thousand³). According to the estimates, a level of threat in the Czech Republic is surprisingly lower than in Germany, Japan and some other advanced countries (see Picture 1).

¹ Frey, C. B., Osborne, M. A. (2013).

² See <https://www.oecd.org/skills/piaac/>.

³ The estimate is based on the employment state in 2017, source: ČSU-VŠPS.

Picture 1: Rate of job positions at risk due to automatisisation – comparing the OECD countries (in %)



Source: OECD: Employment Outlook 2018. Remark: High risk automation=job position involving over 70% activities that may be automatized; Risk of significant change=job position involving 50-70% activities that may be automatized.

Also, negative demographic development and population aging will play their role and will limit the availability of workforce, not only in relation to a number but also required level and area specialisation. According to the middle version of ČSÚ demographic projection,⁴ number of people in productive age (15-64 years) will decrease by 2030 by about 126 thousand people, if compared to 2018. Implementing automatization may be one of the ways used by businesses to solve insufficient workforce, particularly in the fields which are not popular among young people. Ageing workforce will also less and less willing (and able) to perform physically demanding work, which will contribute to the trend.

As a result of forcing low-qualified people out to a side of labour marker and their replacement by the free medium-qualified ones, the middle class, which constitutes an important stabilisation element of society, may go weaker. Significant opening of scissors between the higher and lower society classes constitutes a great potential risk of social peace. Those negative outcomes can be prevented a systematic creation of environment, continual qualification increase that will make it possible for the employees to keep up with technological progress in their fields, so that the structure of the workforce skills would adjust to new requirements. At least a art of employees could aim higher on the qualification ladder, which could prevent unemployment, income polarization and social tension in society.

The tendency towards labour market polarization can be seen on American labour market⁵ but other authors note ⁶ that it is typical for economies with a lower rate of

⁴ ČSÚ (2018).

⁵ E.g. Frey a Osborne (2013).

⁶ Hall, P., Soskice D. (2001).

regulation rather than e.g. Scandinavian economy or economy of the Netherlands. However, some studies indicate it could only be a temporary trend. For example, a study done in Switzerland, which monitored how digitalization and employment related, based on empirical data from companies, came into conclusion that so far, technological development caused a higher demand for highly qualified professions as well as those with low qualifications, while a demand of those with medium qualification was decreasing (the scissors opened). But at the same time, the study indicates the situation may change and a demand for low-qualified workers begins to go down. Overall effect of digitalization onto employment is, however, valued slightly positively, as a demand for highly qualified workers continues to grow.

It is apparent that the processes of replacing job positions by automatic systems will spread over a longer time period, and in this context, we cannot expect any massive, jumpy or revolutionary changes. That will involve gradual, evolution changes, which, besides other things, is an opportunity to continually evaluate the situation and prepare for potential risky issues proactively and in advance. The question is how the development will be influenced by the coronavirus crisis. According to the existing estimates (July 2020), investments are likely to be limited for some time and companies will let employees go. On the other hand, the coronavirus crisis caused a jump in faster implementing of some forms of work connected to modern technology, such as work from home, and there are also attempts to have more digital and automatized services, aiming to minimize personal contact. We can expect the trends requiring new types of qualifications, particularly connected to connectable with using ICT technologies, could be strengthened.

Besides directly creating new job positions, technological development may also lead to secondary positive influences on labour market. It was assumed that saving the amount of workforce thanks to innovations and increasing effectiveness can be compensated by lower prices and higher income, which will again lead to a higher demand of products and services and as a result, to higher employment. Coronavirus crisis, however, has brought great disruption in the trend, and this positive development is likely to be interrupted in the mid-term horizon. In the long-term horizon, however, it will be renewed, as it was manifested regularly in a similar way in the history of humankind with economics of technological progress.

1.2 Changes in the structure and organisation of work

Trends in Industry 4.0, such as some shift of employment from industry to the sector of services requiring a high level of knowledge, will bring a greater use of more amorf forms of work, new ways of thinking about the forms of doing work, more opportunities of remote work, opening the borders of working hours and higher changeover of work and

personal life etc. Thanks to that, there will be higher requirements of maintaining and controlling security at work and working conditions of employees. Development of alternative forms of work will lead to creation of a certain group of workers who will not have a centroid of their work in a classic main employment, and they will not have protection provided by employment legislation to employees. This will involve the self-employed, who will provide their services more to employers or they will join in different forms of shared economy (resp. platform economy) etc.

Some positive aspects of the 4th industrial revolution include decreasing a part or complete removal of physically demanding routine work and the work dangerous for life and health. The quality of work will probably increase in a sense of a higher potential of interesting activities, providing more opportunities for creativity, independence, professional development and self-realisation. Work environment quality will improve. Those are attractive aspects particularly for the young generations. On the other hand, there are groups of workers, particularly from the older generation, for which the higher pressure of new dimensions of work with a greater use of digital technologies may appear negative and may mean greater psychological burden, or even being at risk of losing employment. In the previous time period of economic growth, investigation in companies did not show that older people without IT skills would be under a threat of being made redundant massively. Nevertheless, the issues are solved in companies, and workers who are not able to adjust to new requirements in the area are often shifted to another type of work. It is likely for the economic regression due to coronavirus crisis to cause a higher rate of redundancies of just those employees.

Development of remote work will theoretically allow easier joining for the groups of workers, who had only limited possibilities in a traditional system of organisation of work, e.g. people with a handicap, parents on parental leave, those living in remote location etc. For it to happen practically, there must be a support of their interconnection and good will from public authorities and businesses, and also edification and education of the groups at risk to motivate them to use the new possibilities on labour market and to gain required skills.

1.3 Education in Industry 4.0

From the viewpoint of qualification structure of population, a high proportion of people with secondary education is characteristic for the Czech Republic. The percentage of population remaining without complete secondary education belongs to one of the lowest in Europe. On the other hand, the Czech Republic has, compared to other EU countries, quite a low proportion of people with tertiary education, although it has increased significantly thanks to a gradual opening of universities in a combination with demographic trends since the 1990s. A part of population which chooses specialised

education on secondary level (compared to general education) belongs to a very high ones compared to other countries (about 77 %). Nowadays, a proportion of students who enter the first year of apprenticeship programmes without matura examination is about 30 %. Another almost 6 % go to the programmes L0, that is matura programmes a part of which is also specialised training (they get apprenticeship certificate as well as matura one), which also represents a preparation of highly qualified craftsmen or people on workers positions. About 36 % of the youth therefore complete professional training. Approximately 40 % then go to specialized schools programmes with matura examination (programmes M).⁷

Quite a significant proportion of Czech businesses has experience with apprenticeship education. In 2015, about 25 % businesses in the Czech Republic stated they provided initial specialised education, therefore they accepted students for practical training. It is less than the EU-28 average, which is 31 %. The highest proportion within EU is in Germany, where nearly two thirds of businesses provide apprenticeship education (64 %). This practise is logically the most common in large businesses (above 250 employees), which have bigger capacity and better infrastructure for the activities. Out of those, 55 % educates pupils (however, in Germany, it is all large businesses – 94 %). From medium businesses, it is 34 % (73 % in Germany), and from small businesses under 50 employees, practical education is provided by only 21 % businesses (59 % in Germany).⁸

The existing school education fails to meet the requirements of technological development, and many employers tend to be dissatisfied with the level of school graduates, which applies even more in case of apprenticeship programmes. Many employers therefore accepted the fact that they will have to add to the specialised education of graduates themselves according to their needs. Secondary education, which is traditionally very resistant to changes, is therefore one of the areas great attention should be paid to, striving to prepare the society better to face the challenges of Industry 4.0.

Concerning development of the ICT skills, which is a key component of any progress towards putting the Industry 4.0 processes into practise. There are also great reserves in Czech education. The document Strategy of digital education until 2020⁹, which elaborates the priorities of the Strategy of educational politics in the Czech Rep. to 2020 for digital environment states that „in 2007 – 2014, there was no support of technologies in education and ICT (digital) literacy in the Czech Republic on an adequate level compared to other EU states“. In future, it will be necessary for all graduates from education processes to have the knowledge of computers and internet, possibilities of

⁷ Source: MŠMT (2020a).

⁸ Source: Eurostat (2020): Enterprises employing IVT participants by size class - % of all enterprises [trng_cvt_34s]

⁹ MŠMT (2014).

their use in any profession, to know the benefits of applying new technologies and tools of Industry 4.0 including future development trends. Trade unions should look for their own ways to support digital literacy, particularly in connection to the needs of businesses and specific use at work, and create control and constructive-opponent mechanisms to state initiatives in this area.

There is a trend at present when young people tend to prefer humanistic programmes, which they consider more interesting and with higher perspective, often sensing it as clean office work compared to hard and unattractive work in production. In many cases, the idea does not correspond with reality. Young people deciding about their future job need to be introduced technical and scientific branches as a desirable option, allowing to shift the development of technologies and to be on the top of the processes that move society, as a realistic way to a meaningful personal development and well-rewarded professional career with security of future employment. Technical and industrial businesses should also accept attracting new people as a challenge, which very often also brings things like changing company culture and a way of thinking. What would be acceptable and sufficient for middle and older generations in the context of company culture would not be acceptable for younger generations. Those are the areas that open great opportunities for the work of trade unions.

Next graduates will have to be able to come to terms with big changes concerning the content of their work and on labour market, which will be accompanied by a necessity to change employment more often and continuously keep up with new technologies as well as the forms of work and organisations. Flexibility should not be just a must of educational strategies but also a specific goal of education process. Graduates will have to realize that completing initial education is not the end but the beginning. They should not be surprised that requirements of their first job do not correspond with the tasks they did at school, they should be able to co learn continuously and look for adequate support of their efforts. They should not just passively wait for answers provided by their management and some existing structures.

A priority in the context of Industry 4.0 should be timely finding and supporting the talents. Czech education is typical for growing differences in the results of students from different schools and types of schools, and a level of students' skills strongly depends on their socio-economic background¹⁰. That way, talented children who were born in the disadvantageous background escape, and their potential is often not discovered at all. Considering the unfavourable demographic development and increasing requirements of Industry 4.0, the relatively small Czech company cannot afford to waste any talent. Conditions should be created for their searching, strengthening their position at school and society and openness to their further development, which may be done only when

¹⁰ See e.g. ČŠI (2014) or ČŠI (2016).

accompanied by complex and long-lasting support that considers various aspects of life of a young person in disadvantaged environment. That will require quite a high effort and innovative approach, as it is complex and demanding problematics that still does not have many functional mechanisms created in society to manage it.

A key condition of good quality education is particularly good quality pedagogical workers. In countries, where the system of education reaches excellent results, teachers are one of the most respected and the best financially rewarded professions (e.g. Finland). School trade union organisations in the Czech Republic traditionally play an important role when negotiating financial terms for teachers and other pedagogical workers. Financial situation of teachers has been improving recently, however, the support has to be extended to other areas, too. E.g. to attempt to decrease bureaucratic burden of teachers, improve the atmosphere at schools, support prestige and social renom e of teachers. It is important to create a complex of conditions that would attract and bring strongly motivated and creative personalities to education including the apprenticeship one, who can be an attractive example for the young and motivate them for the field, for wanting to work in it and also shift it further and be involved in changes. To reach this aim, payment terms are a requested necessity, but it is not all.

A basic prerequisite of maintaining competitiveness for the future is considered to be development of further education, an importance of which increases due to quickly developing requirements of professional skills necessary in order to do a job. The proportion of population that participates in further education in the Czech Republic does not reach the level of advanced countries. In 2019, only 8 % of population aged 25-64 participated in further education, whereas it was for example 34 % in Sweden.¹¹ Concerning engagement of companies in employee education, however, the situation is quite favourable. In 2015, for which last data are available, professional education was provided to employees by 91 % of companies, which is one of the highest proportions in the EU.¹² Regarding a content, the most common courses included those in foreign languages, using internet, psychology and presentation skills. Businesses therefore realize the need of further education, which can be understood as a good starting point for their engagement in the field.

¹¹ Source: Eurostat (2020): Participation rate in education and training (last 4 weeks) by sex and age [trng_lfs_01].

¹² Source: Eurostat (2020): Enterprises providing training by type of training and size class - % of all enterprises [trng_cvt_01s]

2. Participation of trade unions in specialized education abroad

2.1 Supranational context

A role of trade unions in specialized education is quite diverse problematics in the international context, which is based on historical development and a context of an individual country. There are countries where the role is significant and quite clearly defined, there are other ones, including the Czech Republic, where the role of trade unions in education system is on the edge or does not have any formal support (e.g. in legislation).

The engagement of trade unions in professional education is, on global level, supported by supranational organisations, which point out main directions of desirable actions in the area. The international organisation of work prepared a strategy for education in a partnership with trade unions and employers and presented it on a summit in Toronto in 2020. There are the following goals defined in the strategy:

- To provide good quality initial education as a base for further education
- To create good quality interconnection of the world of work and education providers (schools), especially on the branch level, where direct participation of employers should ensure high relevance of professional preparation
- To provide continuous education at work and lifelong education
- To predict qualification needs and to build competences that will correspond with future needs
- To provide wide access to education for men as well as women, particularly for groups which struggle with greater difficulties, especially for the young, those with low qualification, handicap or similar.

A document of the World Economic Forum from 2016 also emphasizes the necessity of trade unions taking part in the development of skills. It calls to create a complex long-term strategy, which would involve partnership of governments, employers and trade unions and would aim towards permanent creation of skills and their effective use, in a sense of decreasing discrepancies on labour market. Support of trade unions is seen as a key to development of qualifications and curricula relevant for labour market.

On European level, main political initiative defining European politics of specialised education is the so-called Copenhagen process. It is a set of desirable provisions aiming to increase quality and attractiveness of professional education. The Copenhagen process involves social partners as key actors of education politics and its implementation from its start in 2002. Besides relevant national ministries and European Commission,

Copenhagen declaration has been also signed by the representatives of employers and trade unions working on European level. Following Maastricht and Helsinki komuniké and Komuniké from Brugg for 2010-2020 also recommended for the social partners to cooperate on an international level and encourage national governments to involve social partners in the processes. In 2016, a new Agenda of skills for Europe was issued¹³, which defines three main strategic priorities in the context of existing social and economic challenges: 1. improving quality and relevance of gained skills; 2. ensuring better visibility and comparability of skills and qualifications; 3. improving knowledge and information about skills for the purpose of a better choice of job. Social partners are considered to be key movers of the processes.

In 2018, the Council of Europe issued the Recommendation regarding European frame for a good quality and effective apprenticeship preparation¹⁴, which prescribes the member states to „closely cooperate with the parties involved and should ensure the systems of apprenticeship preparation are able to react to the needs of labour market and are beneficial for students as well as employers“. There are criteria set for good quality apprentice preparation. Besides other things, it is recommended to get involved and support trainers inside companies and increase the share of practical education at work. Apprenticeship students should be also ensured a right to social protection, right to a reward for completed work according to state or branch requirements or collective agreements, and there should be working conditions and security according to relevant regulations for them. According to the Recommendations, social partners should be involved in preparing, managing and implementing the systems of apprenticeship preparation.

The latest strategic documents in the area of specialised education come into existence in the context of coronavirus crises and attempts of the EU to start arrangements without precedence to renew economy. In 2020, European agenda of skills for sustainable competitiveness, social fairness and resilience was published. The statement introduces 12 points that aim to support partnership to develop skills, increase qualification and requalification and to strengthen lifelong education.

The first of the points counts on creation of European Skills Guild, which should be presented in November 2020, and European social partners play a key role in its preparation. It is an attempt to target a high level of investments into development of skills among all age groups in the EU. The guild will strive to form large extent partnerships, which would involve regional level, strategic branch ecosystems and other priority areas. All relevant parties should enter the partnerships, particularly the small and medium-size businesses. Partnerships will be motivated to share and maximally use the

¹³ EC (2016).

¹⁴ EU Council (2018a).

expertise, capacity available, including e.g. education institutions and financial resources for educational programmes.

Close interconnection of social partners is also considered among other points of the European Agenda of skills. Besides other things, we support their participation in participating the qualification needs of labour market, identifying educational needs and development of information base to make decisions in the area of skills and in creating national political strategies in the area of education. European Commission plans to look into the possibility of implementing individual education accounts¹⁵ in Europe, and also assumes consultations with social partners.

Regarding the apprenticeship education, the Agency mentions strengthening of the European alliance for apprenticeship education (EAfA)¹⁶, where the individual EU countries and other partners join in, often employers and trade unions¹⁷, and publish their obligations concerning supporting apprenticeship education. Newly, an emphasis will be put on national coalition in the area of apprenticeship that would give voice to the apprentices themselves and strengthen a social dialogue.

In the existing strategic material of European trade union confederation ETUC „Manifest ETUC 2019-2023“, there are particularly two priorities related to digitalization and education. One of them declares the necessity of urgent measures that would help solve climate crisis, digitalization, automatization and globalization „with a fair transition phase which (via EU legislation, political measures and allocated financial means, social dialog and collective negotiation) will ensure for all to keep up.“ Another one strives to „achieve a state when there is lifelong education and a right to training is reality for all at work, through a legislative call to EU.“¹⁸

More detailed provisions are included in the ETUC action programme for 2019-2023 (ETUC Action Programme 2019-2023)¹⁹. The priorities for the area of education include firstly ensuring the right to adequate education for all, fair access to education with a support of particularly the opportunities to achieve higher education for those with low qualifications. The document also declares the necessity to provide the sustainable financing of education on the national level. Two priorities directly relate to specialised education - to improve the quality, attractiveness and inclusivity of professional education systems and to provide good quality positions for apprentice preparation, and to support an effective social dialogue in professional preparation and adult education aiming to consolidate the management of the areas. The conference presumes the goals will be

¹⁵ Individual education account is a tool which gives a specific group of adults (or to all) some financial resources that can be used especially for education.

¹⁶ European Alliance for Apprenticeships: <https://ec.europa.eu/social/main.jsp?catId=1147&langId=en>.

¹⁷ For Czech Rep., it is e.g. ČMKOS, the Economic Chamber, mid-Bohemian region and others.

¹⁸ ETUC (2019b).

¹⁹ ETUC (2019a).

reached, besides other ways, by active participation in the EU programmes and initiatives including the Erasmus programmes, ESF+, European quality control mechanisms in education, for accepting professional qualifications including the participation in the above mentioned European Alliance for apprenticeship education.

In European countries, education available to everybody is more and more viewed as a decisive pillar with a potential to ensure for the future economies to be more inclusive and socially fair. Previous goals of trade unions, particularly concerning education of their own members, steps back from greater awareness regarding the importance of development of skills for all employees, especially for those whose professions are under threat or transformed by fast development of modern technologies in the Industry 4.0 processes. New forms of formal and informal partnerships of trade unions and employers appear, respectively old forms of cooperation are strengthened, thanks to which interests of employers in the area of education and future employees (apprentices) enter the system.

2.2 Practical training abroad

Comparative studies show that in general, the role of social partners is much stronger in older EU countries compared to new member states.²⁰ According to a statement of the EC from the end of 2018²¹, representatives of employers and their groups of interest tend to participate in system creation more, trade unions take part less. However, there are wide possibilities of trade union involvement, implemented particularly in the advanced countries of western Europe. In the countries, trade unions often play a systematic, conceptual or management role in the area of initial education including the apprenticeship one. It is so in at least nine EU member states (e.g. Denmark, Germany or Spain). Trade unions in Great Britain have similar strength.²²

In the countries where the tripartite or bipartite dialogue isn't developed as much as in most western countries, dominant topics of the dialogue include wages and working conditions of employees. Specialized education as a topic is established later and gradually. The systems where trade unions have some part in decision making in the area of education have work groups and commissions members submitting proposals to decision sphere. This organisation allows trade unions to create their own proposals instead of only plain remarks regarding the already existing proposals. A principal problem here is usually limited capacity of the trade union representatives to participate in relevant political debates and continual work.

²⁰ Source: ETF (2012).

²¹ EC (2018).

²² Source: Quality Apprenticeships – What are trade unions doing? 2nd G20 Conference on 'Promoting Quality Apprenticeships', 25 February 2015, Antalya, Turkey.

Examples of good quality approach to specialized education are considered to be the countries with the so-called dual system (typically Austria or Germany - see chapter 2.3.1). Main difference between this system and apprenticeship one in the Czech Rep. is the fact that apprentices in those countries enter into a contract with companies where they do practical preparation. The fact that the company is directly responsible for the apprentice's education and has a contract with him makes the role of trade unions important for specialised education. For businesses in the countries, it is common practise to accept apprentices, connected with branch and guild awareness as well as some prestige, and they often consider it to be an integral part of their activities (e.g. Norway). There are countries where apprenticeship education is considered further education, and takes place after initial school education which has a more general character (e.g. Ireland). It is a real fact for trade unions of relevant businesses that the apprentice youth is in the same centre of their attention as regular employees, respectively more, as for many reasons, they belong to groups at greater risk and represent future not only for labour market but also for trade unions themselves.

In the area of initial professional preparation and particularly apprenticeship, the most frequent forms of interconnecting trade unions have been described by a research project carried out by Unionlearn²³. Besides other things, it states that trade unions in advanced European countries are, together with employers, involved in the management of professional education and apprenticeship on various levels, particularly in the following activities:

- Ensuring the specialised education programmes correspond with the needs of labour market
- Cooperating to define professional qualifications
- Co-sharing to create the content of education, at schools as well as at work.
- Negotiating conditions for apprentices, particularly their wages²⁴
- Consultancy provision for apprenticeship students
- Supervision of the quality of practical education at work
- Decision making in the area of financing education at work through bilateral education funds.²⁵

Investigation carried out by the Trade union advisory committee OECD in 2013 among 24 trade union organisations in 19 countries showed that there is a dialogue of trade unions

²³ Unionlearn is a section of British trade union confederation Trade Union Congress (TUC), dealing with education.

²⁴ In many western countries, a position of apprentices in this point differs from a position in the Czech Republic. Apprentices have a contract with an employer and receive wages for their work.

²⁵ ETUC/Unionlearn (2014). In: Bridgford, J. (2017).

and teachers with government authorities in the sector of education in many countries. Majority of trade union organisations, nevertheless, feel to be involved only partly, within the framework of consultation schemes set by government. More frequent involvement exists on a level of creating politics (strategies), rather than on a level of their practical implementation. It means that the existence of formal consultation structures itself, including trade unions, does not mean they are involved in practical processes. It happens that one country has a different extent of interconnecting various trade unions, which is reflected by a differing character of relationships of that government with trade unions in different sectors. Topics most often solved with government bodies include professional development of pedagogical workers, followed by working conditions issues and equal opportunities. Majority also mention issues like curricula, salaries, support of special needs students, evaluation of teachers, assessing students and schools. Approximately one third mentioned discussions concerning student behaviour. Research in the area of education, development of schools and school board has been mentioned less often. In professional education, a discussion concerning curricula has the first place, which is reflected by a specific character of the education segment and its closer interconnection with the world of work.²⁶

A role of trade union organisations in education, however, cannot be assessed only based on whether they participate in creating politics, conceptual work and management. An essential moment is whether they act proactively, bring own initiatives and projects. It is important to also consider their informal influence and distinguish different levels and sectors, as far as a level of the individual businesses, as we can find a very different quality, intensity and form of cooperation there.

2.2.1 Topics of trade unions

In some countries, trade unions and employers get involved in the area of **financing professional education**. There are e.g. funds for education that fall under a joint management of trade unions and employers. The funds may be founded based on the allocation of a certain proportion of company taxes. The fund then serves to finance initial education of the youth and to provide highly specialised professional education (e.g. in a form of grants up to the amount of a certain percentage of the educational costs). An alternative is to use the fund for the offers to companies to provide specialised education in their premises. That arrangement may significantly improve the quality of company education, as besides other things, it specifies criteria that have to be fulfilled by an education programme. An example of a well-working fund can be the Skills Development Fund, founded in Singapore. A number of people who took part in the company education

²⁶ Source: Schleicher, A. (2018).

was three times higher 10 years after the fund was founded.²⁷ At the same time, financial tools managed by social partners together may serve as a tool to implement related public politics.

Obligation of businesses to finance certain schemes of company education, which also includes education of apprentices, also form a content of national obligatory collective agreements. Many collective agreements specify basic conditions of financing education of apprentices as well as financing lifelong professional education of employees.

Trade unions may also take part in **creating standards, qualifications and qualification frameworks**. This role is more often taken over by employers, and the task is said to be easier for an employer who has an exact idea about what he expects from a worker than for trade unions. However, there is no reason why trade unions shouldn't contribute to the education content and standards formation on the same level. This approach would, on the contrary, help more balanced formulations and improve the situation when too one-sided definitions of a job, which only consider the needs of employers and do not consider the needs and possibilities of a person performing the job.

Trade unions also participate in **a direct provision of education** in own education centres via their work in apprenticeship education or education at workplaces. In many countries, trade unions own the whole education or research institutions (including universities²⁸) and provide education programmes to a much wider spectrum of clients. There is often a situation when such educational institutions are financed and administered together with employers, e.g. in a specific sector.

Trade unions often act as **quality insurers** in the apprenticeship education. Their activities in that field include for example ensuring the content of educational programmes is not created only in relation to narrow and short-term needs of labour market but for it to be a long-term benefit for students. Trade union representatives ensure monitoring of quality and consult the content of education at schools as well as at work (e.g. at a place of practical training), aiming to ensure their high level.

Negotiating terms and conditions for apprentices, particularly the amount of their remuneration during their preparation at workplaces or starting wages after completion. In many countries, the amount of remuneration to apprentices for the work in companies is determined by collective negotiation and written in collective agreements, either on a level of individual companies or employment associations.²⁹

²⁷ Source: Quality Apprenticeships – What are trade unions doing? 2nd G20 Conference on 'Promoting Quality Apprenticeships', 25 February 2015, Antalya, Turkey.

²⁸ E.g. Russia, Turkey

²⁹ Ryan, P., Wagner, K., Teuber, S., Backes-Gellner, U. (2011).

The role of trade unions in the area of maintaining and **creating new places for apprentices** highlighted especially during economic crisis and first years after, when many countries had a problem with high unemployment of the youth and at the same time, companies cut down the costs spent on education, including apprentice positions. Trade union organisations tried to negotiate maintenance of the maximum number possible of the places on a level of companies or sectors. An interesting example of such successful activity may be the agreement concluded between trade unions and companies in chemical industry in Germany, signed in 2014. Therein, social partners undertook to create 9200 new positions for apprentices a year in 2014-2016, while the agreement also contained recommendations (but not an obligation) for companies to offer apprentices a permanent contract of employment after completing their education.³⁰

Trade union organisations also play a role when **solving the needs of disadvantaged groups** on labour market when they strive to have wider opportunities to successfully complete the apprenticeship programmes for young people from endangered social groups (e.g. with disadvantaged social background, children of migrants etc.). Particularly a question of children who leave general education (corresponding with primary school) with a low level of reading and numerical literacy is in the centre of attention. The aim is to bring even those pupils onto an adequately successful professional career.

Due to economic crisis, we could see in many countries that **the transfer from apprenticeship education into practice** has become harder. In reaction to the fact and trying to ensure the apprenticeship track remained attractive for young people, trade unions tried to conclude agreements which would support entering employment after completing apprenticeship. For example, in German state Baden-Württemberg, such agreement was concluded in the sector of metal production and electrotechnology in 2012. It states that if a business does not go through serious economic crisis, the graduates from apprenticeship programmes carried out there should get job offers, preferably for a permanent time period but for minimum of 1 year.³¹

In some European countries, social partners join in the processes of **certification of the learning results**, respectively checking and accepting the results from previous (non-formal and informal) learning. E.g. in Finland, certification committees, consisting of representatives of trade unions, employers and teachers of specialised education, are responsible for qualifications which can be achieved by verification.

A significant area providing a potential of trade unions in education is **consultancy and providing specific information** concerning the transition from school to work or admission to learning. In practice, the most often it is advisory services for members but

³⁰ Source: Quality Apprenticeships – What are trade unions doing? 2nd G20 Conference on ‘Promoting Quality Apprenticeships’, 25 February 2015, Antalya, Turkey.

³¹ Same place.

also accompanying and tutoring for apprentices etc. It is an area where various sector and regional organisations can work well, as they can use their good knowledge of the needs of regional economy and a network of individual contacts on „the lowest“ level (regular members) to start relationships with potential clients. For example, in Great Britain, trade unions have created an innovative network of the so-called ‘union learning representatives’, who help people find ways how to gain suitable knowledge and skills, to improve quality of (not only) their working lives. Trade unions trained 23000 representatives for the purpose. Finland and Sweden used similar approach. During information and consultancy activities, trade organisations use modern communication means, such as targeted web sites or social media. German trade union IG Metall administers an internet platform Jobnavigator.org, which helps members and other people interested find the right way in education. In a few other countries, trade union organisations are particularly active in the situation of company restructuralisation with a threat of redundancies, when they help workers enter the education process again and get better qualification instead of ending up unemployed. The activities often take place in cooperation with employment services.

British trade union TUC created a handbook on apprentices (Apprentices Toolkit³² – see its part in Attachment 1) for trade union members, which includes basic information about advantages of investing into apprenticeship, various apprenticeship education programmes available, standards that apply to apprenticeship education, issues of social evenness and diversity, questions of mentoring, remuneration for apprentices, their working conditions etc.

Forecasting of changes and supporting adaptation to them belongs to topics of collective negotiation in many countries, and provide diverse ideas concerning professional education. Structural changes concerning e.g. service outsourcing, globalisation, internal restructuralisation in companies, repeated economic crises and demographic development are significant and present everywhere nowadays. Education as such is considered to be one of the most effective and necessary tools of how to cope with changes and prepare for next development. Trade unions may also participate specifically in **the anticipation of qualification needs**. These activities are usually organised on national level. The key consultancy role is that of the state, but often attributed to the employers, but also trade union organisations may bring some valuable information and consult future views, particularly from the viewpoint of workforce. They may also validate and interpret the results from their own perspective, which will allow them to identify important topics for future work on time. And trade unions may also initiate or finance their own projects in the area and form proposals and recommendations based on the resulting findings.

³² <https://www.unionlearn.org.uk/apprenticeships-toolkit/>

2.2.2 Influence exercising forms

In the member EU countries, participation of trade unions in creating the professional education politics usually takes place as a part of a **social dialogue and collective negotiations**, which serves as a tool to exercise the influence of the groups involved. In many advanced countries (particularly in the OECD and G20 member states), maintaining and extending a good quality of apprenticeship education has become a subject of collective negotiations, especially in the reaction to economic crisis connected with the high unemployment of the youth.

An important mean of integrating the interests of the parties involved is creation of **formal and informal partnerships between trade union organisations and employers** in relation to education and to collective negotiation.

On a national level, a key form is the **participation in top bodies and clusters**, which are responsible for various aspects of creating the politics of professional education. A basic condition here is a political decision of the state to establish the bodies and formations and to create formal opportunities, respectively legislative framework to interconnect social partners. If a partnership is only limited by time, e.g. when negotiating collective agreements or education strategies are involved, also the opportunities of system participation of social partners is significantly limited.

In Belgium, the law guarantees trade unions a role at proposing and implementation of the apprenticeship education schemes. Representatives of trade unions are members of the Flemish Agency Council for professional education and in its implementation committee, which approves all education programmes and qualifications, implements apprentice agreements, is responsible for quality control of education in companies and supervises company mentors.³³ In Denmark, trade unions are represented in the same proportion as employers in the National Commission of specialised education board, which is an advisory body of the ministry in the area of apprenticeship education regulation. French legislation contains provisions concerning participation of trade unions in creation of a concept as well as providing specialised education. Trade unions are members of relevant bodies in the area, such as e.g. National committee for employment, professional education and consultancy. In Germany, social partnership is a central tool of the specialised education system. The role is based in the Act on professional education, which ensures trade unions can participate in key bodies of education sector. For more information about German system, see chapter 2.3.1.

In some countries, there are **national agreements** signed, according to which, both parties are obliged to participate in a social dialogue concerning professional education. For example, in Georgia, such agreement was described by trade unions and employers

³³ ETUC/Unionlearn (2016). In: Bridgford, J. (2017).

together with the Ministry of education and science in 2011. Trade unions and employers are bound by the agreement to compulsory participation in preparation and development of job standards and newly introduced education programmes.

In Ireland, in relation to a recent reform, participation of trade unions was established in the Apprenticeship Council, and its task is to consult the look, length, entry requirements, terms of providing and numbers of apprenticeship places in accordance with national needs found by analyses of labour market and forecasting of qualification needs. The Council also speaks about an introduction of apprenticeship programmes for new professions and supports permeability into further education. In Latvia, a National tripartite sub-committee for participation in professional education and employment exists, the main job of which is revising the proposals of state development plans in professional education and employment, establishment of the new ones and updating the existing education programmes and work standards.

An interesting example of formalization role of trade union organisations in professional education is **the multisector collective agreements** on development of skills, which exist in France and Norway. In France, those are concluded regularly; national agreement was signed in 2003 with all main trade unions and employment confederations. The agreement covers a wide spectrum of issues including lifelong education, education and development of young people, education of a level on sector and regional level, finance schemes etc. The agreement also strengthened some existing elements of the system, such as greater application of the principles of employee contributions to education and strengthening of the role of sector finance administration bodies and determining sector priorities. A new individual right to education and on an assessment interview at least once in two years has also been supported, aiming to identify educational needs.

In Norway, a similar multisector agreement between trade unions and employers established a role of trade union speakers for the area of education, who any new arrangements in professional education are discussed with before they are accepted. The agreement also prescribed each company had to form goals concerning future development in a sense of required qualifications, it had to map the qualifications in cooperation with employees and provide education for employees, if the existing level of competences did not correspond with future needs.

Some countries formed **tripartite strategy to support professional education**. One example is German Alliance for initial and further education 2015-2018, which contained series of arrangements that prepared young people for better performing of their work and to enter labour market. It was aimed at increasing the quality and attractiveness of professional education and strived to reach a state when each young person interested in apprenticeship is provided apprentice position leading to gaining qualification. The aim was also to decrease a share of early leaving of education, to increase a number of

apprenticeship places provided by businesses, increase a number of businesses educating young people and increase permeability between professional and general/academic education.

There is often an opinion in literature that the most suitable level for participation of trade unions in the skills development is **the sector level** (see e.g. Bridgford, 2017), for forming the politics as well as their implementing. Particularly in many European countries, especially the sector bodies consisting of the representatives of trade unions and employers play a key role in the area of initial as well as further education (it involves e.g. Denmark, France, Latvia and the Netherlands). Similar to national level, also here is a risk in starting just the time-limited activities or partnerships which then fail to lead to any significant strengthening of the system participation.

Collective agreements are a frequent tool used on sector level. E.g. in Germany, education is a part of sector collective agreements for many years. Also, in Italy, sector agreements often include provisions concerning apprenticeship education. Besides other things, they deal with rewards for apprentices, company mentors, numbers of apprentices per company, duration and forms of practical education, a role of sector funds which finance specialised education etc.

In many countries, a key role is played by the sector skill councils or committees, which usually gives an opportunity to participate also to trade unions. The councils support professional education and skills development in a specific sector and strive for education in their sector to correspond as much as possible to the labour market needs and at the same time, to fulfil the more general educational goals specified on a national level. A real role of sector councils and a possibility level to influence the real situation depends on the tasks and authority the councils have as well as on financing mechanisms. They may have mainly the advisory role, as it usually is in the Czech Republic, which de facto give them no chance to influence political decisions in the politics of education, not its practical implementing. In some countries, government delegated more authority to sector councils and increased their importance as a tool of social partners to influence education politics.

In Denmark, sector councils are established based on legislation, and there are same numbers of representatives of employers and trade unions. There are about 50 committees and their task is to create specific content of education programmes including their length, structure, goals, way of assessment, proportion between school and practical education etc. in a frame of general framework submitted by the National committee for professional education. Based on developments on labour market, they can propose opening of new education programmes or closing the outdated ones. They are also responsible for granting licenses to education institutions.

In France, there are also sector committees for professional education involving trade unions as well as employers. Following the national multisector agreement from 2003, collective agreements were negotiated that specified bilateral Observatories for job and qualifications (Observatoires Prospectifs des Métiers et des Qualification). Their task was to contribute to forecasting of the qualification needs and to make it possible for the social partners to define education strategy for the individual sectors. Each of 126 observatories also has a bilateral body responsible for financing the professional education in the private sector, which collects company payments and allocates them to educational programmes.

In Latvia, there are 15 expert sector councils, which are responsible for creating standards for professions and curricula, and which provide experts to control the quality in initial professional education.

There are financial funds established on sector principle. In Italy, there are 19 sector funds which finance further education in companies and can also finance apprenticeship programmes.³⁴

In some countries, trade unions get systematically involved in implementing education strategies and politics on a **company level**. It is done particularly through company councils of work, company agreements and activities of trade union organisation members, often directly delegated to education. It shows that on company level, entry of the trade unions into the issues of education is more frequent, if there are company councils / work councils with authority in the area of education. In other cases, it is quite difficult for trade unions to find or create a platform to negotiate the issues.³⁵

For example, in Austria, the legislation specifies extensive rights of company councils in education, particularly the right to information concerning the prepared programmes in further and initial education, and the right to contribute to their implementing into companies. In Germany, company councils are responsible for promoting professional education, establishing educational institutions and programmes and their implementation. They may also request for the company management to provide for the educational needs of employees in the area of further and initial education. In companies with company councils, a significantly greater proportion of former apprentices remain five years after completing apprenticeship, compared to companies that do not have that. The fact means higher return of investment into the apprentice education in companies with active trade unions.³⁵

Many provisions concerning education also appears in company agreements. Great Britain has the so-called learning agreements, which deal also with a role of the individual

³⁴ Bridgford, J. (2017).

³⁵ Kriechel, B. et al. (2012).

parties in education, educational infrastructure and management, activities in the area of identifying educational needs, free time for education, equal access to education, integration with wider organisation principles, background for trade union representatives active in education or similar.

Trade unions in many countries establish **their own institutional structures**, active in various segments of education. With a support of public resources, e.g. British trade union TUC established its own education section Unionlearn³⁶. Its aim is to facilitate education opportunities not only for the trade union members, also search for and publish examples of good practise, support agreements on providing education on company level as well as sector level etc. Activities of the Unionlearn section are assessed as those that highly contribute to social inclusion and to organisation performance in a wide context (reflecting the level of trust, quality of consultations and negotiations or similar.)³⁷

In other countries, trade unions established specific departments, the competence of which includes apprenticeship education (e.g. department of professional preparation or department of the youth). Their job is to strengthen the capacity of organisations to solve the issues. Besides other things, they are involved in monitoring of demand and supply of apprenticeship education, quality of apprenticeship programmes, monitoring of apprentice transition to labour market and supporting their development and certification of their skills. They also represent a voice of employees in the management process and a concept of professional education, and initiate research and analyses in the area of professional education and apprenticeship.

There are also examples when **the role of the individual trade union representatives is institutionalized** in education. E.g. in Great Britain where the right to negotiate about education is not established in collective negotiations, employers are not obliged to provide education, and no strong tradition of company councils exists; in 2002, legislation specified the possibility of trade unions to join the issues of education via trade union learning representatives.

2.3 Examples of foreign systems

In this chapter, we offer two specific examples of trade union participation in creating, modifying and real operation of apprenticeship (secondary professional) education. In both cases, it is a dual type of education in a system which contains the possibilities of professional education, too. German trade unions and public gained much experience with dual education, and we take Germany as a good example of trade union practise aimed at the young (including apprentices). On the contrary to that, Slovakia is at the

³⁶ <https://www.unionlearn.org.uk/>

³⁷ Stuart, M. et al (2010).

beginning of this journey and its example may serve as a model pointing at the strengths and weaknesses of this significant change in education system.

2.3.1 Germany

Dual specialised education in education system

The core of German system of specialised education is a dual system where apprentices enter into contract with their educating employer, and at the same time, they attend theoretical education at a specialised school, while apprentices spend 70 % of time by learning in employer's operation and 30 % time at school³⁸. However, dual education is not the only way to professional qualification; besides dual system, professional education is also provided by specialised schools on a higher secondary level. It is not unusual for young people to first complete one form of professional education and then enter dual education. The curricula and organisational characteristics of all grades of education are in the competence of provincial countries to a great extent, which causes great variability of the education system including the curricular content or length of education in the individual programmes (more detailed information including a basic scheme of education system - see Attachment 2).

Dual form of education is chosen by about a half of population year³⁹, education usually lasts 2-3 years⁴⁰ and is formally open to all people interested, completed compulsory education is enough to enter (9 – 10 years depending on state)^{41,42}. Practically, a person interested has to find an employer who will accept him for education, while the interviewing process equals to the one of a new employee (usually a CV, interview), so some applicants therefore remain without a chance to enter dual education (around 12 % in 2019⁴³). The same applies for businesses which offer positions for dual education: under a half of them state they have a problem to fill in the vacancies offered.

³⁸ See Hippach-Schneider, U., Huismann, A. (2019).

³⁹ For basic description, see for example <https://www.kmk.org/themen/berufliche-schulen/duale-berufsausbildung.html>.

⁴⁰ Although we speak particularly about professional apprenticeship education provided on higher secondary level (corresponds with age 15 - 18, education in the dual system is also possible on tertiary level in Germany, there are more dual programmes prepared in cooperation with universities).

⁴¹ Compulsory education applies for the first 9 to 10 years, starting at the age of 6. Young people are then obliged to learn at school for another 3 years, either until they are 18 or during their professional dual system preparation, at the same time as they learn at their employers (if a student decides for dual system education). For more, see the ReferNet Vocational education and training in Europe – Germany report, available at

https://cumulus.cedefop.europa.eu/files/vetelib/2019/Vocational_Education_Training_Europe_Germany_2018_Cedefop_ReferNet.pdf.

⁴² For more information about German system of education, see Attachment 2, clear scheme and basic description of specialised education is also in a report of CEDEFOP „Spotlight on VET – GERMANY 2020“.

⁴³ See Berufbildungsbericht 2020, str. 54

(https://www.bmbf.de/upload_filestore/pub/Berufbildungsbericht_2020.pdf).

Dual professional education is considered to be an important education tool, which ensures access to professional qualification also to the socially weak, thanks to an easy access to education, practical experience and remuneration paid. The weaknesses of the system have also been discussed, such as insufficient education of educators in companies, low rewards for apprentices, misusing apprentices for work unrelated to their study programme, insufficient care of companies for their apprentice education. A subject of social discussion is also growing academisation⁴⁴ of professional education, which can be seen e.g. in more frequent dual studying (a combination of academic studies and practical education in company that takes place on the tertiary level of education). On the whole, the requirements of digital competences grow on all levels of education, and the problematic remains a challenge.

The role of trade unions in German professional education

On a state and federal countries level, German dual system of professional education counts with active participation of social partners⁴⁵: employers and trade unions take part in the establishment of a content and a form of education, they are active in case of any changes related to changing conditions and labour market requirements. Meetings of the representatives of social partners takes place in the main BIBB council⁴⁶, which is an advisory body of German government in the issues concerning professional education and also institutions that carry out the professional education monitoring via research and analytical work. Committee members include representatives of employers, trade unions, individual federal countries, federal government and representatives of federal job centre. On the federal state level, there are equivalent bodies, similar as on the lowest local level (committees for specialised education usually work as part of chambers)⁴⁷, also trade unions on a company level may intervene, in selection boards, professional boards⁴⁸ etc. That way, trade union representatives become the initiators of changes in the form and content of professional education including curricular changes required.

Concerning education places, trade unions are active in consultancy for those interested (making CV, job interviews: on-line manuals and advice are well available), and on a level of state and federal countries (pressure of trade unions to provide a sufficient number of

⁴⁴ See e.g. a newsletter of conference Berufsbildung 4.0. Steht die berufliche Bildung vor einem Umbruch? Online: <https://www.bibb.de/veroeffentlichungen/de/publication/show/16425>.

⁴⁵ For more about the roles of social partners, see p. 37 of the Refernet document: Vocational education and training in Europe – Germany, dostupné na: https://cumulus.cedefop.europa.eu/files/vetelib/2019/Vocational_Education_Training_Europe_Germany_2018_Cedefop_ReferNet.pdf.

⁴⁶ BIBB = Bundesinstitut für Berufsbildung, www.bibb.de.

⁴⁷ This participative structure, just like the BIBB tasks and legal characteristics of the relationship studying - employer is based in law on specialised education (Berufsbildungsgesetz, BBiG, available at https://www.bmbf.de/upload_filestore/pub/Das_neue_Berufsbildungsgesetz_BBIG.pdf)

⁴⁸ <https://wir-gestalten-berufsbildung.dgb.de/>.

places for apprentices is typical). Trade unions also offer advice for apprentices who have problems with employers, fulfilling obligations on a side of employers or their own ones.

From January 2020, legislation specifies minimum wage for apprentices, which was one of the long-term goals of trade unions.

Examples of trade union activities in specialized education

We offer specific examples of services and communication of German trade unions with apprentices on an example of two significant trade unions. Even though the position and legal status of apprentices in Germany is quite different from the situation in the Czech Republic, we consider the examples to be very inspiring, especially in an activity level and an approach to communication with young people via electronic communication means.

German trade union (DGB – Deutscher Gewerkschaftsbund)⁴⁹

DGB aims to support its young members (up to the age of 27), caring for them is a base for trade union **DGB-Jugend⁵⁰**. It targets particularly areas of education, practical experience of young people and students in companies and employment. Typical topics include: providing job vacancies for the young, enough education places in the dual system, providing good working conditions and adequate financial reward for the young (employees as well as apprentices in dual system). DGB enforces their influence concerning the issues in politics (towards politics of local and state level) as well as businesses. The most recent topics include for example study fees at universities, insufficient number of educational positions in the dual system, advice to apprentices in the non-standard conditions of coronavirus quarantine (e.g. the problem of final exams not having been organised, a way to continue education in an employer's place.), or precarious work (in case of young people, those typically unpaid practise positions).

Web site DGB-Jugend (www.jugend.dgb.de) are, as for content and communication style, greatly adjusted to the youth (division, graphics, colours), one section is specifically for professional education(<https://jugend.dgb.de/ausbildung>) – offers information about problems and situations which apprenticeship students solve (e.g. pregnancy during education, irregularly paid wages, mobbing, sexual harassment, termination). There is also a brochure for students deciding about their future profession available⁵¹, which contains worksheets to decide about a future job, an overview of education types (dual studying, dual education, studying at university, practice, voluntary social year, further education...), and a list of professions (in a form of a clear table with a short description of profession, overview of positives and negatives, prerequisites needed for the

⁴⁹ This trade union joins together eight trade unions representing around 6 million members. For more, see <https://www.dgb.de/uber-uns>.

⁵⁰ For more, see <https://www.dgb.de/uber-uns/dgb-heute/jugend-jugendpolitik>.

⁵¹ To download, go to <https://jugend.dgb.de/ausbildung/++co++241bf1de-5154-11e9-9fd4-525400d8729f>.

profession, length and programme code). The brochure also offers a list of rights and obligations during practical training, advice about how to prepare a CV to search apprenticeship position and employment.

In case of more complex or personal problems, DGB pages offer **personal on-line advice free of charge, directly for apprentices** www.dr-azubi.de⁵², which is free, anonymous and fast, questions and answers are published anonymously on-line for other visitors⁵³.

DGB also organises **regular visits of specialised schools**⁵⁴, where it educates and informs apprentice formally in lessons as well as informally about their rights, trade unions, collective contracts etc. Communication of trade unions with public, not only the youth, takes place actively on the **Youtube DGB channel** (<https://www.youtube.com/user/wwwdgbde>), where - besides videos from various events, interesting toics interviews, introduction of DGB - DGB has livestream (livestream) about current trade union topics.

Trade union of workers in the service of ver.di (Vereinte Dienstleistungsgewerkschaft⁵⁵)

Even this large trade union significantly and specifically presents itself and its services for young people at graphically distinct and thematically structured web site.

Specific examples from the ver.di web site:

- www.ausbildung.info – information portal on education ver.di offers information about the possibilities of education and professional ways incl. professional information and information for the graduates entering practise; there is an information file specifically for apprentices <https://www.ausbildung.info/ausbildung>, which contains information on a choice of area, searching education place, information and instruction manuals to CV and a selection process and a link to advisory Doktor Azubi, rights and obligations, advice on education with a child, and a dictionary mapping some important terms and situations (<https://www.ausbildung.info/ausbildung-a-z>)
- presentation of 10 reasons for membership in trade union (<https://macht-immer-sinn.de/>)
- services for members (<https://verdi-mitgliedservice.de>)
- an offer of on-line meetings for young people about the latest topics (e.g. an online meeting „And what if I catch it now? Corona and my job position" where ver.di offered a discussion about worries as well as advice about how to put one’s opinion forward in front of management and colleagues

⁵² The tile of the advisory service could be translated for example as „Doctor for apprentices“.

⁵³ See a form at https://jugend.dgb.de/ausbildung/beratung/dr-azubi/#answer_form.

⁵⁴ For more, see https://jugend.dgb.de/dgb_jugend/aktionen-und-kampagnen/berufsschultour.

⁵⁵ www.verdi.de, <https://jugend.verdi.de>.

- communication for young people also goes on via social network accounts (e.g. Twitter, many videos on Youtube - <https://www.youtube.com/user/verdijugend11>).

2.3.2 Slovakia

Formation of dual education in Slovakia

After a political break in 1989, apprenticeship education in then Czechoslovakia went through significant changes, which in practise meant a significantly weaker proportion of businesses in specialised education. The system of specialised education, very similar to the so-called dual system of education⁵⁶, was transferred to the school system of professional education that we know today in the Czech Republic.

The act no. 61/2015 Z. z. on specialised education and preparation⁵⁷ amended by the amendment from 2018, Slovakia implements a dual education system for the secondary specialised school students again⁵⁸. The amendment was prepared by employer trade unions, regional governments, Slovak Ministry of Economy and the Centre of work, social affairs and family⁵⁹ together with the Trade union of education and science employees in Slovakia⁶⁰. The system is implemented in the framework of national project with a financial support of EU "Dual education and increasing attractiveness and quality of OVP" lasting to December 2020, the implementor of which is the State Institute of Professional Education⁶¹.

At present, secondary education (with apprenticeship certificate and maturita) can be achieved in the dual education system and outside the system in Slovakia. First students entered dual education on 1. 9. 2015 and their number gradually increases, there are still more students in the school type of secondary specialised education.

⁵⁶ See e.g. <https://www.minedu.sk/kym-v-nemecku-rakusku-a-svajciarsku-sa-dualne-vzdelavanie-podporovalo-u-nas-sa-zlikvidovalo/>.

⁵⁷ See <https://www.minedu.sk/system-dualneho-vzdelavania/>.

⁵⁸ The alternations aimed to make easier entering dual education for schools and employers, particularly cancelling the wage normative shortening to practical education for secondary specialised schools; decreasing the administrative burden when proving competence of employers; a possibility to create a common practical education workplace for company consortium; establishment of the institute of company school and main instructor. see e.g. the Report of ensuring quality of socialized education and preparation in Slovakia 2020 available at http://okvalite.sk/wp-content/uploads/2020/05/Správa-EQAVET-2020-final_online-HD-1.pdf.

⁵⁹ ÚPSVR is a state administration body, which manages state administration in the area of social affairs and employment affairs. It controls 46 job centres, social affairs and family centres. For more, see www.upsvr.gov.sk.

⁶⁰ See <https://www.minedu.sk/parlament-schvalil-efektivnejsie-dualne-vzdelavanie/>.

⁶¹ For more, see the web site of the project and also central information about dual education: www.dualnysystem.sk.

In the dual system⁶², a secondary school enters into an agreement of dual education with a company. The company then takes over the responsibility as well as the costs of student's education at its place of work and makes it possible for him to go to school at the same time. At the same time, a student, respectively his legal representative under the law, and a company enter into an agreement of education. The agreement contains details of practical education at employer's place, including the specification of rights and obligations of a student as well as employer and conditions of agreement termination.

Dual education means a possibility for a student to have partial financial security. It was compulsory to give him remuneration for productive work for his employer in the minimum amount of 50% of minimum wage, non-compulsory company scholarship in the amount of max. four times the living minimum. In case of professions not sufficient on labour market, pupils may also get the so-called motivation scholarship. Financial reward is also specified in the learning agreement concluded between a pupil and a business.

Role of trade unions in specialised education in Slovakia

In the phase of establishing the whole system and the conditions of its functioning, the trade unions have been present in the Government Council of Slovakia for professional education and preparation⁶³, which processes other changes needed as well as the comments regarding specialised education. There are work groups established for individual programmes. There are representatives of trade unions besides those from ministries, regions and employer organisations in majority of them. Employee interests are most frequently represented by the Trade union of Educational and Scientific Workers in Slovakia, in some cases by professional chambers (e.g. Slovak chamber of medical-technical workers)⁶⁴. For employees, it is the school system workers and their interests that are represented most frequently.

It is generally the same in the EU countries, its is also confirmed in case of Slovakia that employers are more involved in specialised education and a role of trade unions is weaker. Some prevalence of the employer view is also clear from the history of dual education implementation, where particularly employers were involved intensively. Motivation was, into some extent, to provide adequate amount of qualified workforce, and involved not only dual education but also implementing job preparation to primary schools, monitoring of the needs of labour market and verifying quality and assessment of school graduates. Although introduction of dual education in Slovakia brought a

⁶² See more on <https://www.minedu.sk/zakladne-principy-systemu-dualneho-vzdelavania/>.

⁶³ <http://radavladyo vp.sk>.

⁶⁴ An important expert and coordination role in Slovak system of specialised education is played by ŠIOV - Štátny inštitút odborného vzdelávania (www.siov.sk).

stronger role of employers in professional education, compared to Germany, students are still legislatively connected to the school system more than to companies⁶⁵.

Slovak system of dual education is still in its initial phase, and its development may take more directions. At this moment, the interests of apprentices are not represented by any actor significantly, though it needs to be said the system was also implemented due to solving the problem of unemployment, and regional and state institutions monitor the numbers of apprentices in apprenticeship programmes to correspond the needs of labour market. Compared to German system, a missing thing is particularly direct communication with apprentices and an offer of services for their better orientation in the system and managing education.

⁶⁵ Source: interview with an expert on Slovak specialised education.

3. General terms and conditions of joining trade unions in the area of professional education

Main general conditions required for good quality participation of trade unions in the politics of specialised education has been evaluated e.g. by. ETF based on a comparative study in selected countries⁶⁶. A key condition is **simple willingness of government** to cooperate deeper with trade union organisations in the area of education. A strong tool is an implementation of the principle into legislation, which may give trade unions some mandate in the area of specialised education in their partnership with employers and state. Achieving this point may mean important transformation of an otherwise consultancy role of trade unions in the processes, and it may be a beginning of an active role in creating politics in education.

It is also important for trade unions to be a **functional partner of the government** and relevant decision-making bodies in education. To do that, the existing structures for cooperation and consultations should be used to the maximum. Willingness and functional capacity on a side of trade unions is a basic condition for having beneficial and equal partnership with the state in education.

Trade unions should **organise activities** to get involved in the processes that influence professional education. Carrying out the systematic activities may require new establishment or reorganisation of own internal structure. An example of that may be Croatia where all organisations of social partners involved in the decision making processes concerning professional education have functions or even departments for that specific purpose, which plan and implement the initiatives.

A prerequisite of successful social dialogue involves political willingness to introduce **environment opened to a dialogue**. Without that condition, there is a risk that social dialogue will become a one-way monologue on a side of government. Particularly in the countries with not a long tradition of tripartite negotiations, it often happens that government institutions fail to understand why it is essential to listen to social partners and what is the importance of their participation. A level of acceptance of the fact the social partners can carry out the reforms and significant steps to improve the system can them be quite low. On the other hand, in countries with a long tradition of social negotiations, e.g. western Europe, governments have experience that social partners can adopt key decisions on a system level independently. Social partners are given authority in decision making regarding important issues. On the other hand, if there is lower quality of state management in the country, lower transparency and respect for law, effectivity and meaning of a social dialogue also goes down in all areas.

⁶⁶ Source: ETF (2012).

To achieve a successful social dialogue, we also need good quality institutions and actors who get involved practically and **including all relevant actors into the dialogue**. Particularly specialised education needs to connect schools and companies effectively (respectively also specific workplaces) as well as regional and local government, local communities and relevant sectors of economy, via their representatives or associations.

Involvement and ownership of the problem is generally an indispensable condition of a successful social dialogue management. If trade unions do not perceive themselves as key actors in the area, commencing a social dialogue itself will not lead to any significant changes. In some countries like Ukraine or the Mediterranean, negotiating capacity of trade unions in the sphere falls behind significantly beyond the capacity of employers. We can see a disproportion here, when employer organisations are very active in the area of school reforms, they propose legislative changes, participate in the development of education standards, organise seminars and conferences about those topics etc., whereas trade unions practically do not work at all in the field.

A level of social dialogue in education and the participation of trade unions greatly depends on **the skills and resources of the individual participants** in the processes. They must realize the importance of the competences for education and should have deep understanding of the specialized education problematics and its relation to labour market. General capacity of institutions that participate in negotiations always depends on an interest and capacity of selected management, but also other staff. To increase the effectiveness, organisation contributes significantly when it obtains and places competent individuals into key positions, who are keen on education. Strong partnerships with other organisations and subjects also need to be created, where it would be possible to form and further develop relevant concepts and strategies.

An important prerequisite to strengthen possible roles of trade unions in a social dialogue in professional education is to understand that good quality, effective and balanced education system is always a **collective goal**. Individual employers are not able to fulfil their educational needs effectively on their own. Solving the issues on higher level is therefore a great benefit and practically the only approach possible. Only on that level, it is possible to balance public interest in education and the interests of the individual employers at the same time.

4. Opportunities and threats of participation of trade unions in the Czech Rep. in the area of specialized education

4.1 Basic measures

4.1.1 Situation in the Czech Republic

In the Czech Republic, the specialised education programmes have a long tradition and they are attended more than in the majority of European countries (about three quarters of Czech children enter specialised programmes, whereas it is only a half on average in EU-27⁶⁷). That alone gives, in a context of educational system, a relative advantage to trade union organisations working in the Czech Republic. On the other hand, Czech professional education cannot be directly compared to that of other countries, as the key responsibility and the main base of apprentice education remains in hands of schools here, and consequently, a position of an apprentice is significantly different and the role of companies is limited.

The topic of education as such is not new for trade unions in the Czech Republic and individual trade unions indicate it in their statuses and solve it in some practical activities. It usually involves professional development of employees, particularly training and courses provided to office-holders or regular members of trade unions. The work of trade unions also involves activities directed at children and youth in general, in a form of supporting family recreation, camps or similar.

As a part of professional education, trade unions also solve the transfer of apprentices to labour market to some extent, starting to work and conditions at work (e.g. discussions of pupils organised by KOVO), get involved in promotion events to increase the attractiveness of specialised education (e.g. competition Golden Czech hands announced by ČMKOS), etc.

On the system level, trade unions participate in the multiresort commenting legislative proposals in education (e.g. the education act amendment, a reform of financing regional education, Long-term goal of education and development of educational system of CZ 2019-2023, Strategy 2030+ - see chapter 4.1.2). It is apparent from the available documents that particularly ČMKOS strives to comment the reform processes in education, such as master examination, revision of curricular documents, reforms concerning ending secondary education etc. In reality, nevertheless, considering limited capacity, e.g. when creating curricular documents, trade unions are usually not present so far.

⁶⁷ See e.g., Cedefop (2020).

In the Czech Republic, there are sector committees, a task of which is to monitor trends and changes on labour market and to communicate information about the needs of the sectors in the area of human resources. Based on the activity and professional knowledge of its own members, they then propose a structure of qualifications, which are included in the National qualification scheme, prepare its content and assessment standards. There have been a few sector agreements concluded, which define the needs of labour market in the sectors and propose tools to fulfil the needs as much as possible, and they also include quite specific steps (such as proposals of some legislative changes). Sector committees have been determined as the cooperatives of professionals in specific sector from a start, and they also count on the participation of some representatives of employers and employees. Position of trade union organisations in the bodies is rather limited. It is likely for some members of sector councils, who were nominated from a title of their professional expertise, to also be members of trade union organisations in their companies, nevertheless, trade unions practically do not appear in sector councils as a visible subject. Also, the following sector agreements are usually signed by the representatives of the state (ministries), trade union bodies (e.g. former National Institute of Education) and employers (Economic Chamber, Industrial union), respectively educational institutions or regional administration (regions).

The most important initiatives of trade unions regarding system questions of education are implemented on the highest level of tripartite negotiations. However, education does not figure as a separate and individual topic with its own structure and strategy here, but rather as a part of other topics. A classical work area of especially educational trade unions are the issues of employees in education, particularly their salaries or other issues concerning their work conditions and situation. More specific issue in education, like school system, content of education, its form, conditions or a situation of apprentices and other secondary school students usually isn't in the centre of attention.

It is apparent from the materials available that not even the higher level agreements contain specific provisions for apprenticeship or general specialised education. Direct involvement of trade unions in school professional education including the apprenticeship one is quite rare, and falls into the category of specific cooperation in the individual companies and their company schools. That involves activities „from down below“, not any centrally roofed strategic influence. It has to be stated that even though apprentices and other secondary school students can theoretically become members of trade union organisations, in practise, it happens minimally.

An important example of the initiatives on the company trade union level includes Trade unions of Škoda Auto and their long-term cooperation with Specialised secondary apprenticeship engineering centre Škoda Auto, which is also based on negotiating benefits for students, including e.g. permanent contracts for successful graduates, better school equipment or adaptation camps for pupils in a specialised leisure centre. Trade

union KOVO MB also took part in preparation of a complex Volkswagen Education Charter, which also includes a dual education system, considered to be a base for lifelong education.⁶⁸ However, it needs to be said that in this case, it is quite a specific company in an extraordinary position in Czech economy. In many other cases, cooperation of trade unions, companies and specialized schools works to a benefit of all parties, usually based on personal initiative of the individuals involved.

On an international level, Czech trade union representatives figure in various European forums and committees related to professional education (e.g. a representative of a trade union is always a member of the Control Committee Cedefop - European centre for the development of professional education, which is organised on the tripartite basis).

In the Czech Republic, the system role of trade unions in professional education is therefore drafted in some way, however, trade unions do not belong to the significant movers in the area in practise. Recently, however, professional education gets - together with education as such - to a centre of attention of all central bodies including trade unions. It happens particularly in the context of increasing demands of Industry 4.0, acute shortage of good quality workforce, in a combination with decreasing quality of graduates, particularly from specialised technical and apprenticeship education. That development underlines education, good quality initial one or continual lifelong on, as a basic prerequisite of the ability to react to new and fast developments of technical progress demands and maintaining the competitiveness of the Czech Republic.

Supranational reform efforts of the last years reflect the trends. There are requirements of employers to implement dual system elements (a pilot phase of which takes place at some schools in the Moravian-Silesian region). There was also pilot assessment of the possibility of introducing the master examination as a chance to gain a higher level of professional qualification than the apprenticeship certificate, which would confirm high craft qualities of its holder. A generally accepted necessity to revise the frame educational programmes significantly, particularly for professional education in order to better reflect the technological development and new demands of labour market.

4.1.2 Synergy with national politics

Trade unions should look for common ground and opportunities to apply own priorities, particularly in terms of national strategic goals in education. It is in the interest of trade unions to find capacities and ways how to join in the process of forming goals and their implementing to firstly strengthen the role in that area, increase their prestige of a competent player who brings effective inputs, and secondly to support the processes according their own strategies and trade union priorities. It is therefore good to monitor

⁶⁸ Source: Odbory KOVO MB (8.2.2016), Odbory KOVO MB (24.9.2015).

current intentions and plans of educational politics and to deepen the participation of trade unions in their negotiation. Main aims of education politics currently form particularly two strategic documents, the Long-term intention for education and development of Czech education system 2019-2023⁶⁹ and the Strategy of Czech education politics until 2030+⁷⁰ (Strategy 2030+). The Long-term intention is a rather short-term document, which should be currently fulfilled. Strategy 2030+ is a key roof document that defines a vision for education for next decade and has been created and discussed in 2019-2020.

The long-term plan for education and development of Czech education system 2019-2023

A long term aim contains three key cross-cutting objectives. The first one is an increase of salaries for pedagogic workers, which is in line with the long-term interests of trade unions. The second strategic objective is curricula revision. New possibilities open here for trade union inputs, in relation to their efforts to join in the discussions in the sphere more, and where possible also in the structures the goal of which is to participate in preparing the curricular documents content. In the Czech Republic, it is mainly sector councils, which are organised associations of professionals independent on employers which discuss the content of qualifications defined in the National system of qualifications, and trade unions of former National institute for education which solved the content of school frame education programmes⁷¹. The third strategic goal of the Long-term plan is to improve management of school and school institutions via more effective cooperation of the centre and a middle part of management, therefore regional authorities.

Strategy 2030+

The document, so far (July 2020) in a stage of a proposal submitted for professional discussion, defines priorities for the whole area of education till 2030 and should reflect not only important technological challenges which our society will deal with in next years, but also complex and unexpected changes which can be foreseen.

As a basic general strategy, it puts gaining competences needed for working, civil and personal life on the first place, which brings not only the innovation of the education content but also the innovation of education forms and learning process in the context of fast development of society. We expect reduction of the learning volume balanced by the

⁶⁹ MŠMT (2019).

⁷⁰ MŠMT (2020b).

⁷¹ Trade unions worked at the National Institute for Education, which has been fused with the National Institute of Further Education since 2020, thanks to which, present National Pedagogical Institute has been formed. In the new arrangement, trade unions have not met yet, but their involvement is expected in relation to the planned revision of the framework education programmes.

emphasis on understanding the connections, strengthening functional literacy and practical application of learned theory, particularly in the context of digital technologies. In the close connection with the above, essential thing is consider to be increased support of teachers and implementing the forms of pupil assessment that would assess more the competences (skills, results of education), not only marking the skills of grasping some amount of information. Other issues mentioned include aiming to greater connection of formal and informal education and equal access to education with the maximum use of each student's potential.

The priorities open many possibilities for trade union organisations to create and strengthen own topics in the synergy of national politics topics. Specific goals where it is relevant to consider the synergy include particularly the following:

As a part of strategic line no. 1 **Change of content, ways and evaluation of education** , the revision **of** the education programmes is assumed. Besides the reduction of the education content, we also expect stronger access based on competencies, particularly the key ones, including the competence of lifelong learning. The ability of students to use their skills in practise, in various contexts and conditions will be supported more. The is also greater individualisation of education, greater use of didactical processes to allow education of heterogenous collectives, greater integration of digital technologies into lessons etc.

Employers are perceived as a stabile part of the system which should have a say concerning the requirements regarding specialized education graduates' profiles. However, it is illogical system wise for the voice of employers not to be joined by the voice of trade unions too, which could have - considering the emphasis of complex developments (future ones) of employees, their high employability and decreasing the risks related to a position on labour market - a wider grasp of the skills required. Trade unions should look for ways to enter into the sphere of creating the education content and the forms of education (see also chapter 4.2.2.)

Strategy 2030+ supports the implementation of innovations in education. It also includes support of sharing and cooperation including personal capacities, background and equipment. This point is in the synergy with any prospective greater involvement of trade unions, as such successful involvement may be an inspiring example of innovation in education.

Strategy 2030+ also includes the support of civil education including the ability to communicate with others in a common or a public interest, development of critical thinking, development of argumentative skills and constructive participation in local activities and decision making on all levels, from local and state one to European and international one. This is an area where students could also get an insight into the area of industrial relationships, collective negotiations and in general, into the historical as well

as present role of trade unions. It would be good to strive to include the topics into lessons in the specialised schools which are connected to companies and segments of economy with strong trade union involvement, but not necessarily just there.

For trade unions, an interesting area could also be the goal to achieve safe environment at schools including higher participation and autonomy of the students themselves. This can be done e.g. in a form of student parliaments and co-organising various school events or similar. We can also include improving climate at schools, increasing the motivation of students, preventing negative aspects and stress connected with attending school. Trade union organisations may act here as a defender of rights of students (not only) from specialised schools and try to support their higher and more responsible involvement in the process of education.

In the section Strategy, which is dedicated to **professional education**, the aim is also to reassess narrow specialisations, cancelling the old ones, support of the intersector elements for related programmes, vertical and horizontal transmission based on accepting previous education by a director etc. Greater attention will be paid to topics connected with digitalization, automatization and robotization and programmes with high added value. Modularization of curriculum and more lessons organised in cooperation with employers are expected. The document states that „requirements to achieve specific education levels will be reassessed, e.g. whether the education programme needs to be necessarily ended by maturita exam, if - from the point of issuing trade licence - having just a requalification course or a professional qualification according to NSK is adequate“, it also assumes „solving situations when a pupil successfully completes education in a 3- or 4-year programme but fails his final examination“. Here, trade unions could be involved in the area of control and supervision of relevance of any changes carried out and their quality and contribution to all parties, including those in more difficult position to exercise their interests, such as the students alone.

There is also support of cooperation with employers, resorts and other partners directly declared in this section. Its part will also be the support of further education elements, creating a standard of quality in companies and schoolwork places where practical education takes place, further interconnection of professionals from practise to education and supporting teachers in companies. It is desirable for trade unions to work even more intensively, as they open to the possibility of getting a stabile element role of the model here. Their role may lie in bringing the reflexion of developments on labour market and/or in quality control of practical education provided in companies. Also concluding agreements of cooperation between employers and schools are expected, and a system interconnection including relevant resorts and regions into supporting relevant schools and programmes will be initiated. For the steps, creating an action plan approved by the government is counted on. Trade unions should closely monitor the steps and continuously strive to be involved on central level and on the level of the individual trade

unions according to relation to the education programmes, respectively to recommend to individual company organisations to take part in preparation and implementation of the agreements of cooperation between companies and schools.

Some possibilities to extend the participation of trade unions are included in the chapter Strategy, dedicated to **informal and lifelong education**. There is also development of a social dialogue mentioned within the support of further education. Another topic is processed - interconnecting various forms of education – incl. the support of schools in cooperation with various organisations and implementing the rules that allow to consider the knowledge and skills gained informally in a formal education of a student. The role of trade unions in the area may be strengthened, as the centre of their work is in the companies, they have practical experience with providing informal education (mainly to members) and therefore have prerequisites to become a connecting article between the initial professional education and further education of employees, and this way to strive to practically fulfil the ideas of lifelong education.

More specifically, it could be considered whether it would be possible for trade union organisations to provide extracurricular courses for the specialised schools students (e.g., on employee rights, new risks connected with modern technologies coming to work, role of trade unions in the system, relationships at work or some specific topics related to practical implementation of some professional skill) and negotiate their accepting by schools as a part of some subject or student portfolios.

As a part of strategical line 2 **Equal access to good quality education**, there are also common areas where trade unions are generally involved. It will involve covering each student's potential and increasing the quality of the second grade of primary schools including limiting any early specification of education. Supporting the quality increase of apprenticeship education is in close synergy with the objective, as there is a potential to have students who are much better prepared to enter the apprenticeship education. Trade unions should strive for the apprenticeship programmes and secondary specialised schools to be able to use the potential to the maximum and to return prestige to many apprenticeship programmes, connected with preparation of demanded and good quality individuals on labour market.

Another significant section of the Strategy concerning the work of trade unions is strategic line 3 **Supporting pedagogical workers**. The strategy aims to create, besides other things, a competence profile of a teacher, reform the concept of further education of pedagogical workers, to increase the attractiveness of the teacher profession and to motivate new adepts, to support new teachers (a system of being introduced into the profession should be created). Those are areas in a competence of complex care for employees in education, and involvement of school trade unions should be on the first place. An interesting innovation the Strategy assumes is, in this sense, strengthening of teachers' well-being

and reduction of stress thanks to an introduction of systematic support of managing the load.

As a part of strategic line 4 **Increasing professional capacity, trust and cooperation**, it is proposed to introduce a middle support article, which should provide a support and coordination (not decision-making) role on middle level and help the schools from excessive administration. There is a possibility here to search whether and how trade unions could cooperate with this article, in connection with its assumed closer specification and institutional look in future.

Strategy 2030+ is being finished during 2020 using public discussions, with participation of trade union representatives, too (ČMOS PŠ). The document contains a schedule of other steps including a specified time period for consultations with other parties and the public 11/2020–01/2021. Finishing the strategy and a proposal of more specific implementation processes ⁷²should continue to be in the centre of attention of those trade unions that attempt for the system participation in specialised education. Joining a public discussion and where relevant, also the following implementation van be a significant step how to highlight and strengthen the role of trade unions.

4.2 Opportunities

4.2.1 General/extracurricular challenges

To have education as one of the priorities

A basic pre-requisite of successful involvement of trade unions in specialised education is definitely a "loud" declaration of the area as one of the priorities for their own work in society. So far, there is tendency to act in connection to the long-term issues, which the trade union organisations are experienced at, such as wages, employment relationships conditions, redundancy threat or similar. Issues related to education are not always included, particularly when it concerns initial education. It is understandable that a frequent reason of the fact is insufficient personal and time capacity and impossibility to cover an unlimited spectrum of topics.

Identification of wider social interests, system and strategic approach

To begin the systematic participation in the development of apprenticeship education, trade unions should analyse the situation, assess their options, and based on wide internal and external consultations, they should select some key strategic ways which add to one another, and which they will strive to fulfil. It is essential to put the activities into the context of wider social interests and reflect the areas where the interests of trade unions

⁷² By autumn 2020, the so-called implementing cards of provisions and a set of indicators for monitoring purpose should be created.

meet the interests of employers, state as well as whole society. The interests are similar in many dimensions on general level - quality, satisfied and productive workforce, social peace and prosperity. System support of apprenticeship education does not lie only in supporting this specific segment but the whole system, increasing its quality. Supporting the apprenticeship education should also deal with what is before and after this grade, including the interconnection with lifelong education.

Unification of the process - compactness and conception of trade union activities

Activities and priorities in education, if they should have desirable effect, should be compact and centrally roofed. It is desirable to unify the process and activities of the individual unions and organisations, not to scatter forces and not to proceed in a way that would result in competing processes. Information flows should be interconnected horizontally, among trade union organisations, and vertically, inside members base in the individual organisations, unions and centrally.

Inspiration abroad

As shown in previous chapters, particularly many western countries have trade unions as very strong players, not only in tripartite negotiations concerning employee issues but also in the area of control and development of professional education. Although it is clear the profiling of the areas and the strength of trade unions is a result of complex long-term processes and it's not easy to bring it into a country with a different context and history, many activities and approaches from abroad could be used as an inspiration. It can be recommended to trade unions to study foreign materials intensively, to connect and strengthen international communication and consultations including study visits and exchanges aimed at the role of trade unions in professional education.

Proactive approach – „to enter an open door“

Due to acute shortage of qualified workforce, employers begin, especially in industry, to be more active and involved in the area of professional education. There are arguments supporting closer interconnection of the company sector with education including the plans to implement the dual education elements (see chapter 4.1.2). Now is a good time to increase the involvement of trade unions. Many projects and initiatives start, aiming to greater interconnection, dialogue of the parties involved and to form some proposals for ongoing reforms of professional education. Generally, trade unions should actively step into the dialogue on local, regional but particularly central level. It is important not to stay in a passive (reactive) role, when only comments to submitted materials are handed over. It is important to actively communicate with schools (not only via school trade unions), to initiate meetings, to ask where trade unions can help, where and how it would be suitable to lob for the interests of schools, teachers and students.

Bringing own new topics

Trade unions should systematically create capacities to allow them to form their own topics in education, respectively find new and at the same time relevant aspects of topics included in social discussion, for which a specific view of trade unions covering the interests of employees from "down below" could help. Industry 4.0 is, in this context, a huge opportunity, as it opens many areas which have not been systematically covered yet. An ideal situation is trade unions use their active members to get into the role of the initiators of changes and the facilitators of positive development, by which they would significantly increase their potential influence.

Support of analytical and research activities - acting based on knowledge

To reach a stronger position, it's important to carry out analytical and research activities that would bring practical, conceptually valuable and verified information. Creating knowledge base and expertise will help build the respect of trade unions in education, and will be a base for specific activities and forming strategies. Otherwise, there is a risk for the society 4.0 - the voice of trade unions could be too weak and unheard. It may concern e.g. analyses of the needs of labour market and adequate possibilities of professional education or a research aiming to understand young people, reflect their legitimate interests connected with education and future work. Trade union activities should build on good understanding of the threats and opportunities, which future trends will bring in future. It is therefore important to support analytical activities striving for foresighting.

Increasing participation of trade unions in education process

It can be recommended to trade unions to get more involved directly in own education process, which may include e.g. a higher interest in education quality or searching opportunities to join in lessons, particularly practical education. System support should also go to the process when trade union professionals join in the professional education using the existing possibilities prescribed by legislation. They can be useful for example on positions of the so-called professionals from practise, defined by the Act 563/2004 Sb. on pedagogical workers. Legislatively, a representative from practise is also present during final exams of apprenticeship programmes. In the P-KAP (2016-2017) project, regions prepared Regional action plans of education development (KAP), which also include support of interconnecting the experts from practise in lessons and cooperation with social partners.⁷³

The question is also a possibility of trade union representatives participating in the lessons related to the cross-cut topic Human and the world of work, respectively their participation in excursion of students at Job Centres, which are organised as a part of their preparation to enter the world of work. Trade union organisations could also organise

⁷³ Lichtenberková, K., Chalušdoc, P., Dostál, J. (2019).

excursions for students or teachers in companies, which could become a part of educational plans. The activities should not be limited only to company or cooperating schools but should extend wider within the trade unions to all segments of economy or more schools in the regions.

Trade unions could also become informal mentors of apprentices in companies. To meet with them, help them get to know new environment, to explain company context and be available in case of any problems. This role exists abroad (e.g. Denmark, the Netherlands) and trade unions are sometimes the first representatives of companies the apprentices meet.

Systematic involvement of the topic of education into collective negotiation

Some existing collective agreements of higher degree contain provisions concerning employee education, however, it is usually general formulations when e.g. education of employees is defined as one of the topics included in negotiations with trade unions. Provisions that would bind contractual parties to participate in the initial professional education are not common. It is undesirable to systematically add education among the dominant topics as a whole, and bring new topics, such as initial professional education. The need will become even more intense, if the dual system elements are implemented into professional education, as proposed in the Strategy of education 2030+ (see chapter 4.1.2).

Collective agreements can for example specify an obligation of the parties to actively cooperate in the development of sector relevant professional education on the national and regional levels, to modify the terms of education for pupils who do practical education in companies or those who should start in companies after graduation.

It is essential to widen the company understanding of education as a tool to increase own productivity, and focus on a more general approach, which wants education as a benefit that strengthens the position of a worker on labour market. There are collective agreements abroad which contain provisions about a right of an employee to an increase of his employability⁷⁴, which obliges the company to care for professional development of employee/student not only concerning the benefits for the company but also personal and professional development of an individual, which will increase his chances to be successful in future.

Creating communication platforms to exchange opinions and experience

A very beneficial activity that can be done without changing a system can be foundation of local, regional, branch or central platforms for communication, dialogue and sharing

⁷⁴ Bridgford, J. (2017).

information between school environment and trade unions. Platforms can have informal character, too, and should be opened to many different actors (employers, regional administration, state etc., possibly to also invite student or parent organisations). Platforms could also be a source of information for e.g. advisory institutions like job centres, school advisory centres or similar. Respectively, platforms could propose or comment to modular educational blocks in connection with the current needs of labour market in a region.

Promoting specialized education

An opportunity to strengthen the active role of trade union organisations and at the same time to increase the potential to bring new members is in systematic work in the area of promoting professional education in general. It may also be e.g. promoting the more desired technical and industrial programmes on labour market; however, they are less popular among students and parents. A reason for lower popularity is often a wrong idea about the character of the programmes. They are considered "dirty" and as badly paid work "at the belt"⁷⁵, although the idea often does not correspond with reality. It is important to strive for a gradual change of the opinion and for a selection of a future job to reflect the reality of Czech labour market. Technical fields need to be introduced, particularly the so-called hi-tech ones and those overlap to ICT as the ones with the best perspective to be used on labour market, to get good wages and lifelong security.

Promotion can be done in many forms from personal meetings, public discussions, publishing printed materials to the necessary presence on the internet and social networks. For the trade unions to successfully work to make the professional education more attractive, it is important for the trade union members to be aware of its qualities themselves and to understand the relation to labour market. To fulfil the purpose, excursions of trade union representatives may be organised in specialised schools as well as other meetings of schools and trade unions in order to come closer together and to interconnect the two worlds.

Increasing of awareness about trade unions among young people

It can be assumed that there is not enough information about apprenticeship programmes nowadays. Education cross-cutting topic Human and the world of work where students should, besides other things, learn some basic issues related to employment does not include information about trade unions and their role or importance during tripartite negotiation etc. One of the possible initiatives of trade unions on the central level may be seeking systematic implementation of the issues into the compulsory content of secondary school education.

⁷⁵ See e.g. Trexima (2015).

Besides that, there should be systematic implementation of issues where the representatives of trade unions would meet the secondary school students and apprentices, perhaps also last-year primary school students, when many pupils choose their professional education way. The initiative of trade unions in the area could definitely be welcome by schools, as they seek greater interconnection with the world of work themselves. On the other hand, in some cases, certain mental barrier needs to be overcome when trade unions as such are perceived as a political topic and therefore unsuitable for school environment.

Pupils should understand what trade unions are, what is the importance of their existence or membership in trade unions for them. It is important for members of trade unions and the whole concept of the programmes to speak to young people using "their language", considering the content as well as form. There should be topics the pupils will understand, and they will see them as important issues - personally, for their education and future work. It is generally true that young people, particularly the apprenticeship programme graduates, who come to labour market at the age of 17-18, are not well prepared for the basic requirements of working life, and they often have wrong ideas, unrealistic expectations or just the opposite - they worry. Trade unions could be a player here who offers a hand, safe place, advice and guidance through the world of work, employment issues or specifics of a certain company or sector a student is connected to, respectively directly his first employment.

Considering the form, it would be useful to use modern technologies and social networks besides personal meetings, which are often the first communication channel for young people. To is for example possible to set up web sites of trade union organisations on social networks, specifically directed at younger age groups, create web presentations and multimedia content (e.g. videos) with an aim to solve the existing conditions of young people who prepare for employment.

In western countries (e.g., Great Britain or the Netherlands), there are special programmes where young people entering trade unions have either free membership or a better price for it for some time, and at the same time, many trade union services are targeted at them, incl. legal advice or vouchers. In the Czech Republic, trade unions also provide their members various minor or bigger benefits from advice, recreation contributions, culture, education or Christmas collections. To get some attention of the young, however, we recommend some modernization and implementing benefits that will be understandable and attractive for young people, close to them and aimed at their current situation and interests.

Support of good practise spreading

On the level of the individual schools and companies, there are many examples of interesting and good quality cooperation in the Czech Republic, and in some cases, trade

union members are involved in the activities. It involves more the individual examples based on active individuals and on specific local situation. There is no monitoring that would systematically create any overview of what is currently happening. Trade unions should use those individual practises as examples for other people and seek to make them more common. It's possible to address members base, collect information and make printed materials summarizing the examples, respectively collect and publish them on web sites or organise workshops and seminars for members where those examples would be shared.

Using existing capacities and resources

A big advantage is the existing capacity within trade union organisations. Trade unions are experienced in training and lecturing for their own office holders and other members, they possess certain skills in this area as well as suitable premises. The capacity can be used as a base or to extend the activities beyond education of members.

On the other hand, the often mentioned problem is limited personnel capacity of trade unions, especially concerning the specifically defined areas like initial professional education. It is necessary to look for new and perspective capacity for this area. Trade unions could get funded professionals for the cooperation - not only from their own capacities but also to connect with the best personalities from the fields and to cooperate with them to support professional education using different forms, from direct participation in lessons, discussions, to cooperation to form priorities of professional organisations in the area of education content including their application (e.g. by participating in sector committees or cooperation with schools when creating school education programmes etc.)

The EU declares the support of forming educated and competent trade unions and an interest in the process in different areas of education to be carried out in the cooperation and coordination of all partners involved. There is the support of project activities including the cooperation of more actors from both sides of a social dialogue (trade unions + employers). Involvement in the programmes in a form of presenting projects or partnerships need to be strengthened and use the possibilities to strengthen the influence and widening the spectrum of activities of trade union organisations in specialised education.

New methods of trade union work made possible thanks to modern technologies

4 Industrial revolution does not bring only new topics but also opens a large amount of new challenges and opportunities in the area of trade union work forms. Therefore, the question is, how the Trade unions 4.0 should look like? They should certainly strive to fully grasp the new forms of communication and presentation, higher use of internet and social networks, especially for initiatives concerning young people. Trade union initiatives

should flexibly and creatively react to new situations, new topics concerning the society as a whole or appearing in the individual fields and sectors - e.g. new requirements of employers for specific skills, forms of work etc., and for that purpose, they should monitor modern media and social networks.

It can also involve strengthening of the trade union position in those segments of economy which have not been so strong, such as in traditional industrial branches. It could therefore involve services, ICT or high-tech industry, which also show intensive development in relation to 4th industrial revolution, which opens the mentioned and still unresolved issues connected with the necessity of flexibilization of education and new risks of working life.

4.2.2 Reflecting changes on labour market

Identification of endangered sectors and segments of work

A frequent topic of trade unions, not only in the Czech Republic, is a threat for job positions due to digitalization and automatization. It is apparent from the analyses in the Czech Republic that rather than reducing the need of workforce, it will go through restructuralisation. We will probably not need less employees, but they will be required in different spheres, their positions will change and they will need new skills. And this is the area for the trade unions to step up. We will have to identify which professions and education programmes are at risk of disappearance, which related perspective branches and professions are best for transferring the employees, and particularly, what needs to be added to their skills. The role of trade unions can then lie, on the system level, in putting education forward in the areas for employees at risk, and in professional education, in systematic implementation of education innovation considering modernization and coming closer to the practical needs in the future, including the support of introducing programmes for the workers under threat.

Special support should go to the transformation of the content of education, the usefulness of which will decrease, into the more required content. In spite of the apparent technological development of Czech industry in a direction corresponding to the 4th industrial revolution, pressure of some companies still aims to fulfil their current needs, which correspond to the ongoing existing approach with an emphasis on manual skills and traditional technologies. Trade union initiatives should, in that context, seek not only to conserve the existing state but to look into the future and strive for the professional preparation to mean a complex preparation of a modern educated man, who will easily find his use in any company in the future, as he will be able to adjust to the requirements of Industry 4.0.

System interconnection of initial and further education

Trade unions could become a player who actively seeks to interconnect the initial and further education. In many countries, the line between the initial and further education is not as clear as in the Czech Republic, and it is common for the young adults to combine working lives with professional education in various ways. For example, after a few years in practise, they return to school to complete or increase their qualification in the already started direction, which is perceived as natural and education systems are adjusted to the directions. Educational programmes on higher than secondary level are common⁷⁶, which prepare for a specific profession and are closely connected to the immediate demand of labour marker⁷⁷. It is important to seek higher flexibility of educational lines in the Czech Republic and greater openness of education system to the educational needs of the adults.

On the level of company practical work in the Czech Republic, the need of lifelong education of employees is apparent, and the majority of especially the larger companies solve the need on different levels of continuity. There is a possibility for the trade unions to systematically enter the process and strive to achieve greater use of business capacities and premises dedicated to practical education of pupils, for the lifelong education of employees.

Education as a prevention of being under threat

It's possible to put pressure on creating education programmes and using the existing education capacities (schools and businesses) for employees who would be otherwise at risk of being made redundant, or they are forced to accept shorter working hours (which can be the issue now due to coronavirus crisis). Free time could be used for getting better qualification in companies to do practical education.

That may involve e.g. workers on the middle and lower positions in production who still perceive modern ICT technologies as necessary extras rather than the basics, and do not feel too competent to transfer to the computer work. Statements of the companies⁷⁸ show that the workers who fail to manage the change are often transferred to another work, but they can also be made redundant. Another possibility opens here for the trade unions, which can work for education of the group of workers which the programmes aimed at specific ways of work have been designed for, but also generally to increase self-confidence when working with digital technologies.

⁷⁶ That means those get applicants who have already completed secondary education.

⁷⁷ E.g. in Sweden, people can use that way to get very specific and practically prepared qualifications (e.g. application developer for iPhone and Android, construction engineer – digital technologies, nurse specialised in dementia, web communication specialist – social media).

⁷⁸ Viz NVF (2016b).

Also a change in the perception of education on a side of employers is essential. Particularly the workers with lower qualification are used to consider education as a return to their young age and finished once and for all. Returning to school environment or environment corresponding to practical education is hard to imagine for them in many cases. It is therefore essential to seek new forms and create environment based on modern access to company education, and are easier to accept for adult workers and therefore more beneficial. Education should not be perceived as something ordered by an employer but as a great personal benefit for one's future career, whether in the company where education takes place or at a place of a prospective future employer. In this respect, the role of trade union organisations can be irreplaceable, as their above-company branch structure could be useful platforms to spread the awareness.

In this context, trade unions could strive to create more permanent education schemes under their heading.

4.2.3 Changes in education in the context of Industry 4.0

Development of the content of education

Greater change of economy due to Industry 4.0 will bring new requirements for the content of education - not only at secondary schools. A role of trade unions in this context, in cooperation with employers, should be to strive for adequate update of the curricula, to deepen the cooperation of schools and labour market to achieve closer interconnection of real requirements of graduates' professional skills with the content of school lessons and practical education.

It is true today the digital literacy is practically as important as reading, writing and counting. The ability to work with information, "think in technologies" and can solve problems effectively via them are things employers often consider more important than the knowledge of specific content.

It is important to identify and implement the skills into the educational goals which would help graduates be successful on labour market in the future, regardless changes in technology. It includes generally valid and transferrable (mainly the so-called soft) skills, such as an ability to cooperate and orientate in a complex and multicultural environment, ability to learn all life, actively search new information in the field, education using available new technology, internet, social media or similar. It will be more and more important to have critical thinking, social intelligence, media literacy, working with information and cooperation in virtual environment, creative approach to problem solving, independence and an ability of self-regulation and initiative.

Particularly in the context of specialized education, however, connecting and balancing the general and soft skills with the professional skills („hard“), therefore with good

understanding some professional basics in the field, its principles that remain unchanged, will be a key thing. It will have to be distinguished which skills are rather changeable and grow old fast, and which ones are valid as an essential base to achieve balance in the profession.

The content of education is defined particularly in the framework education programmes, which the individual schools specify in the school education programmes. Trade unions should test the possibility of getting involved in the processes on the central level or by supporting local or sector cooperation with schools, particularly from the existing company practise point of view.

To enter the processes, the trade unions can use the created formalized platforms represented especially by the social dialogue on central level, where they can bring the topics in a suitable way, as a necessary condition of developing human resources towards maintaining competitiveness of the Czech Republic and social peace in the time of Industry 4.0. They can strive to modernize the education programmes of secondary schools, e.g. via pressure to constructively revise the framework education programmes (e.g. by entering the discussions – also see chapter 4.1.2), initiation of the cooperation programmes to the following modernization of school education programmes, entering more into the consultation processes, respectively they can test the possibilities of future participation in professional groups⁷⁹, which are a tool to create the content of secondary specialised schools education. The platforms are still an important domain of particularly the central school institutions or employers. More important participation of trade unions may represent a shift of the social partnership character closer to the more advanced western countries, where the tripartite dialogue is an automatic part of the specialised education development.

An advantage and an opportunity is relative is, in the context, the relatively high autonomy of schools when processing school education programmes, which gives them opportunity to introduce various innovative practises and experiments. It does not always have to involve significant and difficult changes but, for example, regular small actions like discussions or excursions.

Also increasing the involvement of trade unions in sector councils would be an effective tool to influence the content of education through making and modifying the National qualification system, which should be increasingly important framework for the initial professional education, too, in the future.

Education flexibilization

⁷⁹ See the note no. 88.

Generally, education systems really prepare their students for the past, for the present in better cases and for the future only in some exceptional cases. It is therefore important to seek to increase their flexibility, so that they can react to some challenges faster at least in some segments.

Formal autonomy of schools, considering the content of education in the Czech Republic, as already mentioned, is quite high. Main support of flexibilization therefore needs to go to schools, make the curricular changes easier for them and support their ability to react fast and flexibly to the changing requirements of labour market. Trade union organisations can be recommended to systematically support specialised schools and start close practical cooperation, to support teachers and their contact with the existing practise of professionals.

Supporting modern methods of education

Another important area that needs support concerning the trends of Industry 4.0 is modernisation of methods and forms of education. The existing school system including apprenticeship is, unfortunately, often unable to keep up with the fast development of ICT technologies. On one hand, the reason is chronic underfinancing, on the other hand, it is the already mentioned inertia of the school system, supported by a higher age average of pedagogical workers. The crisis caused by coronavirus is a factor that has made it even faster - when distance learning methods using modern technologies have had to be used by practically all teachers and students very quickly. The situation needs to be used for greater use of ICT in education, even in the situation when lessons will carry on at schools.

4.2.4 Kicking for pupils' interests

Kicking for the interests of the secondary school students on higher level

It is common abroad for the amount of remuneration, working environment and other conditions of apprentices who do practical education in companies to be negotiated by trade union organisations and put into the collective agreements. The state is based on the reality the trade unions are in a strong position, respectively (e.g. in Germany) of the dual system when apprentices have a contract directly with a company. In the Czech Republic, it is not realistic to achieve the same state and to understand apprentices as the quazi-employees without the existence of this type of legislative responsibility. Nevertheless, the formulation of issues itself, involving the terms of practical preparation of apprentices in companies, their negotiation and their form in the collective agreements, is not only possible but even desirable. It should be put forward and controlled for the conditions for employees specified in the collective agreements to be adequately related also to the students who do practical education in companies. Besides their amount of remuneration for productive work, working conditions, keeping the

health and safety rules etc., other issues could be solved, like the possibilities and ability of apprentices to exercise their rights and come forward when they are dissatisfied with the terms of practical education, its quality etc.

In the future, the issues will be even more relevant, as there will be higher requirements for the terms of practical education, considering the more serious consequences of using some advanced technologies.⁸⁰ Secondary school youth are often not aware of their rights, in practise, they don't have many possibilities and they are not used to negotiate their rights systematically or constructively comment on the quality of their own education. Trade unions could become a voice of apprentices, their opportunity to express themselves, and they could create programmes to teach apprentices about the issues, to support their self-confidence, and strive to bring the topics to curricula, too. Trade unions could profile as a good place where the secondary school students can communicate their interests and complaints related to professional education. Trade unions could also form closer cooperation, e.g. in a form of meetings together or projects, with the organisations representing pupils and students, such as Czech secondary-school union⁸¹.

Preventing early leaving of education

Compared to most European countries, the Czech Republic have had a very low rate of the early education leaving for a long time, which has been moving around 5 % on average (the average of EU-28 moved from about 14 % to 10 % in the last decade)⁸². The reason for the good results is particularly a strong tradition of secondary education and accustomed perception of the public, which considers completing secondary education to be prestige basics for life and an essential prerequisite of a good position in profession. A role is also played by the system which allows the unsuccessful students to transfer quite easily to a less difficult programme, often even in the same school institution. Nevertheless, there is a worse situation in the Czech Republic, and unfortunately, the proportion of young people who leave education early increases (it was 6,7 % in 2019).⁸³ Several facts may be behind this. For example, it is likely that establishment of the so-called state matura exams have led to an increase in the number of the unsuccessful ones. But there are no statistics about how much those unsuccessful students went to

⁸⁰ It will involve e.g. medical risks related to the long-term use of some technologies, the issue of permanent control of employees via technologies (monitoring their whereabouts or measuring performance), the issue of assigning work and its assessment using algorithms including the question of who can access the algorithms, and who is a partner for negotiation, if a worker is not satisfied with the algorithms etc..

⁸¹ www.stredoskolskaunie.cz.

⁸² Early leaving education is defined on European level as a proportion of people aged 18-24 who have not completed higher secondary education (in case of the Czech Republic, their highest completed education is the elementary one).

⁸³ Eurostat (2020): Early leavers from education and training, age group 18-24 (online data code: TESEM020).

other schools in next years and what chance they therefore have to finish their secondary education elsewhere.

Preventing early leaves from education may commence in higher classes of primary schools where children (and their parents) decide about their future. Children often don't have any adequate idea what to expect in the field they selected, then they are disappointed at secondary schools, lose motivation early, and there is a risk they do not finish their studies. This discrepancy also corresponds with the research among the secondary school graduates⁸⁴, which show that almost one third of graduates work in different sectors after completing secondary school. Trade union members could play a positive role of mentors and advisors from the real world of work here, too, who would bring the real character of the fields and performed work closer to children in order to decrease the level of probability of uninformed selection and subsequent disappointment.

The higher proportion of early leaving education has been caused by a good state of economy and high demand of employees on labour market recently. For many young people, it has been easy to find employment even with incomplete qualification and the imagination of income has been more attractive than remaining at school particularly for those from weaker social classes. There were also cases recorded when some businesses purposefully attracted the pupils to enter employment before finishing school. In a situation of repeated increase in the unemployment rate (which will probably be great due to coronavirus crisis), there is a risk those young people will end up unemployed and with no qualification, just with limited practical experience, and their chances to find another employment will be limited. A role of trade unions could be to bring the topic into a social dialogue and to try to find ways to keep young people at schools until they achieve such qualification, which will guarantee them good quality and long-term use on labour market and career development. It is also possible to cooperate with schools and employers to prepare programmes that would help young people with incomplete secondary education return to educational process and complete it. The first target group could involve young people with incomplete qualification, who are employed in businesses or branches with trade unions. An interesting option is also the trade unions stepping beyond the borders of companies and targeting the young in the same situation or the unemployed in general.

New forms of work

Expected increase in the new forms of work is also one of the frequently discussed results of digitalization of the whole society. It is work that will be carried out especially with the use of digital technologies, alternatively those will be used to order work or agree to do

⁸⁴ See e.g. Chamoutová, D., Kleňha, D., Koucký, J., Trhlíková, J., Úlovec, M., Vojtěch, J. (2018).

work (e.g., through work platforms), and it will vary from a traditional form of employment relationship. This trend is often called "shared economics" or "economics of platforms". Insufficient legislative anchoring of the forms of work and related unclear employment relationships bring many risks for working conditions, social protection and incomes of involved workers, in other words, increase of precarious work. Activities of trade union organisations should be aimed at providing access to employment covered by the employment legislation and to social insurance for all groups of workers.

At the same time, new forms of work organisation will also enter classical work relationships (see also chapter 1.3). That will bring new questions concerning work performance in a situation of remote work, control, combining work life and free time, when there is pressure on employees to be constantly available online etc. The topics are still solved sporadically by employment law.

With greater awareness about a change of labour market, however, the situation improves, and experience with alternative forms of work at the time of coronavirus crisis will probably help faster development of employment legislation in this respect. However, one unresolved issue is preparation of young people in specialised schools for those looks of working life. A certain thing is that in some branches and segments of labour market, new forms of employment and organisation will be more common than in others. In the corresponding programmes of professional education, adequate information about the options and risks of alternative forms of employment will have to be provided. Students should be prepared for the advantages and the risks involved, specifically including perception of their rights in the context of various types of employment relationships and ability to defend them.

Decreasing inequalities in education

Research shows that Czech education system is selective to a great extent.⁸⁵ That means dividing students to the so-called „good“ and „bad“ schools and their subsequent journey to achieving good quality or lower quality education is given, into some extent, by their socio-economic background, therefore parents' social status, and children's own preconditions play a less important role than they should here. This area should be close to trade unions, as it is a typical reproduction mechanism of inequalities in society, which increases the risk of opening the scissors between social classes and a threat for social peace from the long-term point of view. Moreover, it contributes to the insufficient use of the potential of talented children, born to parents with a worse socio-economic status. A specific example is the issue of more-year grammar schools where children go after the first grade of primary school, respectively during the second grade. The research

⁸⁵ See e.g. ČŠI (2016).

confirmed⁸⁶ that the change itself brings no significantly higher value concerning skills but rather, it reflects a better socio-economic status of their parents. The quality of the second grade at schools consequently falls, as the pupils who stay here are not as motivated. Those interested to study in apprenticeship centres come practically exclusively from those groups, and there are frequent complaints about their preparedness. The topic of trade unions in this context may then be the effort to increase the quality of education at the second grade of secondary schools, respectively a reform of the selective system of more-year grammar schools. This also matches the targets proposed by the Strategy 2030+ (see chapter 4.1.2). Increasing the quality of the second grade of primary schools would probably result in increased quality of apprenticeship education. Experience from abroad (e.g. Poland⁸⁷) confirm that selectivity of education tracks in early age does not contribute to the overall quality of education. The systems where children are educated all together for longer time (up to the higher grades) have better average results of all, compared to the early selective systems.

4.2.5 Consultancy provision

Trade union organisations in the Czech Republic provide consultancy concerning legal issues to their members. According to the resources available, however, consultancy related to job selection or education is not widely spread, including the one that would be provided also outside the members base of trade unions, therefore specifically to young people, apprentices and secondary school students. More systematic participation of trade union organisations in the career advice would be a more suitable form the trade unions could use to fight for the interests of secondary school youth. Greater involvement in career advice could bring a positive effect on a few levels for the trade unions. In the future, they could strengthen their role in the processes of restructuring of society and labour market in connection with the changes required by Industry 4.0, and at the same time, the awareness of trade unions among young people would increase. At the same time, trade unions could use the activity to contribute to preventing unemployment, social exclusion and other negative features there could be in connection with the changes on labour market due to 4th industrial revolution.

Trade union consultancy could become a certain platform to transfer specific experience between generations. Consultancy topics directed at secondary school students don't have to involve just career choices but also typical trade union issues, such as employee rights, negotiation techniques, work conditions, safety at work etc., alternatively specific topics connected with some branch or sector, where this or that trade union works. In any case, such services should be accompanied by a specific information campaign at

⁸⁶ See e.g. results of the project CLOSE (Czech longitudinal study in education) carried out by the Pedagogic Faculty of Charles University, CERGE-EI and National education fund in 2012-2019.

⁸⁷ See e.g. Jakubowski, M. (2015).

schools or in companies, and greater effort should be made to get the information into the students' awareness. Otherwise, there is a risk of shortage of clients, as it is not very likely for the secondary school students to search the services on their own.

An alternative is to commence negotiations with the Job Centre and schools about whether and how the trade union members could participate the excursions of students at Job Centres, or about other forms of cooperation.

4.2.6 Supporting good quality education

Supporting pedagogical workers

Good quality education goes hand in hand particularly with good quality teachers. We can see it on examples of the countries, education systems of which belong to the most successful ones, such as Finland where teaching profession is one of the most prestigious ones, the most talented people apply for it and it's also well paid. Countries with a very successful education system have also very strong trade unions of teachers at the same time. A positive state when government institution constructively cooperate with teacher trade unions and take them as professional and trustworthy partners is connected with good results of students in a specific country in an international comparison (PISA⁸⁸). A research proved that rigid style of government control of education system, which is based on prescribing rules and a control „from above“ and is not opened to innovations, leads school trade union organisations k primary fixation onto a question of salaries and creates more of an antagonistic mutual relationship. On the contrary to that, professional way of management, which offers positive proposals, diversified vareer options and wide opportunities to innovative ways of work to teachers, brings also constructive and effective strategic cooperation with trade union organisations.

Teachers' salaries are a traditional topics of trade union organisation in the Czech Republic. Some success has been achieved recently and salaries of teachers gradually improve. However, financial reward is not everything and it becomes apparent especially now that preferences of young people when choosing employment is connected a lot with a possibility of self-realisation, satisfaction with work that makes sense, psychological well-being, good background in a collective etc. Supporting teachers by trade unions should therefore become more complex and involve other topics than just salaries more.

A big challenge is decreasing the administrative burden, psychological and time stress of teachers, attempts to improve the atmosphere at schools where Czech ones don't do too well in an international comparison (see e.g. the PISA research⁸⁹). Trade unions can create their own programmes of systematic support of good quality teachers in specialised

⁸⁸ PISA are regular international investigations of a level of student skills, carried out by OECD – for more, see <https://www.oecd.org/pisa/>.

⁸⁹ OECD (2019).

schools, e.g. in the area of stress management, solving conflict situations or active rest and relaxation, or to lobby on central level to limit the administrative burden of teachers in accordance with the goals of Strategy 2030+ that strives to find a solution of that (also see chapter 4.1.2).

It's also possible to do programmes where secondary specialised school teachers or young candidates on the job are accepted for internships to companies, have excursions etc.⁹⁰ It is important for the teachers to have a chance to get to know current technologies companies really use from the first hand, and for the young candidates for teaching position to feel they will not lose contact with the most modern technologies of their field by choosing teaching.

Supporting the quality of practical education in companies

Strategic documents of the education resort assume gradual further implementing of the dual education elements in the Czech Republic (see chapter 4.1.2). That should be accompanied by the essential extending of education carried out in companies, and a still more important role of employers is assumed. There is a possibility here for the trade unions to take the role of active involvement. This part of education could then gradually become some "joint-venture" of trade unions and employers on central level (tripartite) or locally/company. It is important for the trade unions to be active right at the start during forming and establishment of the newly implemented features of dual education.

In the future, a system role in the area of quality control of practical education in companies could be interesting for trade unions. In European countries, participation of trade unions in the area of increasing and quality of specialised education is quite common. In the Czech Republic, quality of education is a task of the Czech School Inspection including the company workplaces where practical education takes place. ČŠI evaluation is aimed more at general and formal characteristics of education, such as its relevance to a school education programme, assessment methods used and support of students etc.⁹¹ It is not possible for ČŠI to fully grasp the complex trade union content of specialised schools. Trade unions could bring some new practical dimensions into assessment concerning purposefulness and relevance of content and technical aspects in relation to their real usefulness in practise. Trade union workers could also monitor and comment the equipment of students' workplaces, negotiate improvements with companies, respectively control whether the equipment purchased is really used in education. A contribution of trade unions in quality control would be their independence on the system and employers. Supervising the quality of professional education would be good to organise in sectors according to the areas of influence of the individual trade

⁹⁰ Similar programmes have already been carried out by the state (e.g. the project Internships in companies carried out by the Further Education Fund in 2016-2019).

⁹¹ See e.g., ČŠI (2019).

unions. A condition of putting the scheme into practise would be achieving the consensus on central level including provision of active (and financial) support of the state and relevant legislative changes.

4.2.7 Financing education

Financing professional education is an often mentioned and very complicated topic. A huge challenge for trade unions is looking for conceptual solutions that would establish new mechanisms of financial flow for the benefit of professional education, e.g. for using multiple-resource financing. It is important to use various ideas and solutions existing abroad and analyse their feasibility in the Czech Republic. One of the options could be e.g. establishment of a special fund where some part of company taxes would be carried out. The fund should be based on national or branch level. Based on foreign experience, there are two principal solutions of the provision: (a) to reach, using legislative changes, establishment of the fund and having compulsory contribution of employees, respectively co-financing from the state budget, (b) to establish the fund on the basis of voluntary contributions of employers (e.g. in employment union structure) with the following option to get new graduate employees from education programmes funded from the fund, respectively influence the content of their education (participation in the fund would have to be a clear competitive advantage for the companies). In both cases, greater attention would have to be paid to the mechanisms of allocating the resources and seek their transparency and about decision making based on the real assessment of the needs of the branches and the whole economy (the so-called evidence based policy). First, the consensus of tripartite would have to be reached, respectively other subjects involved, and find sufficient support of the arrangement in political representation.

An interesting area for the work of trade unions is also the pressure to increase the possibility of direct financial support of specialised school students. It could involve relatively small benefits or contributions for the socially weaker students (e.g. payments of lunches, hobbies, courses etc.), but also some more extensive programmes of scholarship support, which could use the principle of the multiple-resource financing (e.g. in cooperation with employers or regional councils, which already provide scholarship support in some branches or programmes in many cases). On central level, trade unions could strive to remove the barriers and introduce incentives for these forms of financing, respectively they could create strategies to obtain financial resources usable this way themselves.

4.3 Threats

trade union fragmentation

A big problem is the fragmentation of trade union movement. In many countries including the Czech Republic, a situation repeats when there are a few main trade union organisations which compete and fight for influence and level of representation of the employees in economy. There is also the fragmentation of resources related to that, which complicates the role of trade unions on the system level. Information flows are not too effective and systematic even on the vertical level in the individual trade union confederations and unions and many questions and initiatives are solved individually in a lower level, e.g. company one, without overall systematic coordination and information. A threat is the fragmentation will gradually deepen with the gradually decreasing number of trade union members. Greater unity, cooperation and coordination of activities on a horizontal and vertical level would probably contribute to a more significant role on national level.

Decreasing (aging) members' base

Small members base itself is also a problem, which trade unions face not only in the Czech Republic. It is not only about small volume of membership contributions but about low personnel capacities for active participation when solving the existing issues. Higher number of trade union members would probably be support for a stronger negotiation position, higher prestige and authority in society and more significant political role.

In the context of education issues is, the problem is particularly a shortage of young members, who the older ones can only hardly motivate to join them. A shortage of new upcoming young members can be also connected with a low level of informing young people about trade unions, their role and advantages connected with the membership. Young people should learn about trade unions and their practical role in today society at school, particularly specialised school after which they are assumed to enter labour market. This usually takes place in a limited way (e.g. as stated above, in the cross-cutting education topic Human and the world of work that also includes, on a secondary school level, the problematics of business, employment relationships or similar., any information about trade unions is missing). It is therefore likely for many students who have graduated from specialised education and enter their first employment with only very wage idea of trade unions, if any, and their roles in companies and in state. Insufficient information together with lower willingness of the young to have a traditional type of organisation or involvement contribute to the insufficient level of renewing the membership base of trade unions.

If trade unions will not be particularly active in this respect and will not provide young people the topics that are current and interesting considering their real life situation, this undesirable trend is likely to continue. In this context, it is important to remind a fact which repeatedly occurs in the research about preferences of the young generations in relation to work. Young people do not consider the main factor to be the amount of wage,

but more importantly other characteristics of employment like feeling it makes sense, pleasant environment, good possibility of combination with personal life etc. If trade unions want to come closer to young people, they will have to accept their priorities for their own and solve topics which are close to young people, in other words, seek ways to put together the needs of companies and preferences of young workforce.

Insufficient time and personnel capacities

The above mentioned shortage of new members is also closely connected with the resulting shortage of time and personnel capacity. Needed system activities are then limited and consequently, the role of trade union organisations gets weaker on the whole-society level. It is also partly due to insufficient proactive approach, which can be seen in attempts to do only the most necessary things (e.g. supply comments to the material submitted), while another, more consistent activity and initiative is insufficient. That is partly due to the fact there is a small number of trade union workers, they are busy at different places and have not got capacity for any activities above standard. Some stereotype may also appear in solving problems using old and proven ways, without invention or innovation which would attract not only young people.

Insufficient financial resources

Insufficient financial resources limit not only the desirable work of the organisations, but also results in a lower ability to attract good quality and educated staff, which can again strengthen lower attractiveness of trade unions for potential new members. Insufficient finances strongly endanger the possibilities of trade unions to initiate and carry out their own projects and programmes, and it is one of the key limiting factors of higher involvement of trade unions for the future.

Insufficient financial resources are a limitation on a side of companies, too, and will be even greater at the time of economic regression during post-coronavirus crisis. Not even the best possible action and strong negotiation position of trade unions will not bring investments into education in a place with insufficient financial resources. A good idea is to search for compromise and solutions advantageous for more parties, and alternative schemes of multiple financing, respectively various forms of joining the resources of more businesses or creating sector resources for investments into education or similar.

Low professional capacity for the area of education

A threat is a shortage of members who would be competent or experienced enough in education, respectively enough self-confidence to be actively involved in the issues. It can be assumed that in some cases, education - particularly the initial one - is perceived as a typical school area where trade union members from practise do not feel too competent, and it is hard for them to find ways and levels to get involved there. Trade unions should

purposefully bring up workers with high competences for this area, and provide education in this area not only for them but also for other members.

Insufficient long-term strategic thinking

A shortage of long-term strategic thinking is a risk not only on a side of trade unions but also the state and companies. It often happens that the attention of the key players goes to the short-term ad hoc problems and solutions relevant to time of own mandates of top representatives. Long-term vision and any systematic effort to fulfil it is missing. This approach represents a big threat particularly in segments like education, which is quite cumbersome and where changes can show in a horizon of many years. Also, many companies tend to not solve education a lot for the future, and they rather deal with everyday ad hoc seeking human resources.

The individual interesting activities of trade unions in education can be seen on regional or company level. The activities, however, do not overlap to any systematic solution. One of the risks is insufficient systematic capture and failing to use a potential of the initiative members or teams.

Maintaining just traditional topics

In trade unions, some topics belong to the "classic ones", which they deal with for a long time and could be called a routine. That involves mainly the issue of wage terms and conditions, respectively employment terms and conditions, safety at work or provisions against redundancy. Entering more actively into the area of education means to enter the field where there is no clearly prepared way. That brings a possibility to define the new trade union approaches and work as an innovative mover on one hand, but on the other hand, it is quite a hard step. A huge risk is therefore remaining or early comeback into "safe" areas of routine topics where trade unions feel confident and where their participation in a social dialogue is generally counted on. There is a risk of getting anchored only in the critical approach addressing the negatives of the existing system, although in many cases, it could be better to form and communicate constructive offers of own solutions.

Involvement of trade unions in the Czech Republic is connected with traditional industry into a great extent. Modern technologies and the 4th industrial revolution, however, bring many new topics and employment related questions which have not been and could not be covered by the trade unions in any way. In the areas, trade unions will have to pay more attention and targeted activities. Staying only with topics that were brought by traditional industry environment could bring a risk of further weakening of trade union organisations.

Prevalence of other topics than education

Thanks to technologies at the time of faster development, which will probably be even greater due to the coronavirus crisis, it may easily happen that new topics will become a part of a social dialogue (risk of redundancy, employment relationships alternations in connection with new forms of work, economic issues of robotization like tax from robots, unconditional income issues or various solutions of the kurzarbeit type schemes), and among them, education will become Cinderella and there will be no space or finances left for it. Companies will logically strive to saving finances and higher flexibilization, a goal of which will be to survive this difficult time period, ad hoc solutions of acute problems and looking for new ways to prosper. It is known from historical experience that in such situation, education is one of the first "victims". Trade union organisations should not accept priorities determined in such way, and should strive for education to still keep getting into business and national debates at this difficult time, as one of the main tools to maintain competitiveness in the conditions of Industry 4.0 and to overcome the consequences of this as well as any other crises.

Low influence of trade unions

Compared to some countries of western Europe, trade union movement does not have great respect and influence in the Czech Republic. That can be one of the factors why the voice of trade unions is not even heard in the area of specialised education too much. An involvement tradition is missing here and many players in the field do not even think about the possibility of greater involvement of trade unions, as they don't see a reason for it. It's a big challenge for trade unions to begin to change those ways gradually by systematic support of functional solutions, permanent involvement and bringing own bearing issues and approaches that will help solve the problems Czech education has for a long time.

Not enough political willingness

Political situation and priorities of the government including the approach to trade unions is one of the essential conditions of the level and way to involve trade unions in the cooperation concerning public education. If some governments or other relevant public institutions leave the trade union organisations out, or if they are not willing to support their participation in the debates, their functional participation will be difficult. There are warning examples from abroad when for example in Canada, the original practise of founding sector councils using the partite principle between employers and employees gradually disappeared and the presence of trade unions was perceived as no longer necessary.⁹²

⁹² Bridgford, J. (2017).

Missing presence of trade unions in key structures

The Czech Republic has quite a significant problem - low participation of completely missing trade union organisations in structures with defined practical school politics, content of qualifications and curricula etc., such as sector councils or trade union groups⁹³. In this sense, a negative example may be development of sector councils in Great Britain. There are managed by employers, however, at the beginning, it was required for each one of them to have at least one trade union representative. However, participation of trade unions was only limited in practise. After 2013, apprenticeship programmes started to be developed under the direct management of employers. In relation to that, the importance of sector councils fell even more, and the influence of trade unions has been weaker and weaker, as they've had no formally defined role in the system of creating and implementing apprenticeship programmes.

Low motivation of target groups

A limiting factor may also be low motivation and participation of target groups that should benefit from education, that means students or employees themselves. Their interest in their own self-development is one of the determining factors of success for any initiatives in education. Any intervention in the field should therefore be accompanied by providing adequate information in a suitable form, which would show real and practical impacts of education (or its absence) to target groups.

⁹³ See the note no. 88.

Summary

The problematics of Industry 4.0 and its consequences for economy and labour market is one of the most important area of present time, which state institutions and other organisations responsible for different aspects of life need (or should) to pay more attention to. The consequences of the changes for employees are already perceived in some sectors to some extent, their specific consequences in the long-term horizon are, however, hard to foresee. The studies available still differ in the opinions about whether the Industry 4.0 will bring less job vacancies on the whole, whether their number doesn't change a lot or whether it will be just the opposite and employment will increase. It is clear today that the structure of job positions and required skills will change to a great extent, including the fact that some brand new branches and professions will appear and some of the existing ones will disappear. It will be important for the workforce to be able to adjust to the changes as much as possible, which will require great flexibility on a side of employers. These facts point out to a requirement imposed on education system, which will have to prepare graduates who are able to face the challenges. It will not involve only the current skills concerning modern technologies used by employers but particularly a general skill to orientate and work effectively in the dynamic and highly interconnected environment based on IT technologies, multicultural communications and flexible ad hoc processes, and also the ability to learn new things all life.

In the recent years, a voice of employers grows stronger, as they face a critical shortage of qualified workforce and have to deal with the graduates insufficiently prepared for practise. It is the reason why it's important for the trade unions to reflect, and if possible, to get actively involved in the processes that regulate education system, particularly specialised education, the base of which is to prepare for professional life. Trade unions can bring a new aspect to the processes, aiming towards better balancing between the interests of employers, school institutions, state authorities and employees or education participants themselves (students, apprentices and adult workers coming to education).

Strategic materials of international organisations including the EU (see chapter 2.1) put a great emphasis on the role of trade union organisations in professional education. Consultations and support of their further involvement are expected also in the future. In the Czech Republic, trade unions may base the strengthening of their role in this support. International priorities cover one another a lot concerning the directions of desirable development in the Czech Republic, and can be one of the resources to form own strategic approaches of Czech trade unions. Strategic materials and legislation adopted on national level also contain "open doors" for the trade unions to participate in many places.

The study presented outlines quite a wide palette of opportunities for the trade unions to participate, which have been identified on the basis of experience from abroad and reality from practise in the Czech Republic. It involves indication of various ways options,

ideas and inspiration which are not necessarily exhausting or indicative. Choosing specific directions and steps is a matter of a selected strategy and available capacity of trade union organisations. It is desirable to choose strategic ways which add up and strengthen one another well. There will be a higher probability of effective involvement in the system processes of professional education, if the selected strategical directions fulfil specific synergy also with the interests of other actors in the education process, including the national politics strategies.

Concerning opportunities, we first mention the general crosscutting challenges that have to do with fulfilling the principal outcomes for effective participation of trade unions in professional education. This area (respectively education in general) should be set as one of the priorities which trade union accept „as their own“. An important thing is a proactive approach which takes its own steps and brings own initiatives above the framework of just simple reactions required from trade unions by other parts of the system. Trade unions should proceed unanimously and without any useless breakdown of strength, and should form their own topics. This also involves creating the knowledge bases, that is support of analytical and research activities, while it's good to seek functional inspiration and examples of good practise abroad and analyse the possibilities to apply them in the Czech Republic conditions. Another challenge is systematic implementation of specialised education issues into collective negotiation and creating new communication platforms to exchange opinions and experience. Trade unions could also join in the promotion of specialized education, which can be connected with efforts to increase the awareness of the role of trade unions among young people and spreading some examples of good practise. Capacities and resources available should be examined and used to the maximum within the trade union organisations (e.g. available education capacity) and outside them (e.g. EU projects). New possibilities are also brought by a wider use of modern technologies for one's own work and the awareness about trade union activities.

There are also challenges connected with reflexive changes ongoing on labour market mentioned. That includes a possible role of trade unions in the identification of the endangered sectors and segments of work, the support of system interconnection of the initial and further education, and prevention of threats for employees (and future employees) via education. Trade unions should take part in the development of the content of education, flexibilization of education and a support of modern methods of learning. Another significant area of challenges is defending the interests of students, where we include firstly representing their voice on a higher level, then preventing early leaving education, supporting the preparation of pupils for the new forms of work related with the 4th industrial revolution and attempts to decrease inequalities in education. Trade unions could play an interesting role in the area of career advice. As a part of various activities of trade unions to increase the quality of education, we mention particularly the support of pedagogical workers and of practical education in companies. And finally,

seeing many examples from abroad, trade unions could fulfil some role in the area of securing financing of education, too.

The most important threats of system work of trade unions in professional education includes too extent fragmentation of programmes and their activities, decreasing member base accompanied by a shortage of time and financial capacities, respectively insufficient professional capacities funded for education. There is also a risk of long-term strategic thinking shortage, staying only with traditional issues which do not include initial professional education, or an acute need to solve other topics than education which can occur e.g. due to economic crisis. A threat is also the generally lower influence of trade unions compared to e.g. some western countries, respectively not enough political will to cooperate with trade unions in this area and/or the absence of trade unions in the key structures for education. And finally, it is also possible to mention the risk that target groups (secondary school students and employees) will not have enough motivation to get education.

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Attachments

Příloha 1 – Apprenticeship toolkit (příručka pro odboráře vydávaná vzdělávací sekcí britských odborů Unionlearn) – ukázka obsahu



The government has committed to substantially increase the number of Apprenticeships. Therefore, it is crucial that union reps and officers negotiate with employers to set up high-quality Apprenticeships.

“ Apprentices should have contracts of employment for at least the duration of the training period ”

Trade unions support and represent apprentices in a number of ways, from recruitment and organising, to pay bargaining, learning and skills, equality and diversity and health and safety. Unions will have their own negotiating approaches on Apprenticeships. Some will include Apprenticeships in learning agreements, some will draw up specific Apprenticeship agreements and others will treat apprentices like any other category of worker.

Apprenticeships are required to meet government minimum standards. These include: a minimum duration of 12 months, employed for 30 hours per week (this can be reduced to a minimum of 16 hours to accommodate part-time apprentices, for example, but only in exceptional circumstances); an English and maths requirement; and minimum requirements around on and off the job training. Apprentices have the same statutory rights as other employees. Unions will often negotiate higher quality Apprenticeships that far exceed these minimum standards.

The TUC Charter on Apprenticeships (www.unionlearn.org.uk/charter-

apprenticeships) outlines the key principles that should underpin an Apprenticeship and includes the following points:

Contract of employment – Apprentices should have contracts of employment for at least the duration of the training period. Ideally an Apprenticeship should lead to a guaranteed job.

Decent pay and conditions (see the *Pay sheet*) – One in seven apprentices are not receiving the minimum wage to which they are entitled¹. These are unlikely to be apprentices in unionised workplaces as unions will negotiate fair wage rates for their apprentices. Wage rates should progress incrementally as apprentices begin to increase their skill levels. If percentage rates are negotiated, they should start as high as possible and progress by time served or competencies achieved, rather than by age. In industries such as construction with nationally agreed apprentice pay, ensure the local employer is complying with that agreement.

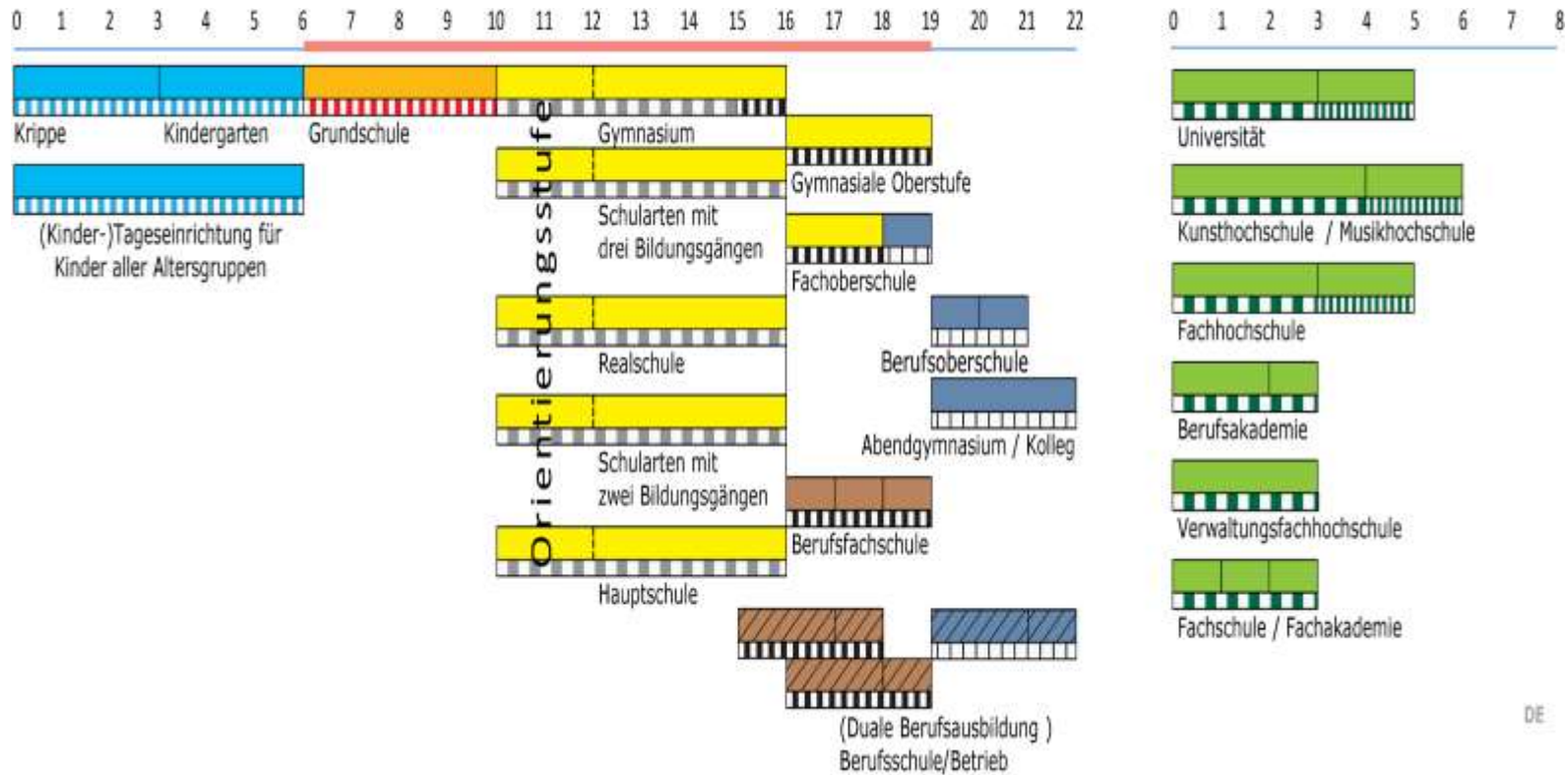
High quality training – (See also the *High Quality Training sheet*). Union

negotiators will want to ensure that Apprenticeship programmes in their workplace identify a clear programme of training, including sufficient time spent on the job, such as in college, in dedicated training centres at the workplace, or in private study.

Access to a trade union – Apprentices have the right to join a trade union. Apprentices are often young people with little experience of the workplace or trade unions. Union reps should negotiate with employers to make sure that the union has the opportunity to speak to apprentices when they start work.

¹ www.gov.uk/government/uploads/system/uploads/attachment_data/file/387319/bis-14-1281-apprenticeship-pay-survey-2014.pdf

Attachment 2 - German education system Scheme



Source: European Commission/EACEA/Eurydice (2019): European education system structures 2019/20: Diagrams. Eurydice – Facts and numbers.

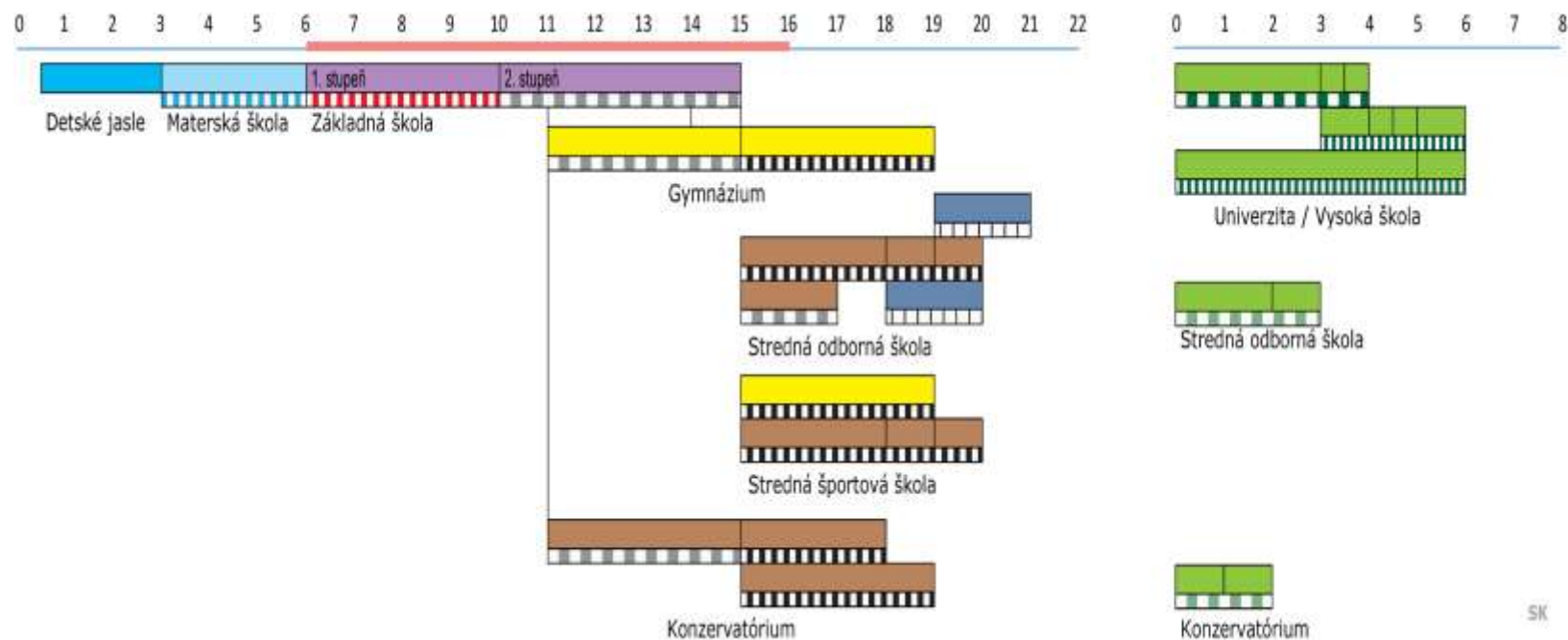
In German system of education, pupils decide about their next education for the first time when they are 10 years old and finish *Grundschule*. They can continue at the hardest grammar schools, which is particularly for future university students. The practically, non-academically oriented students can use *Hauptschule*, from which they can continue to professional education leading to profession. Another possibility is *Realschule*. There are also combined schools that allow transferring on this orientation degree level.

This professional education can be entered into after completing this orientation level.

Secondary professional education can be dual (that means an employer accepts a student for education in a company, the student goes to school at the same time) as well as the school form. After completing professional education, it is usually not possible to go to university (however, permeation of education ways gradually increases in Germany), but it is possible to study at the so-called professional colleges (Fachhochschule). Now there are also

mixed, academic-professional types of tertiary education, for example the so-called dual studies, education achieved when a university cooperates with an employer, usually finished by Bachelor's degree.

Attachment 3 - Slovak education system Scheme



Source: Evropská komise/EACEA/Eurydice (2019): Struktury vzdělávacích systémů v Evropě 2019/20: Diagrams. Eurydice – Fakta a čísla.