CONTINUING PROFESSIONAL DEVELOPMENT FOR VOCATIONAL TEACHERS AND TRAINERS IN SERBIA
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Annex A. Excerpts from the Strategy for Education Development in Serbia 2020+

Annex B. Literature review

Annex C. Survey results

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1. **RATIONALE**

Professional development for teachers and trainers is widely recognized as a vital tool for educational reform. Research demonstrates that professional development can improve the quality of teaching and learning in a sustainable manner, increasing the effectiveness of education and training and adding value for learners, teachers and employers. In Serbia the importance of continuing professional development (CPD) for vocational education and training (VET) teachers is not in question. Serbia has developed extensive policies over a number of years, to address this issue and some are currently being implemented.

However, improving the quality and quantity of CPD is not without its difficulties. It is vital that policy making, implementation and impact are continuously reviewed and understood to ensure feedback and policy learning that will assist policy makers. In support of this objective, this study presents the following:

- an overview of current policy objectives with respect to improving CPD for VET teachers and trainers;
- a description of the provision of CPD for VET teachers and trainers and the way in which teachers' needs are assessed and particular programmes are assigned to teachers;
- an explanation of how the arrangements for CPD fit with other parts of the VET system;
- an evaluation of how well current arrangements are working; and
- recommendations on how current policies can be implemented and how the provision and allocation of CPD can be improved.

This study aims to contribute to evidence-based policy discussion, inform thinking and action at many levels of decision making, and stimulate further enquiry and proposals.
2. METHODOLOGY

At the project launch event held in Belgrade on 11–12 March 2015, experts and policy makers from participating countries were brought together. The Serbian participants formed an expert team which, subsequent to the event, completed and designed the research methodology. The expert team is composed of representatives from relevant stakeholder groups – the Ministry of Education, Science and Technological Development, trade unions, civil sector, Institute for the Advancement of Education (IAE), Institute for Quality Assessment in Education, association of VET schools, and individual VET schools. The expert team dedicated the larger part of its post-event efforts to identifying the research sample, editing the questionnaire and synchronizing the English and Serbian versions, and promoting the demonstration projects in preparation for the ETF announcement for CPD project proposals.

2.1 Belgrade report

The key conclusion from the Belgrade event on Serbia was that a legal and institutional framework for the system of CPD for all teachers (VET teachers are not a separate category) exists. Moreover, a system for the accreditation of CPD programmes and regulations regarding the number of necessary points and licences is in place. Although a new catalogue of CPD programmes is developed every two years, it does not offer a sufficient number of trainings for VET teachers.

The main conclusion of the team was that the future development goal of CPD in Serbia should be to better identify and address the learning needs of teachers/instructors/trainers in continuously changing circumstances. In addition, a system of quality assurance should be established which includes standards of achievement, school organisation, monitoring, and evaluation. Overall the team proposed the following features for CPD development:

- improvement of the CPD system, especially its quality assurance aspect (quality standards);
- development of new models of CPD;
- implementation of the Action plan for the Strategy for the Development of Education in Serbia 2020+1;
- re-conceptualization of the CPD programmes catalogue, especially for VET teachers;
- recognition of VET teachers as a distinct group of teachers and the identification of the particular needs of this group;
- cooperation between employers and VET teachers and VET schools.

The following research goals guided the Serbian research:

- to characterise the current state of policy development and implementation with respect to CPD for VET teachers and trainers;
- to characterise provision and demand by country;
- to compare provision and demand and to assess the match between demand and supply;
- to compare provision and demand between countries and, if possible, against international benchmarks.

1 More details on these two documents are available in the literature review in Annex B (goo.gl/JZxQSo).
In accordance with these goals, the methodology included:

- desk review of documents and published research on the current state of CPD of VET teachers and trainers;
- interviews with 14 stakeholders responsible for policy, provision and implementation of CPD activities for VET teachers;
- survey of VET teachers employed at 22 VET schools or training centres.

The methodology made it possible for the research to include all key actors in CPD in Serbia - CPD policy makers, as well as immediate implementers and teachers as direct recipients of CPD. The key actors in CPD policy development were identified from the analysis of the existing state of CPD. These included the Ministry of Education, Science, and Technological Development and VET Council, institutions dealing with teachers (trade unions and the Union of Employers), universities as providers and creators of programmes, institutions in charge of monitoring and organising CPD (the IAE), VET schools principals, associations of VET schools, and training centres.

No major issues arose during the research, other than the withdrawal of 2 out of 24 schools invited to join the survey. The interview guide and the survey questionnaire were piloted on a number of randomly selected teachers before the main research took place.

### 2.2 Interviews

Interviews were carried out with 14 respondents representing the following stakeholder groups: Ministry of Education, Science and Technological Development, Institute for the Improvement of Education, Council for VET and Adult Education, VET schools, universities, regional centres for professional development, trade unions, Union of Employers, regional school departments. The full list can be found in Annex D. The interviews took place between 1 May and 1 June 2015.

### 2.3 Literature review

The desk research of relevant literature was based on relevant policy documents, reports and previous research results, as well as academic papers exploring the CPD system in Serbia. The focus was on vocational education and VET teachers, though papers and reports presenting data and studies of CPD issues of all categories of teachers were also considered. The resulting literature review primarily covers policy and regulatory documents, which provide descriptions of the relevant procedures and processes. The main issue during the review was a lack of previous research and analysis in this area. Some data are available in academic papers, but Serbia lacks research and evaluation that is up to date and which addresses the main issues that face CPD for VET in Serbia. The literature review can be found in Annex B.

### 2.4 Survey

On the basis of a joint agreement between the Ministry of Education, Science and Technological Development and the Serbian team of experts participating in this research, the sample was to include 24 VET schools and between 800 and 1,000 teachers. The school selection criteria are listed below.

- **Geographical distribution**: the proposed schools were to cover all the regions and counties in Serbia providing a regional distribution of the sample.
- **Sector diversification**: the sample was to include all vocational areas, given that the majority of schools are mixed and each covers at least three different vocational areas in its work. There are even schools covering five areas.

- **Number of students**: the selected schools were to be of different size with the number of students ranging between 500 and 2,000.

- **Number of teachers**: between 20 and 80 VET teachers (per school) should be employed at the schools.

- **The schools** were selected to include several municipal areas and represent central schools towards which students from several municipalities gravitate.

The main criterion was the geographic distribution of schools. Twenty-four schools from six geographic units were selected – from Northern Serbia, Western Serbia, Central Serbia, Southern Serbia, Eastern Serbia, and Belgrade. In this way, the entire territory of Serbia was covered. Four schools were selected per each geographic unit (this distribution was not achieved in the final list of the schools that participated in the survey). The second criterion used was the vocational areas covered by the schools. This criterion ensured that the selected 24 schools covered all 14 active vocational sectors. The third criterion was the type of schools, with the aim of including both specialized schools, which cover one vocational sector (e.g. school for hydrometeorology, school for trade and tourism), and mixed schools, which cover two or three vocational sectors.

The selection was made on the basis of the official document by the Ministry of Education, Science and Technological Development – Call for the Enrolment of Students Into the First Grade of Secondary Schools for the School Year 2014/15, on the basis of the adopted plans and programmes in VET schools, and on the basis of the statistical data of the ministry on the number and type of educational profiles that exist in the educational system. Twenty-four schools agreed to participate in the survey and passwords were assigned to their teachers to access the online questionnaire. Two schools did not respond to the survey. Therefore, teachers from 22 different schools participated in the research. The total number of participating teachers was 603, with 573 (or 95%) valid questionnaires, which represents 56.2% of the total numbers of teachers who had received the tokens (passwords) for accessing the online questionnaire (1,020).

Immediate help and support to the administration of the survey was provided by the ministry by setting up a specially designed web platform, which enabled the questionnaire to be filled in online. The ministry also provided complete technical assistance in the communication with the VET schools in order to have the survey completed within the planned timeframe.

2.5 **Issues and possible bias**

The online administration of the survey incurred certain technical difficulties, which were, nonetheless, fairly easily overcome. A more important issue was the slow rate at which the teachers were responding to the questionnaire. Due to the small number of replies when the planned deadline for the completion of the survey was reached, an extension was necessary. This also compelled the ministry representatives to encourage the school principals to invite their teachers to participate in the research. A potential bias may have arisen during the identification of the survey sample and the interview participants. Namely, the participating schools were not selected randomly, but rather having in mind the above-mentioned criteria. Also, the choice of interview participants was based on the previous professional experience of the members of the Serbian expert team.

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4 The sampling method can be described as a stratified clustered approach.
3. POLICY FRAMEWORK FOR CPD IN SERBIA

Continuing professional development (CPD) of teachers is a legal obligation, prescribed by the Law on the Foundations of the Education System (2013). The Law defines, among other things, the competences (jurisdiction) related to the professional development of teachers and the process of quality assessment. In addition to the rights and obligations of teachers regarding their CPD, this law also defines teachers' advancement through title acquisition. Furthermore, it states that the funds for CPD are defined within the budget of the Republic of Serbia and within the budget of local self-government units, while the exact amount for each school is calculated based on the Professional Instruction for Class Formation and Mode of Financing in Primary and Secondary Schools (CENUS). This Law introduces the teaching licence, and defines how it is granted, suspended, and revoked. The main legal document for the field of secondary education is the Law on Secondary Education, which, however, only mentions teachers' CPD as a part of the schools' development plans.

Professional development is regulated in detail in the new Regulation on the Professional Development of Teachers, Pre-School Teachers and Professional Associates (2015). In this document, professional development, identified as an integral and mandatory part of teachers' development, is defined as acquisition of new and further development of existing competences. CPD is planned in accordance with the needs and priorities of education, with the priority areas identified by the Minister of Education, and on the basis of an overview of the developmental levels of all the competences required in the teaching profession. Moreover, the document defines the forms of professional development, the process of creating and developing teachers' personal development plans, as well as the volume and types of teachers' duties regarding their CPD. This Regulation was preceded by earlier regulations, which also regulated this area.

The Regulation on the Type of Professional Qualifications of Teachers, Professional Associates and Instructors in Vocational Schools (2011) determines the type of professional qualifications of teachers in two-year educational programmes and in three- and four-year secondary education in vocational schools. The required professional qualifications are defined for each teaching subject, according to which they are classified in the document.

The document Competence Standards for the Teaching Profession and Teachers' Professional Development (2011), intended for all teachers, defines teachers' competences, divided into four categories: (1) competences for teaching area, subject, and didactics; (2) competences for teaching and learning; (3) competences for supporting students' personal development; and (4) competences for communication and cooperation. The CPD programmes accredited by the Institute for the Advancement of Education (IAE) are classified according to these competences in the relevant programme catalogue (each programme needs to develop one of the listed competence groups). This document is intended to serve as a guideline for teachers' self-assessment, for the creation of CPD plans at the school level, and for the improvement of the teachers' CPD practice. The stakeholders interviewed for the present report pointed out several problems regarding the implementation of these standards in practice and the design of CPD programmes, which will be further discussed in Chapter 8 below (Professional Development Needs).

In addition to these documents, teachers' training and professional development are mentioned in several strategic documents. The most recent among them is the Strategy for the Development of Education in Serbia 2020+ (2012), with the accompanying Action Plan. It predicts that before year 2020, all participants in the education system on all levels will be taught by quality teachers of modern

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5 Currently, a public discussion on the Law on the Changes and Amendments to the Law on the Foundations of the Education System is being carried out.
training and preparation, and that the teaching profession's qualifications will be included in the National Qualifications Framework. Also, it predicts that the teachers' CPD will be carried out on the basis of accredited programmes of quality, while professional advancement will be based on the results of inclusive and systematic control of the quality of teachers' professional work. The Strategy states the claim for a full professionalization of the teaching profession in all stages of their professional life, through good initial education of all teachers and through continued development of their professional competences, quality scientific and professional research in the field of didactics, and through the establishment of interdisciplinary university centres. The main strategic policy would be the development of a national system of professional development of teachers at all levels, with the establishment (or improvement) of a developed system of evaluation of the teachers' quality, which should provide clear indicators for recognizing a teacher of quality.

Among other strategies, the Strategy for the Development of Vocational Education in Serbia (2006) is relevant. It recognizes the continuing professional development of teachers as a necessary process and a direct prerequisite for the modernisation of vocational education and training. The modernisation of this system will enable better teachers' preparedness for the implementation of new programmes, their full professionalization and continuing adjustment to the changes in the world of work. The concept of CPD offered in this strategy promoted the culture of continuous changes and a systematic approach to identifying the CPD needs and provision. The CPD plans and programmes are based on the needs and capabilities at the level of school, local self-government unit, teacher associations or groups of schools. The key elements of this new concept, as described in the Strategy, are: (1) development and improvement at the school level; (2) modern teaching and learning methods; (3) new information technologies; and (4) development of professional cooperation and partnerships.

The Strategy predicts a dynamic and open system of teachers' CPD, connected with all the relevant institutions (universities, scientific institutions, and educational administration), professional organisations, social partners, and expert groups.

3.1 Governance and stakeholders

At the policy level, the main stakeholders' representatives are gathered within the Council for Vocational and Adult Education. The Law on the Foundations of the Education System (2013) names this council as competent in the matters of vocational secondary education, specialist and craft education, adult education, work based education, and vocational training. The Council has 21 members who are notable representatives of the chamber of commerce, crafts, employers' associations, experts in the fields of vocational and adult education, economy, employment, work sector, social and youth policy, teachers from schools' associations and representative teachers' trade unions established in the territory of the Republic of Serbia.

The Law defines the Council's competence as monitoring and analysing the state of the mentioned segments of the education system, proposing measures for improvement, and participating in the preparation of strategies for the development and advancement of the said segments of education. The Council proposes to the Minister, among else, the list of educational profiles, additional quality standards for the work of vocational schools, qualifications standards, programme standards, national qualifications framework for the level of secondary vocational education, etc. Also, the Council discusses, takes a position and gives an opinion to the Ministry of Education, Science and Technological Development during the procedure for preparing draft laws, regulation proposals and other legal acts on issues of relevance to the educational fields within its competence.

In the interviews with stakeholders' representatives undertaken for the present report, it was reported that the establishment of the Council has had positive effects, given that the ministry is no longer the only actor in this field. The Council is the authorised proposer and no programme can enter vocational education without being proposed by it. It has been stated that Council members have attempted to influence other areas, which fall within the competence of the National Education Council, such as the
general education subjects taught in vocational schools. But, those attempts would seem to have faced opposition from the representatives of the teachers of these subjects, which they regard as important to teach. Interviewed VET Council members characterized these subjects as superfluous in vocational schools. It was emphasized by the interviewees that there are not many similar situations in the VET Council, in terms of these pressures, because teachers, and other stakeholders, are well represented on the VET Council. The results of the interviews also indicated that the policy making process does not make sufficient use of expertise and that there is a lack of awareness of the importance of such activity.

Thus, the employers’ associations do not provide enough essential feedback on the needed competences, and teachers are not included in the existing projects (e.g. in the projects related to dual education and mentor training VET teachers were not included). The interviewed stakeholders estimated that there is a lack of understanding of the education system by the business sector and that employers are not capable of fully articulating their needs and opinions. The overall assessment was that stakeholders are not sufficiently included in planning processes, but they are adequately represented among the policy-makers, mainly through the VET Council. Also, the jointly made decisions in this council often cannot be implemented in practice, primarily due to financial reasons).

The Strategy 2020+ recognizes as one of the problems in the current state of teacher education the fact that, due to the lack of standards and adequate legal regulations, the specialist education faculties place emphasis on pedagogical competences of future teachers but neglect vocational competences, while the conventional university faculties, from which subject teachers graduate, focus on vocational competences, neglecting pedagogical, psychological, didactical competences. As a consequence, according to the Strategy, teaching in vocational schools is almost always carried out by persons without pedagogical competences. Teachers of vocational subjects have often not passed initial teacher training, while the majority of them have no prior experience in their original vocation because the teaching position is usually their first job.

The Strategy states the need for continual skills development of teachers, both in disciplines of pedagogy and psychology and in their original vocations, based on an assessment of the educational needs of teachers and expert associates so as to avoid a training attendance purely as a formality. It also refers to the necessity to develop a methodology to measure the effects of an upgrading of skills and the development of a system of career guidance and counselling for VET teachers, which would also imply training of expert associates and teachers for these tasks.

Accordingly, the following development measures have been planned:

- to develop various models of skills development, including practical work by teachers in their original vocations, organised in companies or institutions;
- to develop teacher skills development programmes to increase their competences for inspiring creativity, innovation and entrepreneurship in pupils;
- to train all teachers to use ICTs in their teaching or in their preparation for teaching;
- to establish a system of measurement of effects of skills development based on a previously agreed methodology; and
- to establish a system of training for teachers to enable them to use the system of career guidance and counselling in secondary vocational education.

The Action Plan for the Implementation of the Strategy 2020+ includes a segment related to teachers’ education, without any special mention of VET teachers. One of the elements of this plan is the advancement of the system of teachers’ development, which includes the establishment of the CPD
system, the establishment of sustainable models of financing CPD, the introduction of trainings for developing crucial competences, and the analysis of the effects of CPD. The document also foresees the implementation of these activities by May 2020.

The Plan further includes the analysis and the reorganisation of the system of professional teacher support (by December 2016), as well as the elaboration of all the components of the CPD and professional advancement of teachers (by December 2017).

3.2 Salient issues

One of the important policy issues identified in the interviews conducted for this report is that, although several strategies and documents related to vocational education have been adopted in the last 15 years, these have remained on paper only, without real implementation in practice. The interviewees also expressed a certain suspicion and doubt regarding the possibility of a complete implementation of the most recent strategy (Strategy 2020+), due to the lack of capacities and financial resources or clearly defined jurisdiction. Doubt was also expressed in relation to the existence of political will to fully implement the new policy. Also, the defined deadlines for the realization of the Strategy were assessed as being too far in the future.

Another salient issue is the fact that the existing CPD policy is equal for all teachers and there are no separate regulations for VET teachers. Thus, all teachers have to possess a licence and master degrees. However, VET teachers often do not have a master degree, given that most work or have worked in business, and practical work experience is for them of equal importance as general pedagogical competences.

The interviewees’ dominant opinion is that certain regulatory provisions (especially those related to the teaching licence) should be common for all teachers, but others, e.g. induction to the teaching profession, should be regulated in a clearer and simpler manner for those who have graduated from faculties not offering teachers’ initial education, i.e. for those who will work as VET teachers. The prevalent assessment among the interviewed stakeholders was that these faculties do not recognize their own responsibility for the professional development of their graduates employed as teachers. In their opinion, the faculties should be more active as CPD providers.

3.3 Conclusion

The teachers’ CPD policy is articulated in several documents and is an integral part of the Serbian education policy, which is also confirmed in the most recent strategy for this policy area. Despite this legal framework, the reality of implementation shows different problems and difficulties, and there are doubts about how to overcome certain issues that arise in the implementation of CPD of VET teachers in particular. Furthermore, VET teachers are not recognized as a category of teachers with specific CPD needs, and this trend is continued in the Strategy 2020+, which places focus mainly on teachers of general education subjects and teachers in primary schools. Thus it remains to be seen to what extent and in which manner the CPD of VET teachers will further develop – as an integral part of the general CPD system for all employees in the education system, or as a special segment whose idiosyncrasies create the need for tailored solutions. This leads us to the main conclusion that the CPD of VET teachers has to be developed as a separate section within the total system of CPD.

In relation to the above the question of VET teachers’ initial education and of the legal requirement for all teachers to possess a master degree is also an issue. Separate regulations for teaching licenses for VET teachers are evidently required, while the issue of their initial education could be counterbalanced with a Master programme consisting of a package addressing five to six core teaching competences (planning, assessment, evaluation, interactive teaching, etc.). Such a programme could be offered in different modalities, e.g. part-time, on line.
<table>
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<tr>
<th>Main issues</th>
<th>Recommendations</th>
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<tbody>
<tr>
<td>■ Lack of capacities and resources for policy implementation</td>
<td>■ Develop the system of CPD of VET teachers as a separate component within the general CPD system</td>
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<tr>
<td>■ No clearly defined jurisdiction for policy implementation</td>
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<tr>
<td>■ Insufficient involvement of experts in the policy-making process</td>
<td>■ Raise awareness among experts and policy makers of the importance of experts’ participation in policy making</td>
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<td>■ Insufficient involvement of experts in the policy-making process</td>
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<tr>
<td>■ Insufficient involvement of experts in the policy-making process</td>
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<tr>
<td>■ Lack of feedback from the business sector</td>
<td>■ Strengthen effective social dialogue with teachers trade unions, employers’ organisations and employers</td>
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<td>■ Business sector lacks understanding of the education system</td>
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<tr>
<td>■ Employers cannot fully articulate their needs</td>
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<tr>
<td>■ Inadequate initial education of VET teachers (lack of pedagogical competences)</td>
<td>■ Develop a programme for initial education of VET teachers containing five–six core teaching competences (planning, assessment, evaluation, interactive teaching etc.)</td>
</tr>
<tr>
<td>■ Same rules and requirements equally applied to all teachers (possessing a master’s degree, induction etc.)</td>
<td>■ Establish separate regulations for the licensing of VET teachers</td>
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</tbody>
</table>
4. ORGANISATIONS AND INSTITUTIONS

The Law on the Foundations of the Education System (2013) identifies the Centre for the Professional Development of the Employed in Education, a unit within the Institute for the Advancement of Education (IAE), as the institution responsible for the advancement of the CPD system. Furthermore, the Centre is in charge of preparing and developing the standards of teachers’ competences and approving CPD programmes. These programmes are planned, coordinated, and organised by the Ministry of Education, Science and Technological Development, which also defines the priority areas. The accreditation of programmes is performed by the IAE and the Pedagogical Council of Vojvodina (for the national minorities).

Providers who can submit their CPD programmes for accreditation to the IAE include pre-schools, primary and secondary schools, student dormitories, higher education institutions, institutions and associations engaged in professional development. Furthermore, there are 11 regional centres for professional development, which also submit CPD programmes to the IAE. They are connected within the Network of CPD centres of Serbia, functioning as a non-profit organisation. These centres organise seminars and trainings for teachers, offer consultation services (choosing CPD programmes, participating in them, etc.) and access to different resources. They also organise programmes of horizontal exchange (learning).

4.1 Programme catalogue

In the IAE’s Catalogue of CPD Programmes for Teachers, Pre-School Teachers and Professional Associates for 2014/15 and 2015/16, 62 programmes for vocational secondary education (vocational subjects) are offered. Among the providers, the most numerous are universities/faculties (17), teacher associations (11), high schools (10), and NGOs and CPD centres (8 of each).

In the previous catalogue, for the school years of 2012/13 and 2013/14, a total of 75 programmes for vocational secondary education were offered, although some of them had as their target group not only VET teachers, but also teachers from other high schools and primary schools. A total of 57 programmes, covering 31 topics, were implemented\(^6\). These programmes were carried out by 20 different providers: 8 high schools, 5 NGOs, 2 faculties, 2 regional CPD centres, one upper-secondary school, one university and one teacher association. The biggest single provider was the teachers’ association (5 programmes), two high schools implemented three seminars each, and one high school, one faculty and one regional CPD centre implemented two programmes each. The rest of the providers implemented one programme each.

4.2 Cooperation and involvement

The stakeholder representatives interviewed for this report estimate that vocational schools, employers and professional associations participate in about 20% of the training programmes. Their assessment is that there is no particular cooperation between the providers; rather, each of them submits programmes to the IAE on their own, and continue to conduct the trainings if they get accredited. There is no partnership approach or cooperation in selecting topics or in selecting providers, which is the exclusive responsibility of the IAE’s commission.

The impression of the interviewees was that, in designing CPD trainings, providers are more focused on the profit to be made rather than teachers’ professional development and needs. Sometimes,

\(^6\) The data on the organised trainings were received from the IAE, with a remark that the number of organised programmes was actually greater, but the data on some of them had not been entered into the database because the providers’ reports did not contain all the required information.
organisations which submit programme proposals are not those whose primary work is in training and/or education. It often happens that individual experts in specific fields design their own programme, establish cooperation with an organisation, which then officially applies for accreditation. Thus it is often the case that in practice individuals are delivering the trainings, and not the organisations which are officially named as the provider. Therefore, the number of competent organisations/providers might be smaller than the number of those formally listed as deliverers of trainings in the catalogue.

As already mentioned, the university faculties do not recognize their responsibility for the professional development of their graduates who work as teachers, neither in terms of didactics or vocational specialism, and as a result are not particularly engaged in this process. Moreover, companies and employers are, in the experience of the interviewees, more focused on organising internship programmes for students than teacher trainings.

4.3 International projects and donors

The interviewees for this report mentioned several international donors and projects as relevant. Among them are CARDS and IPA projects which always include a teacher training component, although there are no specific projects for CPD. GIZ also offers support to vocational schools. The interviewees underlined that there is a difference between the schools which participate in such projects and significantly improve their teachers’ competences, and the schools which have not had this kind of direct support.

4.4 Conclusion

Both the findings from the interviews and the data presented in the IAE’s catalogue indicate that the organisations and institutions involved in the provision and design of CPD programmes are few and not particularly varied. While the issues indicated pertaining to the character of the programmes offered will be discussed more in detail in the following chapters, it can be concluded here that the organisations which seem to be least involved in VET teachers’ CPD are universities/faculties and companies. A generally weakened economy, which represents an overarching problem, is the reason why some schools do not have adequate partners from the business sector. This is the case with schools in economically underdeveloped and/or poor regions, which do not have opportunities of jointly organising internship programmes for their students. Schools in areas with developed economic capacities can establish good cooperation with companies and organise student internship programmes, which also offer opportunities for teachers to learn about new technologies and innovation.

<table>
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<tr>
<th>Main issues</th>
<th>Recommendations</th>
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<tr>
<td>■ No partnership or cooperation in selecting topics or providers of CPD programmes</td>
<td>■ Support dialogue among all relevant stakeholders (research institutions, education agencies, ministries of education, chambers of commerce, local communities, universities)</td>
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<tr>
<td>■ No particular cooperation between CPD providers</td>
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<tr>
<td>■ Providers are focused on their own profit instead of on teachers’ needs</td>
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<tr>
<td>■ Universities and faculties, as well as employers, not engaged in designing provision</td>
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<td>■ High quality CPD is sometimes associated with short-term donor projects with limited participation</td>
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5. VOLUME, MODE AND CHARACTER OF CPD PROVISION

As already stated, the IAE’s catalogue for 2014/15 and 2015/16 offers 62 programmes for vocational subjects. The predominant topics are those related to didactics and teaching methods (14), tourism and hospitality (9), electronics (8), and transport (5). Entrepreneurship dominates among the topics of the 31 programmes from the previous catalogue (for the school years of 2012/13 and 2013/14). It was covered in different ways in four programmes. Several programmes are related to teaching methods and the assessment of student performance, as well as to didactics of specific subjects, such as economics, tourism, electro-technics, and mechatronics. There are also a few programmes covering the application of computer software in teaching (CAD programmes, Excel), and internet presentations or audio technology. A total of 558 VET teachers participated in these programmes, and the seminars lasted a total of 960 hours. The total number of participants in the programmes categorized in the secondary vocational education (vocational subjects) group was 1,417.

This catalogue does not separate CPD of VET teachers as a special category; rather, programmes are offered to all teachers. What is done in terms of categorization is the classification of the offered programmes, one of which is the above mentioned ‘secondary vocational education (vocational subjects)’. Moreover, target groups are defined for each programme. However the training offer emphasis towards general and primary education was described as one of the shortcomings of the existing catalogue by the interviewees. Although the majority agreed that not enough vocational trainings are available, their views of the PPM (pedagogical, psychological, methodical) programmes differ, primarily among the school principals. Namely, some of them think that there are plenty of trainings related to general work with students and teaching plans, that these are the most frequently occurring themes, which has resulted in a certain saturation among the VET teachers. Others, however, state that there can never be too many of these trainings, because teachers’ primary competence is teaching.

The interviewed principals agreed that VET teachers are more interested in trainings in which they become acquainted with modern innovations in technology and equipment, necessary both for the purposes of their teaching and for the purposes of their own professional development. Also, teachers, especially instructors, lack training in didactics of vocational subjects. The subject of labour law was also mentioned as an area requiring greater attention in CPD programmes.

An important problem of the CPD of VET teachers, according to the principals, is a lack of textbooks, especially for the new profiles, but also a lack of equipment for practical teaching.

The interviewees further claimed that a rationalization of CPD is needed, given the decreased number of teachers, who are, moreover, unequally distributed within the country. There are too many programmes offered (around 1,100 in total) and that number should be decreased, considering that at least 40% of them do not get implemented. They are assessed to be uneconomical and too lengthy, making it difficult for teachers to attend them, especially for those who have to travel to a different city. Suggestions were also made that the existing Regulation needs to be changed; in fact, efforts in this direction are already under way. The interviews revealed that a working group for this question has been formed within the IAE, although no further information is available from official sources. Concerns were raised that the presented changes are only cosmetic.

Interviewees also voiced the concern that the system of collecting points through CPD was distorting decision making, because teachers were selecting programmes to obtain points rather than to benefit from the CPD.
5.1 Survey results

The results of the survey carried out for the present report show that, over the past year, the respondents have spent most of their CPD hours participating in organised in-service training – 22 hours out of school and 25 hours in school, on average. However, CPD is not evenly shared out: one third of the respondents have not had any out of school training – 34% have had no in-service training out of their school.

The respondents have, on average, received less CPD focusing on their vocational specialism – the average number of hours of participation in trainings with this focus is 15. The number of hours spent in other types of CPD activities – conferences and observation visits to schools, are considerably lower (an average of five hours each), while observation visits or trainings in business premises took up to eight hours of the teachers’ yearly CPD activities, on average.

It is important to note that one half of the respondents (46%) have not had any CPD focusing on their vocational specialism, while two thirds of them (66%) have not had any trainings/observation visits in business premises. Statistics are similar for conferences and observation visits to other schools – 64% and 60% of teachers have not engaged in any of these activities. Such results show that a significant majority of VET teachers engage primarily in those CPD activities organised by the school they work in, which would indicate either a lack of motivation to engage in CPD or a lack of relevant offer elsewhere. Both issues will be further explored in the following chapters of this report. Other possible factors include the cost of training and funding, which will also be explored.

The unsatisfactory cooperation with the business sector, indicated in the previous chapter, was confirmed by the survey: two thirds of the respondents did not spend any time in visits or trainings in business premises.

Most of the surveyed VET teachers have not engaged in programmes leading to formal qualifications over the past 12 months (only 13% of them have). Around one third has participated in teachers’ networks, individual or collaborative research, and mentoring (36%, 33%, and 35%, respectively).

When it comes to the duration of the CPD programmes respondents have indicated greater participation in shorter programmes. The programmes lasting less than one day were sometimes attended by 60% of the respondents, and often attended by 23%. The programmes of duration between one and two days were attended sometimes by 70%, and often by 16% of the respondents. Programmes lasting three days or more were sometimes attended by 49% of the respondents. Interview findings indicated that this result is mainly related to funding issues, and the fact that longer programmes cost more. When schools/teachers choose programmes to participate in, the most frequently cited priority is the price-awarded points ratio. Another factor is geographic distance, i.e. the interviewees’ state that those programmes that involve travelling to another town are especially difficult for teachers to attend.

For roughly one third of the respondents, most of these activities have included colleagues from their own school and opportunities for active learning (34% and 30%, respectively). Collaborative learning and new technologies were limited – for only 24% of the respondents they were included in most of the CPD activities.

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7 Further analysis undertaken by the ETF reveals that if those that did not participate in training at all are excluded then, on average, Serbian VET teachers benefitted from 24 hours of in-service training out of schools and 20 hours within schools.
8 Average of 24 hours excluding those that did not participate in this kind of training
9 Averages of 15 and 13 hours excluding non-participants
10 Average of 20 hours excluding non-participants
Another important insight offered by the results concerns the distribution of CPD hours across groups of teachers with different number of years of teaching experience and of years spent in the current school. Namely, the respondents with fewer than five years of total teaching experience have, on average, had fewer CPD hours in all types of CPD activities than their colleagues with six or more years of experience. Likewise, those with fewer than three years of work in the current school have had fewer CPD hours in almost all types of the activities than their colleagues who have worked in the current school for longer than three years.

5.2 Conclusion

The above-presented results lead to the conclusion that the share of VET teachers in CPD programmes is small on average, especially those with little teaching experience, either in total or in their current school. The interviews indicate that teachers’ participation varies from school to school and is largely dependent on how much support teachers receive within their schools, particularly from the principals. The funding issues and the price of CPD programmes is, once more, an important factor and a barrier in selecting and taking part in these activities.

Another significant aspect to consider is the attitude towards the programmes focusing on vocational specialism and those focusing on the so-called PPM competences. The interviewees’ predominant claim that there is a substantial lack in the offer of the former, and that teachers are more interested in developing their vocational knowledge and skills, is corroborated by the survey results showing that almost one half of the respondents has not participated in such activities in the past year. Regarding the teaching competences, the interviewees’ opinions are somewhat divided: there are claims both that there are more than enough offered programmes in this area, and that there can never be too much of them. The teachers’ views on the impact of the existing offer on their teaching will be discussed in the next chapter.
<table>
<thead>
<tr>
<th>Main issues</th>
<th>Recommendations</th>
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<tbody>
<tr>
<td>■ Too many programmes offered in the CPD catalogue</td>
<td>■ Decrease the number of CPD programmes offered in the catalogue, in accordance with the declining number of teachers</td>
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<tr>
<td>■ Many programmes do not get implemented at all</td>
<td>■ Develop CPD programmes for VET teachers</td>
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<tr>
<td>■ Not enough vocational trainings offered</td>
<td>■ Develop cooperation with employers and business sector</td>
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<tr>
<td>■ Lack of trainings in vocational didactics</td>
<td>■ Disseminate information regarding these master programmes among VET schools and teachers</td>
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<tr>
<td>■ Lack of textbooks and equipment</td>
<td>■ Take advantage of strong collaborative practices among teachers</td>
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<td>■ Practical teaching, in most cases, can only take place at business premises</td>
<td>■ Conduct further research on possible causes of this imbalance and with a special focus on younger/less experienced teachers</td>
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<tr>
<td>■ Around one third of VET teachers received no formal CPD in the last 12 months</td>
<td>■ Selecting CPD programmes to attend often is a matter of assessing price-awarded points</td>
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<tr>
<td>■ Many VET teachers do not participate in any training or visits to business premises</td>
<td>■ Many programmes are too costly or of too long duration, which makes it difficult for teachers to attend them (because of teaching obligations or additional expenses)</td>
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<tr>
<td>■ Lack of funding for master programmes specifically designed for VET teachers</td>
<td>■ Younger teachers and/or those with fewer years of teaching experience have fewer hours of CPD activities than their older/more experienced colleagues on average</td>
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6. DESIGN, CAPABILITY AND QUALITY OF CPD PROVISION AND PROGRAMMES

As already mentioned, the Ministry of Education, Science and Technological Development and the IAE define priority areas for professional development, and providers design programmes on their own and submit them for accreditation. The submitted programmes are assessed on the basis of whether they contribute to the development of teachers' competences, achievement of the education goals defined by the Law, if the programmes are logically connected to each other and coordinated, and the references, experience and skills of the providers and the training designers are related to the programme's theme. Once the programme has been delivered, the provider submits a report to the IAE, as well as evaluation forms filled in by the participants.

In the interviewees’ opinion, not all the stakeholders are involved in the process of designing the CPD offer. The IAE’s representative mentions that the IAE has considered administering a survey on CPD needs at the national level, but concluded that it would have resulted in statements of personal preferences and needs of individual teachers. She states that the needs should be assessed at the school level, that the management should estimate what the teachers in the particular school need, and that they should be trained to do this and to use the results of development planning. The interviewees also suggest that this planning process should be raised to a higher level – the VET Council and the Associations of Vocational Schools.

6.1 Training of trainers

There are no particular programmes for the training of trainers. The assessment from the interviews is that the IAE could do this, but their employees would first have to undergo a training themselves to be able to give such trainings. One of the needs recognized in the interviews is the development of training skills, given that some of the experts who conduct CPD programmes are experts in their own field (e.g. university professors), but they do not possess sufficiently developed training skills. Also, it is necessary to develop the skills of monitoring implemented programmes, and one of the proposals is to accredit individuals who would be responsible for educating trainers and assessing the quality of their work every year or two.

6.2 Accreditation and evaluation of CPD programmes

The impression of the interviewees is that the accreditation system pays more attention to the administrative issues and focuses less on the quality. The accreditation procedure was described as complicated, while the question of the quality standards for CPD seminars was also raised. The quality of the offered trainings was said to vary with no adequate monitoring of the quality or the effects. The IAE’s evaluation forms used for the CPD programmes were assessed as unreliable.

Some of the interviewed stakeholders stated that the IAE does not pay enough attention to the technological changes and the new skills that teachers need, remaining within traditional didactic and pedagogic frameworks. Regarding external training providers, the assessment of their quality was considered an important question. In order for professional training providers to have their main focus on teachers’ CPD, and not on the profit they can make, a greater effort was deemed necessary by the IAE in monitoring programmes. Considering that the regional centres for professional development currently do not have the right to assess the quality and if the IAE lacks the capacity, it was suggested that this possibility could be given to the education advisors and the regional centres. It was proposed that the IAE, which currently does have the right to provide CPD services, could contribute directly to provision. In this way, individuals who have developed the changes in plans and programmes could explain and present them directly to teachers.
6.3 Survey results

The respondents in our survey assessed how much positive impact the CPD activities they have participated in the past 12 months have had on their work, which can be taken as an indication of the programmes’ quality. The percentages of respondents who recognized high positive impact on their teaching for CPD programmes were for the following areas:

- knowledge and understanding in the particular subject field (51%);
- knowledge of the curriculum (51%);
- ICT skills for teaching (49%);
- new technologies in the workplace (47%); and
- updating professional knowledge and skills in relation to current practice in the workplace (47%).

When the percentages of the respondents who recognize both high and medium impact are combined, the largest impact has been achieved by the programmes focusing on:

- knowledge and understanding in the particular subject field (89% = 51% high + 38% medium impact);
- knowledge of the curriculum (89% = 51% high + 38% medium impact); and
- student evaluation and assessment practices (88% = 46% high + 42% medium impact).

On the other hand, the programmes assessed to have had no or low positive impact are largely those with a focus on:

- approaches to developing cross-occupational competencies for future work (20%);
- approaches to individualised learning (18%); and
- updating professional knowledge and skills in relation to current practice in the workplace (18%).

Significantly, the percentages in this category (low or no positive impact) range between 14% and 20%; therefore, there are no significant differences among the programmes in these terms. Overall, the majority of respondents estimated that the activities in which they have participated have had either a moderate or large positive impact on their work.

It is interesting, although probably not surprising, to note that the average percentage of those who recognize a high positive impact of the different suggested topics is the highest among those under 30 years of age (55%), and the lowest among those above 50 years of age (38%). And, as expected the opposite is true for the average percentage of those who recognize no or low positive impact.

Another important insight from the survey is the percentage of respondents who have not participated in any training on the suggested topics. The least attended programmes have been those relating to teaching in a multicultural/multilingual setting (64% of the respondents have not had such training), to career guidance of students (57%), to developing cross-occupational skills in students (52%), to updating the teachers’ professional knowledge in relation to the current workplace practices (52%), and to classroom management (51%). It is particularly worth noting that 48% of the respondents have not participated in activities related to the knowledge in their subject field, while 39% have not attended programmes related to the pedagogical competences in their subject field. The majority of the respondents have attended programmes related to student evaluation (74%), followed by those
related to working with students with special needs (64%), ICT (62%), approaches to individualised learning (61%) and teaching in the subject field (61%).

6.4 Conclusion

As presented previously evidence in this chapter also supports the view that the existing offer of CPD trainings is not designed in a cooperative and systematic manner, and that it does not reflect the needs of teachers. Similarly, accreditation, evaluation and quality assurance were brought into question by the interviewed stakeholders, and it is clear that these processes are in need of thorough reform and development as well as addressing the quality of providers, and in particular their training skills.

Even though the majority of respondents reported a medium or high positive impact on their teaching as a result of participation to CPD trainings, it cannot be ignored that large numbers of them have not had any training on significant topics in the past year e.g. 48% with no training on the subject-specific knowledge, 52% with no training related to updating their professional knowledge and skills, 47% with no training on new technologies in the workplace etc.). This suggests a mismatch between provision and need as there is evidence that a majority of vocational teachers identify needs in these topics.

Suggestions for improvement

- Have a better-informed design process.
- Establish systematic monitoring and evaluation of CPD.
- Reduce the number of programmes overall but introduce more programmes for VET teachers.
- Introduce programmes of shorter duration, even as short as an hour or two, or structured in several modules.
- Introduce mentors' and trainers' training as a special segment of CPD.
<table>
<thead>
<tr>
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<th>Recommendations</th>
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<tr>
<td>■ Not all stakeholders are involved in designing the CPD offer</td>
<td>■ Increase stakeholder contribution to CPD design, for example, through greater involvement of VET Council, Association of Vocational Schools</td>
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<td>■ Inadequate flows of information about training needs feeding the design of CPD</td>
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<td>■ No programmes for the training of trainers</td>
<td>■ Introduce programmes that would develop training skills of providers</td>
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<td>■ Complicated accreditation procedure that focuses more on administrative issues and less on quality</td>
<td>■ Support/encourage development of organisations which would be professional training providers</td>
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<td>■ No programmes that would develop monitoring skills for implemented programmes</td>
<td>■ Introduce accreditation of individuals who would be responsible for educating trainers and assessing the quality of their work (every one–two years)</td>
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<tr>
<td>■ Varying quality of CPD activities and providers</td>
<td>■ Include the IAE as one of the providers</td>
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<tr>
<td>■ No adequate monitoring of quality or effects</td>
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<tr>
<td>■ The CPD catalogue does not take enough into account new technologies</td>
<td>■ Establish systematic quality assurance and monitoring of programmes</td>
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<tr>
<td>■ Unrealistic requirement of CPD programmes proposed for the catalogue to develop one set of competences</td>
<td>■ Use the capacities of regional CPD centres to support quality assurance and monitoring</td>
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<td>■ Teachers are required to equally develop all four groups of teaching competences during a year, despite the lack of funds and adequate offer</td>
<td>■ Further train school management and leaders to assess the school’s and teachers’ CPD needs</td>
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<tr>
<td>■ Unrealistic requirement of CPD implementation of competence-based standards for CPD</td>
<td>■ Support the providers in developing programmes that are focused on developing new technologies</td>
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<td>■ Set achievable requirements for CPD implementation of competence-based standards for CPD</td>
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7. SCHOOL-BASED PROVISION

School-based provision can be classified into two main categories: teacher’s induction programmes (traineeship) and mentorship, and CPD trainings and programmes conducted by internal and external providers in school. Traineeship and mentorship are regulated by law, in a way that the interviewed stakeholders described as clear and precise, and consequently without particular problems in practice. The aspect that, according to the interviewees, poses major difficulties is teachers’ initial education.

7.1 Teachers’ initial education

As already mentioned, the law requires all teachers to have a master degree. This represents a problem for many teachers of vocational subjects, because they find it difficult to return to studies given family and work obligations. Another significant barrier is posed by the price of these studies. Initial education of teachers was also said to be inappropriately designed – too much theory and not competence-based. Non-teachers’ faculties teach their students to become members of a certain profession (e.g. engineers), and not to become teachers. Graduates come to their teaching career at a later date, and rely on mentors’ support to gain additional training within the school. The current structure of the university system does not allow enough mobility or flexibility, yet students of non-teachers’ faculties need to acquire a sufficient number of PPM credits during their original studies, through cooperation with the faculties that provide this kind of training.

7.2 Traineeship, mentorship and licensing

The Law on the Foundations of the Education System defines the procedures related to teacher traineeships. A trainee is defined as a person who is employed in this position for the first time. In that sense, it is prescribed that the school selects a mentor for the teacher-trainee. During the first three months, the trainee works under direct supervision of a teacher assigned as a mentor who possesses the teaching licences. After completing the induction programme and one year of teaching experience the trainee acquires the right to take the licence exam. The Minister prescribes, among else, the programme of mentors’ training and the induction programme for teachers. The majority of the survey respondents had participated in an induction programme when they were first employed as teachers (72%). More than a half of them also participated in informal induction activities (54%), while 58% took part in a general and/or administrative introduction to the school.

The Regulation on the Licence for Work of Teachers, Pre-School Teachers and Professional Associates (2008) provides more details on the induction programme and the licencing process. A mentor can be a notable teacher or professional associate who possesses the licence, one of the prescribed titles or at least five years of work experience in the field of education. The mentor is selected by the principal, by means of an official document, and on the basis of the opinion of a professional organ – in the case of teachers, that is the council for the subject area. If the school does not employ a suitable individual, a mentor from a different institution can be assigned. A mentor introduces their trainee to work through: (1) helping in the preparation and execution of teaching; (2) assisting in classes for at least 12 hours during the traineeship; (3) analysing the educational-pedagogical work in order to monitor progress; and (4) helping in the preparations for the examination. After a year of traineeship, the mentor submits a report to the principal. During the traineeship, both the trainee and the mentor keep records of their work.

The examination of whether the trainee has mastered the programme is performed through organising and conducting one lesson in school. A trainee who has fully mastered the programme has the right to take the licence exam. The exam consists of a written part (lesson preparation) and an oral part (examination of knowledge, skills and abilities for independent teaching, of the ability to resolve
concrete situations in pedagogical practice, and of the knowledge of regulations in the field of education). During the exam, the trainee’s knowledge of pedagogy and psychology is also checked if they had not passed these exams during their initial education. The expenses of the first examination are covered by the school where the trainee is employed, and the expenses of any repeated examinations are at the candidate’s own costs.

The examples offered in the interviews confirm the implementation of the above described procedure in practice. The procedure is described as concrete and presenting a clear role division. The existing legislation is said to represent progress compared to ten years ago, and the same is valid for its implementation in practice. One of the interviewed principals explained that teacher trainees, under the guidance of the school psychologist or pedagogue, first learn to read teaching plans and programmes, then they write global and operational plans, based on competences and outcomes. The mentor is chosen by the school pedagogue or principal taking into account the experience of potential mentors and the needs of trainees. Interviewees mentioned that being a teacher’s mentor is a time consuming undertaking – 12 hours of attending lessons a week, controlling the lesson preparations, preparing the candidate for the examination before the school committee, etc.

There is no designated compensation for the mentors, but schools try to offer some form of compensation. Mentors receive 5 hours a week (out of the 40-hour work week) for the mentoring, and the number of hours they need to spend on other duties, on preparing students for competitions, and so forth, can be reduced. There is no special training for mentors. In the school year of 2012/13 the IAE organised a training for 100 trainers of mentors, within an SDC project. A law that would better regulate the mentors’ status is needed. Only 12% of the teachers surveyed currently have an assigned mentor; half of these (32 out of 67) are currently in their traineeship programme. One third of the respondents previously served as mentors (37%), while 13% received training to support their mentoring work.

7.3 In-school CPD activities (internally and externally provided)

When it comes to teachers’ cooperation and joint work on preparing lessons, the interviewed stakeholders estimate that these activities are present (around 50%), but that they depend on how interested teachers and schools are in them. The same is said for in-house CPD (one to two seminars a year). The volume of school-based CPD varies from school to school. The interviewees estimate that schools organise 50% of CPD activities on their own (internally), while around 20% come from external providers.

It is further stated in the interviews that horizontal learning is more present in primary than in secondary schools; the latter still place a larger focus on the content of subjects than on learning as a process. A large majority of teachers’ surveyed had engaged in planned or informal discussions with other teachers, school management and advisors: 80% participated in planned discussions with other teachers, 70% in planned discussions managers/pedagogical advisors, 90% in informal discussions with these two groups.

These results show that there is a strong collaborative practice within schools and this is likely to be of great value to discussion, joint planning and reviewing, and generating new materials needed to improve teaching and learning and skills development. However, research demonstrates that collaborative practice can be particularly effective when it is supported by external expertise, good practice from other schools or from industry.
7.4 Internal and external evaluation

Regulation on the Quality Assessment of Schools (2012) is the relevant legal document for this area referred to explicitly by some of the interviewees. According to one of the interviewees, however, many secondary schools are not acquainted with this document and, in the process of self-evaluation, use the earlier Handbook for Self-Assessment and Assessment of Schools (2005), developed within a joint project of the Ministry of Education and the British Council. Therefore, both of these documents will be briefly presented here.

The Handbook for Self-Assessment and Assessment of Schools (2005) recognizes four key assessment areas, as well as assessment indicators and tools. The key areas are:

- school programme and yearly work programme;
- teaching and learning;
- student performance;
- student support;
- ethos;
- resources; and
- management, organisation and quality assurance.

Seen from the teacher's point of view, self-assessment is defined as a continuing process of implementing, analysing, correcting and planning one's own teaching practice and contribution to the school's functioning. This document recommends that schools form their own self-assessment teams.

The Regulation on the Quality Assessment of Schools (2012) regulates, among other things, the foundations and measures of self-assessment and assessment. Self-assessment is organised and coordinated by a Team for Self-Assessment, whose members are representatives of professional bodies, the council of parents, the student parliament and the school's managing body. This team prepares the yearly self-assessment plan, which is an integral part of the school's yearly work plan. The subject of the plan is one or more assessment areas defined by the schools' quality standards, and it includes planned activities, a time frame, actors and outcomes of activities, instruments and techniques of self-assessment. A development plan is made on the basis of the self-assessment report.

External assessment is performed by the inspection from the ministry and the Institute for the Quality Assessment of Education. It is performed on the basis of the analysis of records and documents, of immediate inspection of teaching (at least 40% of a teacher's lessons, with the external evaluator's presence for at least 20 minutes during the lesson) and of conversation with the employees and the principal. In the interviews carried out for this report, the external evaluation and the quality standards are assessed positively in the sense that there is a clear procedure to be followed. Nevertheless, the interviewees think that the monitoring is performed with a greater focus on the form than on the essence. One of the principals also has objections against the manner in which external evaluation is carried out and against the evaluators' qualifications (e.g. they do not spend enough time at the lessons, they are not experts in the given subject).
Further remarks were made against the quality standards for schools, which are deemed too broad, the high administrative burden, the lack of training in external evaluation, and the inertia of the competent institutions. Secondary schools' standards for external evaluation were adopted only recently, in late 2014, therefore their implementation has only just started, but the existing procedure was described as too administrative and quantity-oriented than quality-focused. Certain interviewees mentioned the need for educational advisors to be assigned for each sector in schools.

On the other hand, the interviewed representative of external evaluators remarked that, although indicators for self-assessment exist, teachers always assign themselves high marks, so there is not much room for improvement. In external evaluation, however, lower marks for teachers’ competences are regularly given. It was noted in several interviews that self-assessment is not being performed in a serious manner, being rather superficial, but it is also stated that this varies from school to school and depends on the attitudes of the principal and the school management. Since it is a legal requirement, it is performed as such.

It is difficult to monitor the effects of teachers’ CPD, and how it should be done – whether through the changes in teachers’ behaviour, through student performance, through communication skills, professional empowerment or similar. The interviewees’ assessment is that the problem lies in the fact that there are no agreed measurement instruments at the national level. One starting point could be undertaken by measuring the current state and define three-year priorities.

Regarding the cooperation of schools with organisations which could provide CPD interviewed principals reported different experiences. They cooperate with university faculties by organising vocational seminars, while cooperation with professional associations occurs with varying success – it depends on the individual association but the issue of teacher training for those who have graduated from non-teacher faculties remains an issue. The interviewed are of the opinion that there should be one institution in charge, given that there are currently disagreements between faculties regarding their responsibilities. Companies are rarely mentioned in this respect in the interviews.

7.5 Conclusion

The existing procedures for the induction of new teachers, mentorship and licensing are implemented, but with certain difficulties. Namely, there are no special trainings for mentors and their status is not adequately regulated. Furthermore, the mentorship duties bear significantly on the mentors’ workload, and at the same time no special compensation is received.

The survey indicates that a certain percentage (28%) of the teachers have not participated in an organised induction programme, which is a matter requiring further investigation.

As in the previous chapter, the cooperation and collaboration of teachers within one school largely depends on the support provided by the school management and on the overall atmosphere and attitude to this kind of activity. Most of the school-based CPD is provided internally, while a smaller percentage is conducted by external providers. Regarding internal and external evaluation, the related procedures are well defined, but VET schools seem to be somewhat less well informed in this regard. The external assessment practice appears to focus more on fulfilling formal requirements than on the essential quality of teaching. At the same time, there are remarks that VET teachers and school management are not adequately trained to perform self-assessment.

When it comes to the assessment of CPD effects, there is a lack of agreed indicators for measuring them, requiring such instruments to be introduced at the national level.
<table>
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<tr>
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<tr>
<td>■ Inadequate initial education of teachers, with a strong focus on theory</td>
<td>■ Restructure teachers’ initial education into competence-based programmes with</td>
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<td>and not enough (or any) teacher training</td>
<td>a practical focus</td>
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<tr>
<td>■ Restructure teachers’ initial education into competence-based</td>
<td>■ Reorganise university programmes to allow students of all vocational</td>
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<td>programmes with a practical focus</td>
<td>specialisms to acquire the necessary teaching (PPM) ECTS number during their</td>
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<tr>
<td>■ Reorganise university programmes to allow students of all vocational</td>
<td>initial studies</td>
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<tr>
<td>specialisms to acquire the necessary teaching (PPM) ECTS number during</td>
<td>■ Establish an institution in charge of CPD of VET teachers which would</td>
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<td>their initial studies</td>
<td>coordinate CPD programmes provided by universities and faculties</td>
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<td>■ Mentorship represents significant additional workload for teachers-</td>
<td>■ Legally regulate the status of mentors</td>
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<td>mentors</td>
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<td>■ No special compensation for mentors</td>
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<td>■ No regular training programmes for mentors</td>
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<td>■ External evaluation focuses more on formalities than essence</td>
<td>■ Define instruments for assessment of effects and use them as the basis for</td>
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<td>■ Qualifications and training of external evaluators questioned</td>
<td>accreditation</td>
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<td>■ Quality standards for schools assessed to be too broad</td>
<td>■ Review the process of internal school evaluation to see whether it can help</td>
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<td>■ No national standards for assessment of effects</td>
<td>to inform the identification of professional development needs and the</td>
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<td>■ Teachers’ self-assessment not reliable enough</td>
<td>evaluation of CPD</td>
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<td>■ Define instruments for assessment of effects and use them as the basis</td>
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<td>for accreditation</td>
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<td>■ Review the process of internal school evaluation to see whether it can</td>
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<td>help to inform the identification of professional development needs and</td>
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<td>the evaluation of CPD</td>
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8. PROFESSIONAL DEVELOPMENT NEEDS

The IAE has published the Handbook for Planning Professional Development and Advancement (2009), which offers guidelines including the following elements for planning professional development to schools:

- analysis of the state of CPD in the school;
- identification of the potential, capacities, resources, and deficits, both of individuals and of the school as a whole;
- identification of the needs of individuals and the school;
- creation of yearly personal CPD plans for all employees;
- creation of a yearly teachers' CPD plan at the school level;
- regularly informing the employees regarding CPD;
- continuous reporting to the employees; and
- reporting on the implementation of the plan for CPD and advancement at the school level.

Furthermore, the development of teachers' yearly personal CPD plan should include an analysis of an individual work biography, a self-assessment of competences, needs, and interests, of the school's developmental directions and priorities, and the possibilities of achievement. This plan should be an integral part of the school's plan. The questionnaire for teachers to self-assess their competences, created by the IAE, also offers help in this process. The handbook states that the school's yearly CPD plan is proposed by the principal, who is also responsible for its implementation, while the school management is there to adopt the plan. The principal develops an operational plan on the basis of the yearly plan. For the purposes of its development, a team can be formed (comprising the principal, professional associates, heads of the subject teachers group). The plan should include: (1) themes and forms of CPD; (2) name of the employee who will attend or lead the given CPD activity; (3) distribution of different forms of CPD in accordance with the planned time frame; and (4) level at which the CPD is realized in the school.

Interviewed principals described how this functions in their schools. According to one of the principals, the assessment of teachers' CPD needs is carried out by the school pedagogue and psychologist who, based on their assessment, offer recommendations, which are then considered by the principal. After further consultations with teachers and, if necessary, with students, the principal makes the decision. Alternatively, a seminar offered in the IAE's catalogue is selected based on its alignment with the goals from the school's development plan, an empty list is generated and offered to teachers to sign their names and thus state their interest in participating. Teachers usually sign because they need CPD points, and less frequently because they really need the knowledge and skills. Another practice is to choose those seminars that will yield most points for least money. A prevailing opinion among the interviewed was that, for the most part, there is no difference made between personal preferences and school needs during this process. Teachers attend seminars in order to fulfil their own obligation, no matter whether they choose the programmes on the basis of their own needs, accessibility or the principal's decision. The aggravating circumstance is that it is often impossible for VET teachers to acquire the demanded number of CPD points in practice, and another big obstacle is the lack of funds. Therefore, attendance to trainings often comes down to simply fulfilling requirements, as already mentioned. Another difficulty mentioned in planning teachers' CPD is
the fact that this process is also the responsibility of the school's professional associates, aside from the school management and expert team. However, these associates are knowledgeable in the field of general didactics and teaching, but are not experts for didactics of vocational subjects. The need for the existence of educational advisors for each sector is again cited in relation to this. In the opinion of this report's author, this would, however, be the most difficult solution to implement, due to the fact that the number of advisors in some regional school departments is very small (e.g. one of the largest school departments, the one of Novi Sad, employs only seven–eight educational advisors). Also, introducing advisors for each sector would mean a threefold or fourfold increase in the number of employees for some school departments.

In some of the interviews, the principal's qualifications, or lack thereof, were cited as problematic, for example when the principal is a teacher of a general subject. Also, some of the interviewed principals state that, due to their administrative and other duties, they do not have much time to devote to the monitoring of teachers' CPD. The situation is not helped when the school covers several sectors, while the principal has professional knowledge of only one of them. On the other hand, the interviewed educational advisor was of the opinion that teachers' self-assessment is not reliable, that teachers lack the knowledge of teaching quality standards, and that they need to be trained in this area. Moreover, they lack awareness of what teaching skills they lack – they often blame poor results on students. Also, the advisor stated that professional associates in schools are poorly trained and that they use obsolete methods, while secondary school principals are less well informed than their primary school colleagues. It was mentioned that in the former self-assessments are performed using the obsolete, above mentioned, 2005 Handbook, and not the more recent Regulation on the Quality Assessment of Schools (2012). The advisor estimated that around 40% of secondary schools are poorly informed.

### 8.1 Professional standards

When it comes to professional standards, they are defined for teachers in general, with nothing specific for VET teachers. The document Competence Standards for the Teaching Profession and Teachers’ Professional Development (2011) defines four categories of competences, and these are also used for the classification of CPD programmes in the IAE’s catalogue. They are competences for:

- teaching area, subject, and didactics;
- teaching and learning;
- supporting student’s personal development; and
- communication and cooperation.

The purpose of this document is to offer guidelines for teachers’ self-assessment in the process of professional development planning, for professional development planning at the school level, and for improving the practice of teachers’ professional development in all the stages of their work.

Regarding the practical implementation of these standards, the interviewees stated that a problem occurs when classifying the programmes from the IAE’s catalogue according to these competences. Namely, each programme is supposed to correspond to one of these four categories of competences, which is difficult to achieve in practice, given that programmes usually develop more competences, and not just one in isolation.

Also, another mentioned shortcoming is the requirement for teachers to equally develop all four competences during a year, regardless of the degree in which they already possess them and regardless of their possible needs to focus only on certain competences. This presents a problem because of the lack of financial support for CPD, and thus teachers may spend the scarce CPD funds on trainings in competences that they already possess at a high level.
One of the interviewed school principals added that the existing standards represent only the initial step in the process of becoming employed as a teacher, while there are no clearly defined rules for further professional development. Another interviewee proposed the establishment of a committee for the accreditation of a teacher’s licence for a certain period (three or five years), run by the Association of Vocational Schools and in cooperation with professional advisors for the given sectors. Also, the interviewees thought that the licence for VET teachers should be different from the licence for those who have graduated from faculties offering initial teachers’ education, and that this issue should be resolved in a different matter, because today it mainly comes down to a bureaucratic procedure.

8.2 Survey results

The results of our survey indicate that the majority of respondents (75%) think that it is primarily their responsibility to identify their own CPD needs. At the same time, the majority (69%) report that their employers help them assess these needs, and that there is a well-defined process for assessing the needs and creating development plans (61% of the respondents agree).

When it comes to the respondents’ current CPD needs, the majority feel that the highest needs are in:

- new technologies in workplace (65% assess that there is a moderate or high level of need, with 37% stating moderate, and 28% high level of need);
- updating their professional knowledge and skills related to the current workplace practices (63% in total, 33% and 30% respectively);
- teaching students with special needs (59% in total, with 41% stating moderate, and 18% high level of need);
- approaches to developing cross-occupational competences (58% in total, with 40% stating moderate, and 18% high level of need);
- student career guidance and counselling (56% in total, with 39% stating moderate, and 17% high level of need);
- ICT (56% in total, with 41% stating moderate, and 15% high level of need); and
- teaching cross-curricular skills (53% in total, with 40% stating moderate, and 13% high level of need).

The following are among those areas where the respondents feel they have no or low level of needs:

- knowledge of the curriculum (79% assess that there is no or low level of need, with 58% stating no need, and 21% a low level of need);
- knowledge and understanding of the subject field (70% in total, with 46% stating no need, and 24% a low level of need);
- teaching in multicultural or multilingual settings (63% in total, with 40% stating no need, and 23% a low level of need);
- student evaluation and assessment process (59% in total, with 30% stating no need, and 29% a low level of need).

There is a certain correspondence with the respondents’ assessment of their CPD needs, and the programmes they have participated in the last 12 months. For example, subject knowledge ranks low among their needs, and 48% have not participated in these programmes. The least attended programmes – those related to teaching in multicultural settings, are also among the least needed.
ones, in the respondents' opinion (64% have not participated in these trainings, and 63% feel no or low need for this type of CPD); and

The situation is similar with areas ranked high on the needs list; moderate or high level of need for updating professional knowledge is reported by 63% of the respondents, while half of them have not had any trainings in this area in the past year (52%).

An area showing a certain discrepancy is student evaluation and assessment, where 59% of the respondents report no or a low level of need, but only 26% of them have not had related trainings in the past year. Also, those who have had them, report that the trainings have had large positive impact (32% of all the respondents, or 46% of those who have attended these trainings) or moderate positive impact (29% of all the respondents, or 42% of those who have attended). This is one of the areas with the largest reported positive impact. A possible interpretation of these results is that the respondents have no further needs for these trainings, given that the recent ones have had sufficient positive impact.

8.3 Conclusion

The relevant policy documents offer fairly extensive guidelines for schools and teachers on how to plan their professional development activities. This is confirmed by the survey results in which the majority of respondents think that there is a well-defined procedure in place. However, interviewed stakeholders asserted that this process does not clearly differentiate between the needs of the school and the individual teachers. The survey respondents are mainly of the opinion that this process is their own responsibility, in which they receive help and support from their employers.

The interviews show that there are significant difficulties involved in the identification of CPD needs and creation of CPD plans. The most important ones are, as in other chapters of this report, the lack of financial resources and the inadequate offer of programmes, which in practice means that participation in CPD activities becomes primarily a matter of fulfilling legal requirements. The lack of adequate provision in the case of VET teachers was also confirmed in the survey, in which respondents identified updating their professional knowledge and skills to current workplace practices and new technologies as their main CPD needs.

Furthermore, the interviews revealed that teachers and school management lack adequate training and skills for self-assessment and design of CPD plans.

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<th>Main issues</th>
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<tr>
<td>The main goal of participating in CPD is often merely the fulfilment of the existing legal requirement</td>
<td>Help teachers and schools to obtain CPD meeting their current needs by providing more accurate assessment of needs of individuals and of schools</td>
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<td>School staff in charge of planning teachers’ CPD often lack knowledge of didactics of vocational subjects</td>
<td>Improve the quality of CPD and promote support mechanisms for the planning and allocation of CPD</td>
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<tr>
<td>Teachers and school management are poorly trained in self-assessment skills</td>
<td>Consider how school planning for CPD can coordinate school-based and external provision of CPD</td>
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<td>School management is often poorly informed and lacks up-to-date knowledge</td>
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Further education and training (ET)
9. **TEACHER FEEDBACK AND REVIEW**

The survey results showed that the respondents mainly receive feedback from the school principal or school management. In relation to some areas, such as the analysis of students’ test scores and assessment of their content knowledge, they receive certain feedback from other teachers as well. A significant percentage of the respondents do not receive any feedback on surveys or discussion with parents (41%), analysis of students’ test scores (32%), student surveys about their teaching (27%), or on their own self-assessment (25%). The respondents reported that this feedback has led to positive change primarily in:

- their confidence (68% in total, with 42% reporting moderate change, and 26% reporting large change);
- job satisfaction (56% in total, with 35% reporting moderate change, and 21% reporting large change);
- motivation (55% in total, with 34% reporting moderate change, and 21% reporting large change); and
- their public recognition (55% in total, with 37% reporting moderate change, and 18% reporting large change).

The least change is reported in the respondents’ salary (73% with no change, and 10% with small change) and promotion (42% with no change, and 20% with small change).

**Conclusion**

Overall, the received feedback has mainly led to small or moderate positive change in the respondents’ teaching practice (areas such as classroom management, knowledge of the subject, student assessment, etc.). The feedback teachers usually receive is, apparently, limited to mainly one kind of source (school management) and only to certain segments of their work. In light of existing research in this area, it can be assumed that more feedback, with more variety, would improve the teaching practice.

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<th>Main issues</th>
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<tr>
<td>Majority of teachers receive feedback only from school management/principal</td>
<td>Improve feedback-giving practices – provide feedback from various sources and on various aspects of teachers’ work</td>
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<tr>
<td>Feedback is primarily focused only on few aspects of their work</td>
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<tr>
<td>Feedback leads to small or moderate positive changes in teaching practice</td>
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**Recommendations**

- Improve feedback-giving practices – provide feedback from various sources and on various aspects of teachers’ work
10. FUNDING

The Law on the Foundations of the Education System states that funds for professional development of employees are provided for in the budget of the Republic of Serbia, in accordance with the determined funds and the programmes and criteria set by the Minister. The funds are provided for in the budget of local self-government units as well. According to the Regulation on the Criteria and Standards for Financing Institutions Providing Secondary Education (2013), a school has the right to receive financial compensation on the basis of their submitted budget which includes, among else, professional development of teachers. The latter includes the state exam, seminars and other obligations required by the Regulation on Professional Development. The Instruction for the Formation of Classes and the Mode of Financing in Primary and Secondary Schools (CENUS) for the 2014/15 School Year requires schools to submit to the competent school department a summary of the school's yearly work plan, with the elements necessary for establishing the price of services, on the basis of which the right to receive funds is determined. The financing of employees is carried out in accordance with the Regulation on the Price of Services Provided by Secondary Schools. According to this document, the amount of funds to be received by each school is to be determined within the total amount of funds intended for secondary education within the local self-government unit's budget. These funds cover the school's material expenses, teaching materials, and, finally, professional development of employees.

A precise amount within the budget that goes into the CPD of VET teachers cannot be determined, since the funds are defined for all categories of teachers, in total. Some financing is also provided through IPA projects, in which there is always a segment dedicated to teachers' training, according to the interviewed stakeholders. Most of the interviewed principals stated that the funds their schools receive from the budget are not sufficient. For most of them, the provided funds are sufficient for organising between two and four seminars a year. The interviewees confirmed that the majority of CPD activities are financed in this manner, from the funds received from the local budget. However, they also report mixed experiences with the process of actually receiving funds from the local government units – in some cases it functions well, in others it does not function at all, even though it is a legal obligation for local government. Local self-governments are often forced to choose between providing funds for some elementary expenses they need for their own work out of the budgets intended for teachers' CPD, due to insufficient financial resources, and in those situations schools simply do not receive money. Even the two largest municipalities, Belgrade and Novi Sad, have not been able to provide funds for CPD of late. Interviewees underlined that, in practice, often the decisive factor is the ability and dexterity of the school principals to provide funds for CPD. Since there is no efficient system of monitoring, according to interviewees, corruption often accompanies the selection of training providers.

The expenses of teachers and schools vary. One of the interviewed principals reported that the participation fees for the teachers in his school are not high in themselves; they are higher in the case of two-day or three-day seminars (accommodation, travel expenses etc.). He estimates that they amount to around EUR 100 per teacher per year (the school has only five VET teachers). Another principal claimed that the school receives only 1/7 or 1/8 of the amount it would need, and that it does not make sense to use the same index (for determining funds in the local budget) for VET school and gymnasiums. Some sectors are pricier than others. A third principal stated that the amount that remains for CPD is enough for organising one seminar a year which equals 2.5% of the school's total yearly material expenses. This year's budget funds have been reduced due to last year's flooding in Serbia. In the case of some of the schools covered in our interviews, this reduction is exactly the amount they now lack for CPD. In the case of others, the current funds are five or even ten times less than the amount they would need. All the interviewed principal state that their schools lack funds, but some of them have their own sources of income (e.g. the medical school).
The survey respondents’ answers are in line with the findings from the interviews with stakeholders. Thus, 77% of the respondents report that they have not participated in the cost of their CPD activities, 14% have paid for some of the cost, and only 7% have paid for all the cost.

**Conclusion**

It can be concluded that there is a gap between what funding is prescribed by the law and what schools receive. There are issues at all levels: with the total amount dedicated to CPD within the national budget, with the allocation of these funds to individual schools within local budgets, with the final amounts that VET schools actually receive and how these respond to their needs. The inadequacy of funding is one of the main problems with the CPD of teachers and an issue that permeates all of the segments covered by the present report.

The interviewees suggested several ways of overcoming this problem: reducing the number of required CPD hours; transferring the CPD funds directly to schools, through the price of ‘work’ defined by the collective agreement; allocating the financing to the Ministry of Education, Science and Technological Development, which would be responsible for selecting a certain number of trainings and financing them.

As with many other aspects of the system of CPD, one of the dominant opinions of the interviewees is that separate regulations and procedures should be put in place for VET schools, which would acknowledge their specific needs, and this should also apply to the funding.

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<th>Main issues</th>
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<tr>
<td>The main issue is the overall lack of funds</td>
<td>Reduce the number of required CPD hours, in line with available funds</td>
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<td>A gap between what is prescribed by the law and what schools receive in terms of financing</td>
<td>Increase the financing of CPD on national and local level</td>
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<td>Initiate discussion among stakeholders on finding alternative solutions to the funding gap</td>
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<td>The process of allocation of funds through the local government lacks transparency</td>
<td>Transfer funds directly to schools or through the Ministry of Education</td>
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<tr>
<td>No efficient system of monitoring allocation and usage of funds</td>
<td>Define separate procedures for the allocation of funds to VET schools, acknowledging their special needs</td>
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Given that CPD is a legal requirement, it cannot be rewarded financially (principals can, as they state themselves in our interviews, choose to reward teachers’ effort and dedication). The only reward for teachers can be advancement to a higher professional title, which, however, is not coordinated with advancement through pay levels. Therefore, teachers do not view this type of advancement as a real incentive, and there are few who apply for this process. The majority of the interviewees estimate that financial reward could provide more incentive. The survey results also show that the practice is in line with the regulations: only 5% of the respondents have received a salary supplement for their professional development in the last 12 months, and 14% have received non-monetary support. Confirming the interviewees’ accounts, the majority of respondents (66%) have received scheduled time for activities that took place during the regular working hours. Another estimate of the interviewees is that a certain – mostly smaller – percentage of teachers participate in CPD activities out of a personal need for gaining knowledge and learning. It is estimated that this percentage ranges between 20 and 50. Other teachers are either ambivalent towards CPD as such or participate in it simply because it is a legal requirement. The interviewees estimated that, in most cases, participation is a matter of fulfilling formal obligations.

According to the opinions expressed in the interviews, one of the major obstacles to teachers’ participation in CPD is the financing, which is not structured well enough or, in certain cases, transparently enough. Another suggested obstacle is that teachers lack information (on the Regulation, on their duties and rights) and interest. Difficulties encountered include a bad choice of topics and inadequate trainers in the offered programmes. The interviewees also mention an unclear strategy of advancement through title acquisition. The overall lack of funds is a general obstacle, also repeated here.

The following suggestions for the improvement of teachers’ motivation appeared in the interviews:

- advancement through job titles which would include advancement through pay levels;
- financial rewards/stimulation;
- introducing advisors for each sector;
- participation in the creation of the catalogue for CPD via the Association of Vocational Schools; and
- horizontal learning, which has proved successful in the experience of the regional CPD centre whose representative was interviewed.

In line with the interviewees’ statements, the respondents estimate that the major barriers to their participation in CPD activities are the price (57% agree or strongly agree) and the lack of relevant offer (61% agree or strongly agree). Interestingly, the respondents are almost equally divided in two camps when it comes to the lack of incentives: 51% disagree or strongly disagree that there are no incentives for participating in CPD, while 47% agree or strongly agree that there are in fact no incentives. This result can be related to the statements of some of the interviewed school principals that one half of teachers are intrinsically motivated to participate in CPD, while around one half do it to fulfil their obligations.

The respondents do not feel that they lack support from their school (76% disagree that there is a lack of support from their employer), 86% do not think that conflicts with their work schedule present a barrier to their participating in CPD, and 88% feel that their personal responsibilities are an obstacle. A large majority (89%) do not think that they have no pre-requisites to participate.
Conclusion

It can be concluded from the above that there are inadequate incentive measures in place when it comes to teachers’ participation in CPD. With the lack of formal incentives and recognition (through monetary reward or professional advancement), it appears that the only motive for teachers – aside from the fulfilment of legal requirement – can be their intrinsic desire to gain knowledge and update skills. Both the interviews and the survey would suggest that around one half of teachers recognize the latter as sufficient and valid incentive, while the other half needs more tangible outcomes to motivate them.

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<td>- There are no monetary rewards for participating in CPD, which for many equals a lack of real incentive&lt;br&gt;- For many, the main incentive is the formal obligation to participate in CPD&lt;br&gt;- Teachers lack information and interest in CPD activities</td>
<td>- Align advancement through job title with advancement through pay levels&lt;br&gt;- Encourage horizontal learning&lt;br&gt;- Include more stakeholders in the design of CPD offer (namely, the Association of Vocational Schools)</td>
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12. TRAINING OF COMPANY-BASED TRAINERS (AND TRAINERS IN TRAINING CENTRES)

The existence of public-private partnerships was not evident from the interviews. The Chamber of Commerce organises certain activities independently from the state, through established training centres, on their own or within companies. Businesses have their own training programmes, both for employees and trainers, independently from public institutions and schools, and they have their own criteria and standards.

The interviewed stakeholders stated that there is no special cooperation between vocational schools and companies; the latter are mainly interested in internship programmes for students, but not in teacher trainings, as has already been indicated. Several examples of successful cooperation with companies are mentioned in the interviews; this cooperation has been established, in most cases, due to the school principals' initiative and capability and/or due to the companies' recognition of their own needs and interests in organising internships for young people. In this way, for example, Samsung has equipped a digital cabinet in the Electrotechnical School in Zemun, where students can master the use of new technologies; the company Polimark has tried to provide future workers in professions that are not commonly selected by organising internships; a vocational school from Uzice has successfully established cooperation with local employers who took students in for internships and later employed them. What teachers get from this form of cooperation is the opportunity to attend the internship programmes, monitor the learning process, and in that way acquaint themselves with new technologies and develop their knowledge.

Conclusion

Research data clearly points to the necessity of cooperation with businesses. The survey results, which indicate that the majority of teachers need opportunities for developing knowledge and skills related to innovations in their vocational specialism, raise the question of whether some of these needs can be satisfied through cooperation with companies. This is one of the main issues for the future development of CPD.

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<td>■ No public-private partnerships</td>
<td>■ Support different forms of cooperation between the business sector and the VET schools, especially focusing on innovation in vocational specialisation</td>
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<tr>
<td>■ Companies and their associations organise trainings independently, according to their own needs and standards</td>
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<td>■ Cooperation between companies and schools is the result of individual initiatives</td>
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13. GENERAL CONCLUSIONS AND RECOMMENDATIONS

The literature review and the data analysed for this report indicate that Serbia has an elaborate policy framework related to the CPD of teachers, with important additions that have been created since the adoption of the Strategy for Education Development in Serbia 2020+ in 2012. CPD is explicitly recognized as a requirement for the licensing of VET teachers, quantitative targets are in place supported by process for planning, funding and monitoring. Despite the systemic character of planned provision, various difficulties are encountered in implementation.

The national catalogue of CPD for Serbian teachers contains many general programmes which have value for vocational teachers and 62 programmes for vocational subjects. The overall volume of CPD for VET teachers is above average for the region. On average VET teachers obtained 22 hours of CPD outside of school and 25 hours within schools over the last 12 months. 66% of VET teachers obtained some CPD out of school over the last 12 months (25% received more than 30 hours) whilst 84% obtained some in school CPD (30% more than 30 hours). Only 6% of VET teachers received no CPD in the last 12 months. However, 46% received no CPD related to their vocational specialism and younger and less experienced VET teachers, in general, accessed less CPD than their older and more experienced colleagues.

To meet these challenges there should be more and closer cooperation between relevant ministries and national bodies to ensure that the different elements of Serbian strategy are complementary. Furthermore, policy should have a greater focus on the distinctive needs of VET teachers, particularly in the areas of initial education, licensing and CPD.

The issue which raised most concern in interviews was the funding of CPD. Although the economic circumstances in the country do not allow for significant increases in funds, it seems clear that a different system of funding for CPD for VET teachers and trainers needs to be developed and put in place. More immediately there should be an examination and exchange of good practices in the use of training budgets at school level. In the meanwhile, requirements for CPD and licensing should take into account actual rather than aspirational funding.

Another important issue is the lack of adequate partners from the business sector. There is a need to develop closer cooperation with employers. The majority of schools do not have modern equipment and have to rely on companies for practical teaching. Our interviews show that there are examples of good collaboration between schools and employers in terms of organising student internships, although these are usually the result of personal initiatives of school principals. Only 34% of VET teachers have benefited from training on business premises in the last 12 months.

The research revealed that there is scope to improve the design and delivery of CPD for VET teachers in Serbia. More stakeholders need to be included in the process of selecting topics, the procedure for the accreditation of providers needs to be reformed, providers need to improve their training skills, and – perhaps most importantly – a system of quality assurance and monitoring of effects needs to be established. The existing procedures are not effective and there is a clear need for national indicators of quality.

The research suggests that significant improvements can be made in the self-assessment skills of teachers and schools with respect to identifying professional development needs, as well as in providing feedback to teachers on the quality of teaching. There is a particular need to improve the process by which CPD is assigned to individual teachers: currently this process reflects formal requirements but neglects professional development needs.
Finally, the literature review revealed a significant lack of research in the field of teachers’ CPD in general, but especially so in relation to VET teachers.

**Recommendations**

**At the level of national planning and regulation**, the Ministry of Education, Science and Technological Development and the appropriate institutions and bodies should cooperate to:

1. develop national priorities for the CPD of VET teachers with longer-term plans with precise objectives, as well as separate regulations, which would include a reduced number of required CPD hours, a permanent call for CPD programmes which would be designed according to the needs of VET teachers, and a shorter accreditation procedure for such programmes;

2. develop a system of quality assurance and monitoring, including standards for selecting CPD programmes, evaluating their impact, and assuring quality of providers and trainers through certification and accreditation;

3. support more research in the area of teachers’ initial education and CPD, and support the engagement of VET teachers in action research, e.g. for example, researching good practice and evaluating innovation.

**With respect to CPD provision**, CPD providers, VET schools and local authorities should cooperate to ensure that:

4. a more prominent role of vocational schools’ associations in developing and delivering CPD is enabled and encouraged;

5. regional centres for professional development enhance and coordinate CPD in their regions – by organising and supporting trainings and by supporting analysis and planning. Ensure that adequate funding of regional centres is provided and that local authorities support the existing regional centres within their territories and facilitate their work. Ensure that the establishment of new regional centres is encouraged;

6. education and technical faculties in universities work in partnership with VET schools and with groups of VET teachers to shape CPD and support lifelong professional development and new models of connecting vocational schools and higher education institutions and practice are encouraged.

**The Institute for the Advancement of Education** working with the Ministry of Education, the VET Council, the VET Centre and wider stakeholders should:

7. restructure and rationalise the catalogue to strengthen CPD for VET teachers and to align the provision with the priorities for the CPD of VET teachers;

8. ensure flexibility in designing the catalogue, by maintaining the accreditation process always be open, with greater transparency and links with the economy, and increasing its attractiveness for desired providers; and

9. lead discussion to explore opportunities for innovations in CPD and vocational pedagogy, including but not restricted to, those related to digital and online learning.

**With respect to funding** responsible authorities and stakeholders should cooperate to:

10. explore ways of enhancing the role of VET schools in the deciding how to use CPD budgets so that the use of resources is linked to school priorities in CPD;
11. review the role of municipalities, VET schools and the Ministry of Education in funding decisions with a view to bringing about more predictable funding streams that can be targeted on concrete training needs; and

12. share good practice and knowledge to bring about value for money in the use of training budgets.

**Ministries and national agencies.** VET schools, businesses and their representatives should work together to:

13. encourage closer cooperation between schools and employers in order to connect the VET teachers’ CPD activities with the development of their vocational specialism and to take advantage of the learning opportunities provided through work, as well as to introduce work based CPD trainings;

14. consider the proposal for establishing local councils for the development of vocational education, such as the ones that already exist for employment; and

15. explore ways to further engage stakeholders such as businesses, VET schools associations and universities in policy development and its implementation (CPD provision).
## ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>CARDS</td>
<td>Community Assistance for Reconstruction, Development and Stabilisation (EU)</td>
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<tr>
<td>CPD</td>
<td>Continuing professional development</td>
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<tr>
<td>ETF</td>
<td>European Training Foundation</td>
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<tr>
<td>GIZ</td>
<td>Deutsche Gesellschaft für Internationale Zusammenarbeit</td>
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<tr>
<td>IAE</td>
<td>Institute for the Advancement of Education</td>
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<tr>
<td>IPA</td>
<td>Instrument for Pre-accession Assistance (EU)</td>
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<tr>
<td>NGOs</td>
<td>Non-governmental organisations</td>
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<tr>
<td>PPM</td>
<td>Pedagogical, psychological, methodical (competences)</td>
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<tr>
<td>VET</td>
<td>Vocational education and training</td>
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