ANNUAL PROGRESS
REPORT ON THE
ACTION PLAN FOR THE
IMPLEMNETATION OF
THE STRATEGY FOR
EDUCATION
DEVELOPMENT IN
SERBIA BY 2020

May 2019

2018 REPORT

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List of Acronyms

Acronym	Full name
AP SEDS	Action Plan for the Strategy for education development in Serbia by 2020
ВО	Higher education
HEI	Higher education institution
ENQA	European Association for Quality Assurance in Higher Education
EQF	European Qualifications Framework
ЕУ	European Union
IEQV	Institute for Education Quality and Valuation
LNQF	Law on National Qualifications Framework
LFES	Law on Foundations of Educational System
IIE	Institute for Improvement of Education
IEP	Individual education plan
UISE	Unique information system in education
LSGU	Local self-government unit
UEN	Unique educational number
CAQA	Commission for Accreditation and Quality Assurance
CGC	Career guidance and counselling
CUS	Conference of the Universities of Serbia
MoESTD	Ministry of education, science and technological development of Serbia
NAB	National body for accreditation and quality assurance in higher education
NQFS	National qualifications framework of Serbia
NEC	National education council
OSCE	Organization for Security and Co-operation in Europe
OECD	Organisation for Economic Co-operation and Development
PE	Preschool education
PISA	Programme for International Student Assessment
CCIS	Chamber of Commerce and Industry of Serbia
PPP	Preschool preparatory program
ПУ	Preschool institution
REF	Roma education fund
SOS	Statistical office of the Republic of Serbia
SIPRU	Social inclusion and poverty reduction unit
SEDS	Strategy for education development in Serbia by 2020
SVE	Secondary vocational education
TIMSS	Trends in International Mathematics and Science Study

UNICEF	The United Nations International Children's Emergency Fund
FBEA	Functional basic education of adults
CEP	Centre for education policies



I Progress report on the implementation of four objectives of the strategy for education development

The Strategy for Education Development in Serbia by 2020, was adopted at the session of the Republic of Serbia on 25th October 2012 and published in the "Official Gazette of RS" no. 107/2012 of 9th November 2012. The main objective set forth by the Strategy with respect to the education development are:

- 1) Improving the quality of the process and outcomes of education to the maximum attainable level arising from scientific knowledge on education and respectable educational practice;
- **2) Increasing the coverage** of population of the Republic of Serbia on all educational levels, from preschool education to lifelong learning;
- **3)** Achieving and maintaining the relevance of education, particularly the one that is fully or partially funded by the public sources, by aligning the educational system structure with immediate and developmental needs of individuals and economic, social, cultural, media, research, educational, public, administrative and other systems;
- **4) Increasing the efficiency** of the use of all the education resources, i.e. completion rate within the stipulated period, with minimum extended duration and reduced dropout rates.

Apart from the main objectives, additional, specific objectives related to the development of each part of the education system have been defined. Specific strategic policies, actions and measures for each part of the system have been established, in order to achieve the planned objectives of education development.

On 31st January 2015, the Republic of Serbia Government adopted the Action Plan for the Implementation of the Strategy for Education Development in Serbia by 2020 at the proposal of the Ministry of Education, Science and Technological Development (MoESTD). The Conclusion on the adoption of the Action Plan (along with the text of the Action Plan) were published in the "official Gazette of RS" no. 16 of 19th February 2015.

This document provides the 2018 annual report on the delivery of the Action Plan for the implementation of the Strategy and is structurally built upon the previous progress report on the Action Plan for the implementation of the Strategy which covered the period from the beginning of 2015 until the mid-2018. The annual report also covers the main activities and results achieved under the other two action plans of the Government of the Republic of Serbia in educational segments: Action Plan for exercising the minority rights, and the Action Plan for the implementation of the Strategy for social inclusion of Roma in the Republic of Serbia. The report also covers the results achieved by the educational authorities in the reporting period, which do not originate directly from the Strategy or the Action Plan, but are additional results achieved by educational authorities

in response to the priority needs arising from socio-economic changes and requirements that have arisen as of the adoption of the Strategy or Action Plan.

The Social Inclusion and Poverty Reduction Unit (SIPRU) has supported the development of this report, and researchers from the Centre for Educational Policies (COP) have produced a report based on data collected from relevant institutions.



1. Improving the Quality of Education

1.1. Improving curricula and achievement standards

The process of innovation and improvement of curricula and the expected outcomes of education is one of the key aspects in improving the quality of education. Over the past years, in this segment significant development activities were undertaken in pre-university education. The main measures have been laid down in the Law on Foundations of Educational System (LFES) from 2017¹. This law has provided the basis for future programs to be oriented to outcomes and competences, rather than to content, as they used to be for many years to date. For the first time since the adoption of the *European Framework of Key Competences for Lifelong Learning* (2006), key competences for lifelong learning have been incorporated in LFES (Article 11), much the same as the general crosscurricular competences (Article 12)². During 2018 important activities were carried out related to the implementation of the curricular reform.

Preschool education

The new Foundations of Preschool Education Program³ were adopted in September 2018. Metaphorically named "Take-off Years", the new Foundations of Preschool Education program aim to support the well-being of the child by developing an integrated approach to learning and development, emphasizing the importance of the game and building enabling and supportive relationships with peers and adults in a setting that provides inspirational environment for playing, research and learning. It is a unique conceptual starting point for the development of a program of pedagogical and educational work with children, from nursery age to beginning of schooling, as well as for the development of criteria for monitoring and evaluating the quality of preschool education (PE) and the improvement and development of preschool institutions (PI), and this sector as a whole. The new concept of upbringing and education of preschool children is in line with contemporary theoretical approaches in this field, relevant educational policy documents, domestic and international examples of good practice and values based on the long-standing tradition of preschool education in Serbia.

The adoption of new Foundations of Preschool Education Program is the result of activities implemented in the period from October 2016 to June 2018 within the project

¹ Law on foundations of educational system, "Official Gazette of RS", no. 88/2017, 27/2018 – other law and 10/2019

² General inter-subject competencies were adopted by the National Education Council in December 2013 and published in the Rulebook on General Standards of Achievement for the End of General Secondary Education and Secondary Vocational Education in the segment of general-education subjects, *Official Gazette of RS*, no. 117/2013

³ Rulebook on Foundations of Preschool Education Program, *Official Gazette of RS – Educational Gazette*, no. 16/2018-1

Improving the quality of preschool education through piloting of the draft, further development and finalization of new Foundations of Preschool Education. The project supported the planned activities of the Institute for Improvement of Education (IIE) in cooperation with the Institute for Pedagogy and Andragogy of the Faculty of Philosophy in Belgrade, UNICEF and MoESTD.

A challenge for educational authorities, researchers and practioners will be to develop an efficient approach to the implementation of the Foundations of Preschool Educations Program. For the first time in the domain of preschool education, the Rulebook on the Foundations of the Program prescribes the successive obligation to apply new program concepts in order to provide timely and necessary professional support to the institutions. The Rulebook includes as its integral part a list of cities / municipalities with defined timetable for introducing the obligation to apply the new program concept (in the period from 1 September 2019 to 1 September 2022). The list of local self-government units (LSGUs) where the Foundation of Preschool Education Program will be applied in their institutions as of 1 September 2019 includes: cities of Novi Sad, Cacak, Loznica, Pirot, Sremska Mitrovica, and Smederevo, city municipalities of Zemun and Vračar, and municipalities of Sremski Karlovci, Arandjelovac and Aleksinac.

Taking into account the need that all preschool institutions (162 institutions founded by LSGU⁴) get support in the process of implementing new Foundations of the Preschool Education Program, the timely realization of the planned support activities for preschool institutions is the key challenge for the implementation of the new program concept. In the forthcoming period, support in the form of trainings, development of handbooks and guides, development of horizontal exchange mechanisms and mentoring support to institutions will be provided through the MoESTD project *Inclusive Preschool Education*⁵ (in the framework of its second component), funded from the loan granted by the International Bank for Reconstruction and Development⁶.

Complementary support towards the implementation of the new Foundations of Preschool Education Program will be provided through the IPA 2014 project - *Towards*

⁴ The source of information on the number of local self-government units is the Statistical Office of the Republic of Serbia, and this number does not include local self-government units in Kosovo and Metohija.

⁵ The project *Inclusive Preschool Education in Serbia* is funded from the loan granted by the International Bank for Reconstruction and Development (in the total amount of EUR 47 million). The overall goal of the Project is to improve preschool education accessibility, quality and equity, especially for children from vulnerable social groups. The second component of the project *Inclusive Preschool Education in Serbia* envisages support activities for the implementation of the new Foundations of Preschool Education Program through the development of training programs and all the accompanying materials for preschool teachers and professional associates for their implementation, including the training for the heads of preschool institutions.

⁶ The training of preschool teachers and professional associates for the implementation of the new program concept is planned to start in 2019.

Lifelong Learning. One of the three expected outcomes of this project is to support the reform of preschool education as the initial basis for lifelong learning⁷.

Primary Education

In respect of curricula innovation, it should be noted that in the school year 2017/2018 an amended and updated curriculum has been rolled out for students of the fifth grade of primary education, i.e. three subjects have been introduced as compulsory: IT and computer science, Technology and Physical and Health Education. As of school year 2018/2019, the same changes have been introduced for students of the sixth grade of primary education. In the coming school years, for the generation of students who started the fifth grade in the school year 2017/2018, curricula will be successively changed for the seventh and eighth grades of primary education.

In the context of the curricular reform that began in 2017 with the adoption of the new LFES, a new Rulebook on the curricula (teaching and learning plan) for the first cycle of primary education and on the syllabi (teaching and learning program) for the first grade of primary education⁸ was adopted, and it has been applied starting from the school year 2018/2019, as well as the Rulebook on the syllabus for the second grade of primary education⁹, which will be applied starting from school year 2019/2020. These syllabi place emphasis on learning outcomes, teaching methods and processes. The guidelines and explanations provided within the syllabus and guidelines for the delivery of individual subject instructions, give clarification of outcomes-oriented programs and of the methods to deliver and achieve them. This implies more frequent use of active teaching methods and cross-curricular linking, as well as of project-based classes within the regular instructions. Project-based learning is defined as a form of educational pedagogical work compulsory for all students. It has been planned as overall 36 hours, i.e. once a week for one hour or every other week for two hours; teachers should thematically, together with their students, link the contents of different subjects, with the obligatory use of information and communication technologies.

In 2018, also new syllabi for native languages of minorities – for the first grade of primary education were published¹⁰.

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⁷ Project implementation started in March 2019 through *service agreements* - providing professional support to 50 LSGUs / PIs in the PE planning and management, and contracts for the procurement of equipment for 55 preschool institutions.

⁸ Rulebook on curricula for the first cycle of primary education and syllabi for the first grade of primary education, *Official Gazette of RS – Educational Gazette*, no. 10/2017-1, 12/2018-1, 15/2018-1, 18/2018-1, 1/2019-18.

⁹ Rulebook on syllabi for the second grade of primary education, *Official Gazette of RS – Educational Gazette*, no. 16/2018-47.

¹⁰ The curricula were published in the Rulebook on Amendments to the Rulebook on curricula for the first cycle of primary education and syllabi for the first grade of primary education, *Official Gazette of RS – Educational Gazette*, no. 15/2018-1.

In 2018 the Rulebook on curricula for the fifth and sixth grade of primary education and syllabi for the fifth and sixth grade of primary education 11 was adopted, and rolled out in school year 2018/2019 for the fifth grade students, while as of school year 2019/2020 it will be applied for the sixth grade students. In 2018 also the Rulebook on curricula for the seventh and eighth grade of primary education 12 was adopted, and it will be applied as of school year 2020/2021 for the seventh grade students, and as of school year 2021/2022 for the eighth grade students.

The adoption of new curricula has laid down the basis for the implementation of the curricular reform, envisaged in the current education strategy and under the applicable legal solutions. In the following period, at the level of primary education, IIE is expected to develop curricula proposals for the third, fourth, seventh and eighth grades. Reform of primary education curricula will be continued in the coming school years, and students of all primary school grades will be acquiring primary education entirely according to new curricula.

Secondary Education

At the level of general secondary education (grammar school education), the curricular reform is underway. At the beginning of July 2018, the Rulebook on the syllabus for the first grade of general secondary school (grammar school)¹³ was published, and the program for the second grade is about to be finalized. This involves the first major changes introduced in general secondary (grammar) schools in the last 20 years.

All syllabi are based on the general goals and outcomes of education and the needs of the first grade students. They are oriented to learning processes and outcomes, rather than to content that now has a different function and significance. The content is in the function of achieving outcomes that are defined as students' functional knowledge indicating what the student will be able to do, undertake, perform, carry out owing to the knowledge, attitudes and skills that he has acquired and developed during one year of learning a particular subject, and (in accordance with Article 60 of the LFES) many syllabi state only key notions of the content. Thus conceived syllabi imply that achievement of the outcome leads to the development of competences, including both those general subject specific, and general - inter-subject and key competences. An overview of the outcomes given in the individual syllabi shows how the foundations are laid down for the development of key and general inter-subject competences that students should acquire by the end of general secondary education.

¹¹ Rulebook on curricula for the fifth and sixth grade of primary education and syllabi for the fifth and sixth grade of primary education, *Official Gazette of RS – Educational Gazette*, no. 5/2018-77, 18/2018-1.

¹² Rulebook on curricula for the seventh and eighth grade of primary education, *Official Gazette of RS – Educational Gazette*, no. 18/2018-1.

¹³Rulebook on syllabi for the first grade of general secondary (grammar) school, *Official Gazette of RS – Educational Gazette*, no. 12/2018-93.

In addition to this main change in the curricular paradigm, the other important reform principles are: electoral character (greater choice of electoral programs in order to enable a better preparation of students for continuing their education, their choice of profession, as well as a greater student satisfaction with education); interdisciplinary nature (exceeding subject boundaries by linking different disciplines into meaningful units, aimed at developing the functional knowledge and competencies of students); gradual introduction of innovations (i.e. gradual preparation of schools, teachers and students for the implementation of new syllabi). Innovation of programs evolves towards teaching oriented to outcomes and development of competences. A greater number of laboratory exercises and project-based classes is expected to contribute to this goal.

The new curricular concept of general secondary education introduces a number of new elective programs, in addition to those existing (Religious education, Civic education, Second foreign language). In the first and second grade of general secondary education students are offered the following elective programs: Language, media and culture; Individual, group and society: Health and sports; Education for sustainable development; Art and design; Applied sciences. Students choose two programs in the first grade and may continue them in the second grade or choose two new programs. In the third grade, students choose the elective programs that they will be required to study in the third and fourth grades. The following elective programs are offered: Applied Sciences 1 with a focus on medical science; Applied sciences 2 with a focus on technical sciences; Education for sustainable development; Art and design; Basics of geopolitics; Economy and business; Religions and civilizations; Methodology of scientific research; Modern technologies and entrepreneurship. Out of the offered elective programs for the first and second grade, that is for the third and fourth grade, accordingly to students' interests, available human resources and equipment, the school develops its own list from which students choose two programs. Programs are of interdisciplinary character and are aimed at achieving outcomes and developing competencies through various active methods such as project-based classes, research work, and the like. It is crucial to achieve general inter-subject and key competences. Electoral programs are semi-structured, thus the IIE website offers literature to teachers that will help them deliver classes more easily. The new curriculum for general secondary education defines the weekly student load of 33 hours (instead of the current 31).

In the course of 2018, a new concept, developed by IIE in cooperation with the OSCE Mission to Serbia, for the subject Serbian as a non-native language for the entire pre-university education was adopted. This syllabus was produced in two formats (for students whose native language does not belong to the Slavic group of languages, and for students whose native language belongs to the Slavic group of languages), according to the European Framework of Reference for Living Languages, and it is conceived so as to enable members of ethnic communities educated in their mother tongue to acquire functional knowledge of the Serbian language, which will enable their easier inclusion in the wider community. A dictionary of compulsory lexical corpus for the first education cycle has been prepared, and can be downloaded from the IIE website.

In 2018 achievement standards have been adopted for the subject Native language and literature for the end of secondary education¹⁴ - in respect of eight native languages in which syllabi are delivered: Albanian language and literature, Bosnian language and literature, Bulgarian language and literature, Croatian language and literature, Hungarian language and literature, Romanian language and literature, Ruthenian language and literature, and Slovak language and literature. The Institute for Education Quality and Valuation (IEQV) developed the syllabi and supporting training material (handbooks and scenarios for eight languages) for the implementation of student's achievement standards in the subject Native language and literature.¹⁵

As regards the quality of syllabi in the field of secondary vocational education, it is necessary to consider the quality of the vocational segment, i.e. syllabi for vocational subjects and vocational training, then the quality of general subjects, and further on also the whole of these two complementary segments. Also, when considering the quality of work of the institutions, with the popularization of learning by doing now, the quality of both schools and companies where learning through work is implemented should be taken into account at the same time. In this respect, it is important to emphasize that the work on improving the quality of syllabi, the same as in previous years, mostly involved the revision of the vocational subjects segment and the improvement of the opportunities for learning through work, primarily through the development of dual education (addressed in more detail in the section on the relevance of education).

For school year 2018/2019 MoESTD has developed a series of new educational profiles, innovated and modernized a number of existing ones, while some of the profiles that were piloted became part of the regular system. For all these profiles, qualification standards and outcomes-based curricula have been developed, as well as modern norms regarding space, equipment and teaching aids, and the type of professional qualifications of teachers, professional associates and assistant teachers. In the development of curricula for specific profiles, also certain particularities have been defined, such as instruction requirements and student division into groups, where appropriate and necessary. In school year 2018/2019, students were offered 14 new educational profiles.

Higher Education

¹⁴Rulebook on achievement standards for the subject Native language and literature for the end of secondary education, *Official Gazette of RS – Educational Gazette*, no. 13/18.

¹⁵ Training is planned to be organized in 2019. An additional 2019 priority for IEQV is development of student achievement standard for the end of the first cycle of compulsory education for subject native language.

In 2018 the MoESTD implemented competition "Development of Higher Education" for co-financing development projects of higher education institutions. The subject of project co-financing is, among others, development of new, and innovation of the existing study programs. Projects related to the introduction or innovation of a single course will be financed with up to a maximum of 250.000,00 dinars, and projects related to the group of courses in the study program will be financed with up to a maximum of 1.000.000, 00 dinars. Under the decision of the Minister of Education, Science and Technological Development funds were granted to 65 out of a total of 170 applied eligible projects of higher education institutions,

Since 2001 the largest financial instrument supporting modernization of higher education in Serbia is higher education institutions participation in the EU TEMPUS program. Through their projects, higher education institutions from Serbia have absorbed more funds than any other country in the region. Projects concerning study program reforms account for the largest group - almost two thirds of the projects funded. Year 2018 was featured by the implementation of 26 higher education capacity-building projects, for which applications were made in 2015 - 2017.

1.2. Improving professional development of teaching staff

The strategy for education development in Serbia by 2020 attaches great importance to teachers' education or, more broadly, to their professional development. According to SEDS, the quality of teachers is "undoubtedly a key factor of the quality of education", and therefore special attention is paid to the continuous advanced training of teachers and the regulation of teacher career development - from the introduction into teacher work, through obtaining, renewing and losing the license, the rating system, monitoring, advanced-training, to rewarding, professionalizing and securing the reputation of the teaching profession.

In the reporting period, there were no significant breakthroughs in terms of improving initial teacher education. Search for a formula that would systematically ensure the development of modern teacher competencies, without impairing the autonomy of the university, remains, even after many years, short of adequate answer. The main way of innovating teacher education is still associated with individual initiatives (institutions, departments, university teachers) and inclusion in international development projects. ¹⁶

¹⁶ Certain progress can be expected through the application of the Rules on standards and the procedure for the accreditation of study programs (*Official Gazette of RS*, No. 13/2019) adopted by the National Council for Higher Education, where in the framework of standards related to the curriculum also the expectations have been defined in respect to the duration and realization of teacher-training practice, both for the higher education institutions that implement teacher-training study programs, as well as for those which do not provide pedagogical education, but whose graduates are expected to be teachers of vocational subjects in secondary schools (according to LFES, they also should acquire education in psychology, pedagogy and teaching methodology).

In the field of preschool education, a significant step has been made by adopting the Rulebook on competence standards for preschool teachers and their professional development ¹⁷. The competence of preschool teachers is defined in this document in three areas: 1) direct work with children; 2) developing cooperation and learning communities; 3) development of professional practice. Each competence area is concretized through several competencies given in the dimensions of knowledge, skills and values. Competence standards assert the idea that being competent is more than a sum of individual competencies as a set of separate skills and knowledge about certain matters which an individual must possess in order to successfully perform certain tasks. A competent preschool teacher is professional in his work, which implies autonomous and responsible acting in accordance with the ethical nature of the preschool teacher practice, and the complex, dynamic and contextually conditioned pedagogical practice. The competence of preschool teachers is based on the creative application and review of professional knowledge, skills and values in a changing social and pedagogical context. Development of competencies is a process for which the preschool teacher is not responsible alone, since it requires a systematic approach that will support such a process.

There have been no changes in the introduction of trainee teachers to work, their licensing, and career advancement in the reporting period. The mentoring system for teacher trainees has been adequately regulated, but the support to its effective implementation was not included among the priorities of the education policy in the reporting period. This can be partly explained by the fact that last several years teachers were predominantly hired by being allocated from other schools. Teacher advancement is also regulated by an adequate legal framework, but the system has not been fully implemented yet. In mid-2018, only slightly over 500 teachers had one of four teaching titles.

In the domain of improvement of teacher training system in 2018, minor amendments were made to the Rulebook on continuous professional development and career promotion of teachers, preschool teachers and professional associates¹⁸. The procedure for approving continuous professional development programs and expert meetings was also enhanced: also a training program for training program reviewers was developed, and attended by 120 reviewers. Yet however, the system of professional development of teachers has not been significantly changed since the adoption of SEDS, so there is still much room for its improvement. It should be noted that the Rulebook on continuous professional development and career promotion of teachers, preschool teachers and professional associates¹⁹ prescribes that professional development programs can be

¹⁷Rulebook on competence standards for preschool teachers and their professional development, *Official Gazette of the Republic of Serbia - Educational Gazette*, No. 16 / 2018-1.

¹⁸ Rulebook on Amendments to the Rulebook on continuous professional development and carieer promotion of teachers, preschool teachers and professional associates, *Official Gazette of RS*, no. 48/18.

¹⁹ Rulebook on continuous professional development and carieer promotion of teachers, preschool teachers and professional associates, *Official Gazette of RS*, no. 81/2017 and 48/2018.

delivered through direct work or e-learning via internet, which has led to "online" training becoming an increasingly popular form of professional training, also frequently organized by education authorities.

In the reporting period, in the framework of its internet presentation the IIE developed a Teacher Education Portal (in cooperation with MoESTD and UNICEF) as an Internet platform for supporting the upgrading of education, where online trainings and webinaries will be delivered (the first were delivered in December 2018).

During 2018 a large number of teachers, professional associates and principals attended professional development provided by several national initiatives. The largest among such initiatives relates to the *Teacher Training Program for the implementation of curricula oriented towards learning outcomes*, as a key support for the implementation of the reformed curricula. This is a three-day program (one day it is delivered as "online" training) aimed at developing competencies for planning and delivering outcomes oriented curricula, and includes: getting acquainted with the new concept of teaching and learning programs; global, operational planning and preparation for classes; outcomeoriented methods, techniques and activities; project-based classes; entrepreneurship; elective programs (for general secondary schools) and monitoring and evaluation of learning. The Republic of Serbia and MoESTD received support for the delivery of these trainings from the EU, through the 2016 IPA Instrument Sector Reform Contract (sector budget support - SBS).

During 2018, this program was attended by 18,000 (23%) teachers, professional associates and primary and general secondary school principals. The planning, organization and implementation of such a large-scale training was a very demanding task for MoESTD and IIE, which they have successfully accomplished. Based on the experience from 2018, improvements are planned in various segments of the training (program, materials, lecturers), as well as in support and monitoring implementation in schools²⁰.

In 2018 IEQV delivered online training for the application of educational standards for 11 general education subjects in secondary education²¹. This training covered 3,207 teachers, principals and professional associates²².

In the reporting period, IEQV delivered online training for the application of educational standards for foreign language in primary school (English, Russian, German, Spanish, Italian, and French). About 3,600 primary school foreign language teachers were trained. The main challenge in respect of this and other online trainings is the uneven level of

²⁰ The 2019 plan envisages that over 20,000 participants will attend this training, this time including teaching staff from secondary vocational schools.

²¹ Serbian/native language and literature, Serbian as non-native language, English language, German language, Russian language, French language, History, Geography, Mathematics, Biology, Chemistry and Physics.

²² The continuation of the training is planned under the IEQV program of activities for 2019.

computer literacy of trainees, and computer literacy is a prerequisite for attending online seminars.

Within the project Teaching Content through a Digital Textbook / Digital Classroom in 2018, about 2,000 teachers of the first and fifth grade of primary school were trained for active work with modern technology and modern designed e-textbooks. The training covered aspects of modern digital education, including the creation of conditions for applying modern concepts of distance learning and e-learning, e-services connectivity (such as digital classroom and e-diary), networking of teachers and students, creating and using teaching content more accessible to students, etc. This training for teachers was organized by IIE. Evaluation of the training has shown that teachers have significantly improved their digital knowledge and that they apply the acquired digital skills more often in their teaching.

The Social Inclusion and Poverty Reduction Unit (SIPRU) created the training "Capacity Building of Educational Institutions in the Republic of Serbia for Project Writing and the Use of Potential Funding Resources for Improving the Quality, Equity and Efficiency of Work", which was placed on the List of Programs of Public Interest approved by the Minister, and which is aimed at training teaching staff in educational institutions to plan and write projects in order to improve the school environment and teaching and learning processes, which they can submit to local or foreign donors for financing. So far 120 primary and secondary school teachers have undergone this training.

In the course of 2018, the Rulebook on the training program and licensing exams for principals of educational institutions²³, whereby activities on professionalization of this position have been continued, after 2013 when competence standards for principals were adopted. These Rules regulate the training program in accordance with the competence standards for principals, the exam program, the manner and the procedure for taking the exam and other questions related to taking the exam and acquiring the license to work as a principal. IEE delivers this training program in two ways: through interactive trainings in a group of up to 30 participants, or through individual distance learning. Interactive trainings were delivered in 2018 and the first licenses were already issued²⁴.

Aiming to provide professional support to the work of teachers and educational institutions, during the reporting period activities were undertaken towards strengthening horizontal support within the education system. By ascertaining a list of 47 practitioners, in July 2018, a Network of Practitioners for Preschool Education Support was established, as a result of a joint initiative of MoESTD, IIE, IEQV, UNICEF and the Institute for Pedagogy and Andragogy of the Faculty of Philosophy of the University in Belgrade. The network of practitioners was established with the aim to: contribute to

²³ Rulebook on the training program for licensing exams for principals of educational institutions, *Official Gazette of RS*, no. 63/18

²⁴ The development and implementation of individual distance learning programs is planned for 2019

improving the quality and equity of PE; to provide support to institutions to further develop different segments of quality and equity in PE; to support the development of quality programs and policies; to support the spread of good innovative practices among institutions; to support the development of inclusive practice in preschool institutions, educational groups, as well as at the local level. Continued strengthening of the network of practitioners for preschool education support is also planned within the second component of the project *Inclusive Preschool education*.

At the level of primary and secondary education, based on the 2016 competition, the MoESTD has selected 200 advisers - external associates tasked with providing professional support to educational advisers and their peers in kindergartens and primary and secondary schools. Additionally, there are 70 IEQV advisers selected within the project "Improving the quality of the education system of the Republic of Serbia by improving the effectiveness of the system of external evaluation of school performance and the development of horizontal learning between schools" implemented by IEQV, Centre for Education Policies (CEP) and UNICEF. During 2018, advisers were engaged in various development initiatives in the system.

1.3. Improving the quality and availability of textbooks

In April 2018, a new Law on Textbooks was adopted ²⁵. The need to improve, specify and streamline the existing procedures was identified, in order to increase the efficiency of the entire textbook approval process and ensure an improved quality of textbooks. The new law brought a number of novelties:

- Enabled production and publication of digital textbooks;
- Simplified solutions for registration and approval of textbooks;
- Opened opportunity to procure the textbooks through the school and/or student cooperatives;
- The census in percentages that a textbook would have to reach in order to be used at school was abolished;
- The obligation to use selected textbooks for a cycle of four years still remains, but in exceptional cases, it is possible to change the selected textbooks (and when changing the curricula);
- Introduced obligation for publishers of textbooks that do not publish low-circulation textbooks to participate in providing the funds for the low circulation textbooks in the amount of 2% of net revenue generated from the sale of textbooks in the previous calendar year;

²⁵ Law on textbooks, Official Gazette of RS, no. 27/2018

• The lists of evaluators of textbooks were cancelled and the possible proponents were precisely indicated in order to avoid the conflict of interest and have the process carried out in a most transparent manner.

Based on the aforementioned law, in July 2018, the Director of the Institute for Textbooks passed decision on the establishment of the Centre for Low-Circulation Textbooks (textbooks in minority languages and script, textbooks adapted to the educational needs of students with developmental disabilities, textbooks for experimental programs, textbooks for acquiring education under special programs, etc.). In the course of 2018, 225 decisions were issued on approving textbooks and/or textbook sets. In respect of approval of textbooks and/or textbook sets, the Catalo of textbooks for the first and fifth grade of primary education has been published (these textbooks are used from school year 2018/2019).²⁶

In 2018, quality standards for textbooks in electronic form and teaching aids were adopted.²⁷

In 2018, procurement of textbooks continued to be funded from the national budget, based on which in the school year 2018/2019 the right to free textbooks was exercised by about 84,000 students in the territory of the Republic of Serbia, which included about 830,000 textbooks. In school year 2017/2018 around 86,000 primary school students received free textbooks and other teaching materials from textbook sets chosen for use in classes by the schools. This right was exercised by primary school students who need this form of support the most, respectively:

- students from socially / materially vulnerable families (beneficiaries of financial social assistance);
- students with developmental difficulties and disabilities (who attend the
 primary education according to the individualized education program and
 students who do not pursue education according to individualized education
 program but who need custom textbooks (large-print, Braille, electronic form)
 and
- Primary school students who are third or every next born child who is in the system.

During the school year 2017/2018 MoESTD conducted public procurement for the development of textbooks adapted to children with developmental difficulties and disabilities that attend school according to customized or altered programs. 6,948 textbooks have been adapted and distributed to students. Textbooks publishers have worked in accordance with the Rulebook on textbook content and / or format adaptation²⁸ which was adopted in May 2017. This Rulebook prescribed conditions for

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²⁶ Available at http://www.mpn.gov.rs/udzbenici/

²⁷Rulebook on textbook quality standards, and instructions on their use, *Official Gazette of RS*, no. 42 / 2016-11 45 / 2018-40

²⁸ Rulebook on textbook content and / or format adaptation, Official Gazette of RS, no. 55/2017.

the so-called custom textbooks that may be printed in Braille, or printed using a magnified print on appropriate paper, adapted to the electronic form or adapted for the use of an assistive technology.

In order to secure the missing textbooks in the languages of national minorities who deliver the entire teaching in their mother tongue, in 2016 the MoESTD signed the Memoranda and accompanying annexes on cooperation on printing the missing textbooks in the language and script of the national minority with the Institute for Textbooks and 8 National Councils of National Minorities (Albanian, Bosnian, Slovak, Croatian, Bulgarian, Hungarian, Romanian and Ruthenian national minorities). This memorandum sets forth printing of 184 textbooks, some of which are translations into the minority languages, while some were originally written by respective authors. By the end of 2018, 115 missing textbooks were printed. Printing of textbooks in the minority languages and script in accordance with the signed memoranda and annexes is one of the results of two SBS measure and is supported by EU funds. The total number of textbooks in the minority language and script in the school year 2018/19 is 1,705, and they are all available to students, both in the languages in which the whole instructions take place, and in the minority language in respect to textbooks for electoral programs in the minority languages.

The memoranda related to textbooks in Albanian and Bosnian language were not implemented in accordance with the planned timeframe, due to certain decisions and actions of national councils of Albanian and Bosniak national minorities. In 2018 elections were held for members of national councils of national minorities and MoESTD is ready to find an optimal solution in consultation with national councils in order to speed up the process of publishing missing textbooks.

For the *Roma language with elements of national culture*, textbooks were printed for the first four grades of primary school within the project "*Introduction of Roma language into primary schools in Serbia*" implemented by the NGO Centre for Education of Roma and Ethnic Communities from Belgrade, and supported by the EU Delegation to Serbia. The MoESTD has approved to include textbooks for the electoral program Roma language with elements of national culture in the Catalo of Textbooks in the languages of national minorities for the school year 2018/19.

One of the most important projects, which was implemented by the MoESTD within its program of work in 2018, is the project "Educational content through a digital textbook / digital classroom", which is included in the 2018 Plan of priority objectives and activities of all public administration bodies and Government services for enhancing IT sector in Serbia (adopted by the Council for Innovative Entrepreneurship and Information Technologies in December 2017) ranked fourth on the Priority List of a total of nineteen Priority Projects.

The purpose of the project is to improve teaching and learning process by introducing new technologies and providing support to teachers in the introduction and

implementation of innovations in educational work. Terms of references included 1) training of 2,000 teachers for active work with modern technology and modern designed e-textbooks, 2) equipping 2.000 classrooms / laboratories with modern equipment for digital education and high-speed internet, as well as 3) procurement of appropriate digital content.

During 2018, 2,000 laptop computers and projectors, including a laptop and projector stands, were delivered to schools where teachers interested in using textbooks in digital form for first and fifth grade classes work (selected on the basis of a public competition).

A public call was also made to the publishers to whom textbooks for the first and fifth grade of the primary school were approved in the printed version, included in the Catalogue of approved textbooks. The public call referred to delivery of approved textbooks in digital form, i.e. digital textbooks to determine their conformity with the appropriate approved textbook. The list of textbooks for the first and fifth grade in digital form includes 106 titles from 11 publishers. Public procurement was undertaken for the referred digital textbooks, those conforming with selected textbook in printed form, and already chosen by the applying teachers within the regular procedure of textbook selection. The delivery of digital textbooks – activations codes to schools, i.e. teachers who applied for Public call is under way. In addition to teachers, digital textbooks are also used by students in classes where instructions are provided by these teachers.

1.4. Improvement in the field of evaluation of quality

Since 2014, when the third, combined test was introduced, there were no significant changes in respect of the final exam at the end of primary education. During the reporting period, compliance with the prescribed procedures was strengthened, so the final exam was featured by less irregularities than in earlier years. Major changes in the concept of the final exam at the end of primary education can be expected within the project Improving the quality of secondary education by introducing final exams (general, artistic and professional matriculation and final exam at the end of three-year secondary vocational education) – National matriculation, whose implementation started in 2019. As in previous years, IEQV has prepared a regular report on the analysis of the results of the final exam with recommendations for improving the performance of primary schools.

At the level of secondary education, at the end of 2017, the Rulebook on general and artistic matriculation program was adopted²⁹, and in the beginning of 2018 the Rulebook on vocational matriculation and final exam program was adopted ³⁰. Both programs determine the goal, content, structure and other important elements of the matriculation, or exam, and have been developed based on the concept of final exams in secondary

²⁹ Official Gazette of the Republic of Serbia - Educational Gazette, No. 11/2017

³⁰ Official Gazette of the Republic of Serbia - Educational Gazette, No. 1/2018

education prepared in March 2017 and presented by a working group formed by the MoESTD. Students who complete four-year general secondary education, arts education or secondary vocational education will be taking matriculation exams starting from school year 2020/2021, and students who complete three-year secondary vocational education will be taking the final exam as of school year 2019/2020. The process of organizing and implementing the graduation exams will be realized through the project *National matriculation*, funded by EU IPA 2015.

IEQV worked on preparing tasks for the task database to be used in the first phase of the implementation of matriculation from general education subjects. Per 200 tasks in Mathematics, Serbian language, Physics, History, Geography, Biology and Chemistry were prepared. As planned, in 2019 tasks for foreign languages will be prepared, and translation of existing tasks into the languages of national minorities.

In the course of 2018, IIE prepared 13 final qualification programs at Levels 1-5 of the National Qualifications Framework (NQFS). A training program was prepared for all participants in the examination process, and a total of 521 external examiners were accredited. In 2019, training and accreditation of additional examiners for 50 educational profiles is planned. The main challenge is the interest of employers to engage in these processes.

For the first time since 2004, during the year 2018, national testing of students - students of the seventh grade of primary school and students of the third grade of secondary schools was conducted. The test was conducted on a representative sample of students from 148 primary schools and 135 secondary schools in three subjects: Mathematics, Physics and History. An analysis of data is under way, which will provide in the coming period very valuable information on the quality of student achievements at the national level. The main challenges in this field concern the limited capacity of the IEQV Examination Centre. Securing new job positions and filling in the existing ones is one of the important tasks for improving this aspect of quality assurance of education.

Serbia continues to participate in the most important international researches in student achievements - PISA and TIMSS.

In May 2018, PISA research in Serbia was conducted by the Institute of Psychology. For the first time, the entire research was carried with students taking tests on computers. The results of the research are expected at the end of 2019.

Serbia is currently taking part in the TIMSS 2019 cycle (in 2018, the Institute for Pedagogical Research conducted a trial test) - the results of the research are expected at the end of 2020. Serbia is planned to take part in other important international researches (participation in the PIRLS survey).

In 2018, a new Rulebook on work quality standards for institutions was adopted³¹. Based on the results and experiences arising from the implementation of the five-year cycle of external evaluation and opinion of the employees in institutions, the need was identified to revise the standards and indicators of the quality of work of institutions, and the procedures of external evaluation. The revision included a large number of innovations in the work evaluation framework. Thus, for example, the number of areas was reduced, the number of standards was reduces, some standards were redefined, and others replaced with completely new statements. Indicators have also been redefined to make them more precise and measurable. The priority activities in 2019 relate to training of employees in education for the application of educational standards, as well as for the process of self-evaluation of the work of institutions.

During 2018, the MoESTD, in cooperation with IEQV, implemented the project "Improving the quality of preschool education by enhancing mechanisms for evaluating preschool institutions and developing support systems" in 32 preschool institutions in Serbia. The project aimed to empower PI employees to implement the self-evaluation process. Professional support to institutions was provided by educational advisors in school administrations and external consultants.

In 2018, the OECD launched a study on the evaluation and assessment of the education system in the Republic of Serbia. The project is supported by MoESTD and UNICEF. In addition to the findings and conclusions, the study will include recommendations for further improvement of the evaluation and quality assurance system in Serbia. The study will be completed in 2019.

Regarding the higher education system, 2018 was primarily dedicated to the establishment of the National Body for Accreditation and Quality Assurance in Higher Education (NAB), in accordance with the provisions of the Law on Higher Education from 2017. For these reasons, all the applications for program and institution accreditation were processed rather slowly, and due to the large backlog in the processing activity, the reception of new applications was stopped until March 2019. The accreditation process was also improved through changes to the three rulebooks, which were adopted at the beginning of 2019:

- \bullet Rules on standards and procedure for accreditation of higher education institutions 32
- Rules on standards and procedures for accreditation of study programs
- Rules on standards for initial accreditation of higher education institutions and study programs

³¹ Rulebook on work quality standards for institutions, *Official Gazette of the Republic of Serbia - Educational Gazette*, No. 14/2018-1

³²All three rulebooks were published in *Official Gazette of RS*, no. 13/2019

It is very important that the accreditation process is almost completely aligned with the requirements of the European Association for Quality Assurance in Higher Education (ENQA). Another important novel is about the methodology itself. The standards have been improved and the documentation to be submitted by the faculties has been changed, and/or supplemented by additional sources of evidence of standard attainment. What has been reduced earlier to reviewing the self-evaluation report has now been replaced by a thorough review of all the evidence of meeting the standards that the institution offers.

All changes were subject to consultation with stakeholders, so it is expected that the first accreditation cycle will be implemented successfully, although slower than it was the case before.

The Rules on standards for self-evaluation and quality assessment of higher education institutions and study programs and the Rulebook on standards and procedure for external quality control of higher education institutions were prepared during 2018 and adopted in early 2019.³³

One of the major challenges is the work of the NAB itself, since it still does not have its own premises or sufficient administrative support. Also, the reviewers' lists as before have deficiencies, and for some areas there are not enough experts or there is concern with potential reviewers that even though the process is anonymous, they would be exposed to some type of pressure.

1.5. Development of Inclusive Education

The inclusive education policy in the Republic of Serbia was given the legal basis in the 2009 Law on the Foundations of Education System. The main goals of these new policies and strategies were directed towards improving the quality and the coverage of preschool and primary school education (initially), improving the educational achievements of all students, especially children from vulnerable social groups. Over the years, the number and quality of instruments for the implementation of inclusive education has grown, accompanied by numerous researches and analysis of processes and results. A comprehensive picture of the current state of inclusive education will be provided by the National Report on Inclusive Education in the Republic of Serbia, which will be published soon (MoESTD and UNICEF). Monitoring the state of inclusive education is also covered by the Third National Report on Social Inclusion and Poverty Reduction in the Republic of Serbia³⁴ adopted by the Government on 27 December 2018. The report

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³³Official Gazette of RS, no. 13/2019.

³⁴ Third National Report on Social Inclusion and Poverty Reduction in the Republic of Serbia – overview and state of social includion and poverty for 2014-2017, available at http://socijalnoukljucivanje.gov.rs/wp-content/uploads/2019/02/Treci nacionalni izvestaj o socijalnom ukljucivanju i smanjenju siromastva 2014%E2%80%932017.pdf

includes: a review of the legal, strategic and institutional framework relevant to the processes of social inclusion and poverty reduction, analysis of the current situation in relevant areas, review of implemented measures and programs, conclusions and basic directions for the next period. The report was prepared by SIPRU.

In this text, the focus will be key activities in 2018.

In October 2018 a new Rulebook on more detailed instructions for exercising the right to individual education plan, its application and evaluation was published³⁵, thus replacing the 2010 Rulebook. In the new Rulebook, besides other novelties, the content of the individual educational plan (IEP) is complemented, thus the IEP includes, as a novelty, a personalized teaching and learning program, and it can also include: 1) a transition plan - a plan for supporting the child and the student when entering school, when moving to the second level of education or when moving to another educational institution; and 2) a plan to prevent early school leaving for children and students at risk of early school leaving. All novelties are accompanied by new or changed forms.

During the reporting period, a new Rulebook on additional educational, health and social support for children, students and adults was published³⁶. This Rulebook regulates the detailed requirements for assessing the needs for providing additional educational, health and social support to the child, the student and the adult, as well as the composition and method of work of the interdepartmental commission. The rulebook is harmonized with the new legal solutions in LFES - e.g. changes in the permanent composition of the interdepartmental commissions, but also introduces other novelties like the new system of reporting by interdepartmental commission (the data are to be submitted to the competent ministries as of March 2019). The work of interdepartmental commissions was characterized by a lot of dilemmas and challenges³⁷, thus the new rulebook solutions should make the provision of additional support a more effective and efficient process.

In September 2018, the Rulebook on the criteria and standards for providing additional support in the education of children, students and adults with developmental difficulties and disabilities in the educational group, or other school and family³⁸ was adopted. This Rulebook regulates the criteria and standards of providing additional support in the education of children, students and adults with developmental difficulties and disabilities within the educational group or other school and family by the school for education of

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³⁵ Rulebook on more detailed instructions for exercising the right to individual education plan, its application and evaluation, *Official Gazette of RS*, no. 74/2018-58.

³⁶Rulebook on additional educational, health and social support for children, students and adults, *Official Gazette of RS*, no. 80/2018.

³⁷Protector of citizens (2018). Special report by the Protector of citizens. Inclusive education, additional support services for chidren and students in education, available at

 $[\]frac{https://www.ombudsman.rs/index.php/izvestaji/posebnii-izvestaji/5927-in-luzivn-br-z-v-nj-uslug-d-d-n-p-drsh-d-ci-i-uc-nici-u-br-z-v-nju}{d-ci-i-uc-nici-u-br-z-v-nju}$

³⁸Official Gazette of RS, no. 70/2018-30

students and adults with developmental disabilities, as well as institutions taking care of children and students with developmental disabilities.

In 2018, the Rulebook on the actions of the institution in case of suspicion or established discriminatory behaviour and insulting the reputation, honour or dignity of a person was adopted.³⁹ This Rulebook provides the necessary operationalization of the Rulebook on more specific criteria for recognizing forms of discrimination by an employee, a child, a student or a third person in the educational institution.⁴⁰ It prescribes the actions of the institution when it suspects or establishes discriminatory behavior, the manner of implementing preventive and interventional activities, the obligations and responsibilities of the child, student, adult, parent or other legal representative, employee, third person in the institution, organs and bodies of the institution and other issues of importance for protection against discrimination. This rulebook also prescribes the actions of the institution when it suspects or establishes insults to the reputation, honor or dignity of a person in the institution, the manner of implementing preventive and interventional activities, requirements and methods of risk assessment, methods of protection and other issues of importance for protection.⁴¹

In January 2018, the Republic of Serbia officially became a member of the European Agency for Special Needs and Inclusive Education (www.european-agency.org). This admission is a recognition of Serbia for continuous work on increasing accessibility and equity in education, developing a safe and enabling physical and social environment and ensuring equal opportunities for all children, students, and adults in exercising the right to quality education and additional support. Preparation for admission lasted since 2015, when MoESTD representatives were given the opportunity to participate in the work of the Agency, then in April 2017 Serbia was granted the status of an observer country, and in the same year it was invited to join the Agency as a full member. Activities related to the European Agency for Special Needs and Inclusive Education are supported by the SIPRU. In the reporting period, Serbia has been involved in four Agency projects:

- Country Policy Review and Analysis (CPRA)
- Supporting Inclusive School Leaders (SISL)
- Changing the Role of Specialist Provision (CROSP)
- European Agency for Statistics on Inclusive Education (EASIE)

In 2018, the work on the preparation of the Action Plan for the implementation of inclusive education was continued, but by the end of the year, for procedural reasons, the

⁴⁰Official Gazette of RS, no. 22/2016-49

³⁹Official Gazette of RS, no. 65/2018

⁴¹ In the reporting period, the Rulebook on performing socially useful or humanitarian work (*Official Gazette of RS*, No. 68/2018) was adopted. The Rulebook is applied in three cases - for light and more serious violations of school obligations, but also for violations of legally prescribed prohibitions. It prescribes compulsory activities for students, taking into account the psycho-physical and health-related abilities, the age and dignity of the student, in order to develop awareness of the consequences of their own behavior in students, direct them to what is desirable and positive, and not to punish them.

Action Plan was not adopted (at the level of the Government of the Republic of Serbia). Requests were sent to all ministries of the Government of the Republic of Serbia (whose participation in the implementation was envisaged in the draft Action Plan) for giving opinions on the Proposal for decision on the adoption of the action plan for inclusive education.

During 2018, the MoESTD and SIPRU prepared also a proposal for the Action Plan for the enhancing educational work at the school for students with development disabilities for the period 2018-2020.

The general goal of the Action Plan is to develop equal opportunities for children with developmental difficulties and disabilities and people with disabilities. Specific objectives are: 1) rationalization and optimization of institutions for education of children, students and adults with developmental disabilities, 2) creating conditions for providing additional support in the education of children, students and adults with (developmental) disabilities and the formation of resource centers and 3) improvement of regulations in the field of work of preschool institutions and schools for students and adults with (developmental) disabilities.

In the upcoming period, expected amendments to LFES will regulate resource centers for the provision of professional support to children, students and adults with (developmental) disabilities, their families and other educational institutions. This will provide the legal basis for the adoption of the rulebooks that will regulate in more detail the criteria for obtaining the status of a resource center.

According to the data of the Statistical Office of the Republic of Serbia for the beginning of the school year 2017/2018, primary schools (or classes) for students with dvelopmental disabilities are attended by 0.9% of the total primary school age population (4760 students in total). This places Serbia among the countries with the smallest percentage of students who attend primary education outside conventional primary schools.

Further development of competences of employees in educational institutions for inclusive education was carried out through various training programs directly supported by MoESTD:

- "Training for planning, implementing and monitoring measures for preventing dropouts" from the list of trainings of public interest for representatives of 50 primary schools;
- Training for telephone counselors at the SOS help-line for reporting violence in schools - 50 newly appointed telephone counselors trained
- Within the project "To success together" 30 volunteer trainers have been trained, who are conducting activities in six primary schools in Belgrade, Novi Sad, Nis, Kragujevac, Leskovac and Novi Pazar

- Training for teachers of participating schools in the project "Cross-border intercultural cooperation between educational institutions of the Republic of Serbia and the Republic of Croatia", 50 participants
- Trainings for employees in preschool institutions within the project "Kindergarten as a Safe and Enabling Environment for Learning and Development" included 100 participants from 4 PIs (Belgrade, Sombor, Zajecar and Vranje).
- Trainings for employees in eight primary schools within the project "Gender mainstreaming, prevention of violence and discrimination in schools".
- Trainings for employees in preschool institutions and primary schools within the project "Safe Internet for the whole family" pilot project implemented in Belgrade, Uzice, Nis and Kragujevac.
- In cooperation with the "Veljko Ramadanović" School (Belgrade), "Training of teachers for working with children / students with visual impairments and for providing them support when learning to read and write Braille", which has the status of a program of public interest;
- Training "Teachers / preschool teachers as proponents of quality education for all children" was organized for 90 teachers and professional associates from preschool institutions.
- MoESTD and UNICEF jointly organized training for quality education for all children. MODULE 2 "Activities to support all students - Differentiated Instruction" was organized for 22 future trainers.
- Training "Early intervention and a routine-based approach" for professionals working in the system of preschool education, health care and social protection in Leskovac and Kragujevac.
- Conference "Inclusive education the way of development of education in Serbia", organized by MoESTD, UNICEF, SIPRU with the support of the Swiss Agency for Development and Cooperation. The conference brought together 277 participants from education sector: policy makers, practitioners and representatives of academic, research, international and non-governmental organizations, as well as parents and young people, motivated to learn and share their experiences of inclusion in policies and practice.

In the course of 2018, numerous research and development projects were continued, involving MoESTD, other state authorities, non-governmental and international organizations, with the view to promote inclusive education in Serbia:

- The program "To success, together!" this pilot project is implemented jointly by the MoESTD, the Ministry of Health and the Ministry of Youth and Sports, and it is being delivered in six primary schools in Belgrade, Novi Sad, Nis, Kragujevac, Novi Pazar and Leskovac with the support of the OSCE Mission to Serbia.
- The project "Integrated Response to Violence against Women and Girls II" the project has a preschool (Kindergarten as a safe and enabling environment for

growth and development) and a school component (Gender mainstreaming and prevention of gender-based violence) - project is run by the Gender Equality Coordination Body in cooperation with MoESTD and other national and international partners.

- Project "Kindergartens Without Frontiers 3 Support to Improving System of Children Social Care and Preschool Education at the Local Level", implemented by UNICEF, MoESTD and CIP - Centre for Interactive Pedagogy.
- The project "Safe Internet for the whole family", implemented in cooperation with UNICEF, Telenor and the Children's Rights Centre from Uzice.
- The project "Cross-border Intercultural Cooperation between Educational Institutions of the Republic of Serbia and the Republic of Croatia" implemented by the MoESTD and the Ministry of Science and Education of the Republic of Croatia in cooperation with Nansen Dialogue Centres in Serbia and Croatia.
- Project "Support to Improving the Quality of Educational Work with Children with Developmental Disabilities" UNICEF and the Initiative for Inclusion *VelikiMali*
- The project "Respecting differences and preventing violence in preschool institutions in Serbia" and the program "Kindergarten as a safe and enabling environment for learning and development of children" - CIP Centre for Interactive Pedagogy with the support of UNICEF
- The project "Improving education in Serbia through strengthening the competencies of the Support Network for Inclusive Education and of other employees for inclusive education" - Support Network for Inclusive Education and UNICEF;
- Review program "Transition model for inclusion of students older than seven and a half years in education" - MoESTD, IIE, IEQV, UNICEF and Primary School "Branko Pešić" from Belgrade;
- "Fostering a democratic culture in schools is a project" MoESTD, Council of Europe and CEP.
- Inclusion of children from residential institutions for children with developmental difficulties and disabilities in cooperation with the national and provincial Institute for Social Protection, with a special focus on children from the "Kolevka" Centre in Subotica.
- Piloting mechanisms for monitoring inclusive education at the local level during the preparation of the National Report on Inclusive Education - MoESTD and UNICEF
- Creation of a register of children with developmental difficulties and disabilities under the auspices of the Institute of Public Health "Dr Milan Jovanović Batut";
- Special report by the protector of citizens on inclusive education Additional support services for children and students in education.

Education of Migrant Students

The Republic of Serbia included the first migrant and refugee children in primary school education in school year 2013/14. In school 2018/19, in 40 primary schools, 13 secondary schools and 7 preschool institutions, a total of 383 migrants have been included, of which 82 were unaccompanied minors (this figure is from November 2018, but this number changes monthly). In this way, Serbia fulfils its obligations in accordance with the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families, the Convention on the Rights of the Child and other international documents, as well as national regulations.

After the experience that schools had in the second half of the school year 2016/17, in the same year, the Minister issued Expert instructions for the Inclusion of Refugees / Asylum Seekers in the Education System, whereby institutional treatment of the issue of inclusion of children migrants / asylum seekers started. Thereafter, in 2017/18, in cooperation with UNICEF and the non-governmental sector, the MoESTD implemented several cycles of professional development of teaching staff in the area of learning support for migrant children, which included information on the implementation of this document. Two handbooks were prepared for teachers: School Handbook on the implementation of the Professional Instruction, and the Handbook "From Serbian as a Foreign Language to Serbian as the Language of the Environment: Framework for Language Support".

In 2018 MoESTD actively participated in the implementation of the Project EU Support to Serbia in Migration Management - MADAD 2, with the aim of expanding the support to the migrant population with the access to education in order to address the needs within the current migration context. The activities under this project enable not only more complete coverage of the reception centre network in Serbia, but also the inclusion of migrant students in the regular education system.

One of the goals of the MADAD 2 project in the area within the competence of MoESTD is the Development of the Serbian Language as a Foreign Language. Two types of activities have been undertaken:

- 1. Drafting a Curriculum for Teaching and Learning Serbian as a Foreign Language
- 2. Delivery of trainings for the implementation of the syllabus for *Serbian as a foreign language* that will include all interested schools with the aim of improving the capacities of teaching staff for work with migrant and asylum-seeker students.⁴²

This task was entrusted to the IIE which, in cooperation with the MoESTD, formed a Working Group that, in 2018, prepared standards for Serbian as a foreign language and a syllabus for this subject. The working group gathered experts from schools, as well as

⁴²Training was delivered on 18 April 2019

from four centres for Serbian as a foreign language from the universities in Belgrade, Novi Sad, Niš and Kragujevac.

Another important activity concerns enhancing the capacity of educational institutions to include migrant students in the education system in the Republic of Serbia. This activity is focused on the sustainable integration of migrant children in the system through the improvement of professional competencies of teachers and support to schools attended by migrant students (through the school grants scheme, engagement of mentors and volunteers). 52 grants were awarded to schools that educate migrant students, and 10 mentors provide additional support to schools, while 450 teachers and professional associates completed bimodular training.

Education of Student Returnees through Readmission

During school year 2017/18, a total of 378 students (184 male and 194 female) who had returned with their families under the Readmission Agreement from Western European countries, were recorded. Most were enrolled in the age appropriate class, while others were enrolled in the lower grades according to their results at the exams for assessment of knowledge and skills. Primary schools generally apply facilitated school enrolment procedures, engage a team for previous knowledge assessment and include children in regular instructions. Thanks to the system's flexibility and support measures, these children quickly integrate. Thus, children enrolled during the school year under the Readmission Agreement are often not treated as returnees, but after a month they become regular students. Additionally, if the child returns during the same school year, the school does not treat him as a newly-enrolled student, but the child remains in the same class. Thus, the child does not lose a year, and children are provided with additional support in mastering learning stuff and possibility to compensate for missed classes. The highest concentration of returnees is in the schools in Belgrade, Leskovac and Novi Sad. According to Article 55 of the Law on Primary Education, "Children from vulnerable social groups can enter the school without evidence of their parents' residence and the necessary documentation, but with a submitted proof of medical examination of the child", which enables children returnees to be immediately included in the educational process. During the school year 2017/18, under a simplified procedure, MoESTD granted 67 applications for equalization of the certificates or applications for diploma notification, which made attending classes easier in many ways. An additional support measure during the school year 2017/18 was providing free textbooks for 175 students. Through the competition for the use of budget funds, the MoESTD allocated funds for a project whose beneficiaries will be returnees under readmission agreement.

2. Increasing the Coverage of Education

One of the four main long-term development goals of the Strategy for Education Development in Serbia until 2020 is increasing the coverage of the population of the Republic of Serbia at all educational levels, from preschool education to lifelong learning.

Preschool education

At the level of preschool education coverage, progress has been made since the adoption of the SEDS and continuing increase of coverage is noticeable year after year. Data of the Statistical Office of the Republic of Serbia (SSO) show that in 2017/18 the preschool education coverage of children aged from six months to school entry was and education, 56.04%, specifically 61.3% of children aged three to five years (in 2015 it was 55.5%). Compared to 2015, when PE system covered 192,005 children, in 2018 this number was 10% higher and amounts 212,719. Overall growth can mostly be attributed to increased enrolment in private institutions (higher by almost 14,000 compared to 2015), than to enrolment in state institutions (higher by around 7,000 compared to 2015).

Despite these positive trends, the current coverage rate is still not at a satisfactory level, except for the obligatory preparatory preschool program (98.2% in 2017/2018). Regarding the equity of this segment of the education system, there are two negative phenomena: significant differences between municipalities regarding the coverage of preschool education (richer municipalities are more likely to have higher coverage rates than less affluent municipalities) and children from Roma settlements in Serbia are mostly excluded from PE.

Owing to the Law on Financial Support to Families with Children⁴³ from 2017 support to including children from vulnerable social groups in the PE system has been significantly improved through the reimbursement of the costs of their stay in preschool institutions, for children being the beneficiaries of financial social assistance. Also, this law regulates the reimbursement of the costs of stay in PI for children from materially deprived families. The manner and conditions for cost recovery is determined by the competent authority of the local self-government unit.

Starting from 2015, in cooperation with relevant partners, MoESTD conducts a continuous campaign to increase the enrolment of children in preschool preparatory program and in the first grade of primary school. The campaign involves the printing of flyers and posters in the Roma and Serbian languages, communication with preschool institutions and other institutions involved in the children and family care at the local level, the formation of local teams, the development and implementation of action plans,

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⁴³Official Gazette of RS, no. 113/2017 and 50/2018

the exchange of experiences between local communities in which the coverage is universal and those in which it is not. In all these activities, efforts are made to encourage preschool institutions to promote in their local communities the importance of early inclusion in preschool education, especially at the age of 3-5.5, and to increase the number of educational groups in which shorter quality preschool programs are delivered in accordance with the needs of the family, as well as to find ways to support the regularity of attendance.

Increasing the coverage of children by preschool education and greater fairness of this coverage requires improvement of the organization of services at the level of local self-government and greater allocation of funds for preschool education. The response to these challenges will be partly provided within the project "Inclusive Preschool Education in Serbia". The overall goal of this project is to improve the accessibility, quality and equity of preschool education, especially for children from vulnerable social groups. It has been planned, among other things, to provide around 17,000 new places for children aged 3 to 5,5 years in new, renovated or predesigned facilities in at least 30 cities and municipalities in the Republic of Serbia. Strategic commitment at the national level should be recognized by the LSGUs as the founders of the PIs, responsible, under the Law, for planning and optimizing the PI network in accordance with the criteria set by the Government. Increasing the coverage of children cannot be accomplished solely through project support, because such an approach does not provide for sustainability in the attainment of these goals.

The project also plans to provide subsidies to local governments to ensure that the most vulnerable families get priority in the enrolment of their children aged 3 to 5.5 years in preschool education programs, free of charge. Grants for at least 30 municipalities will make it possible for the most vulnerable and economically deprived families and their children to have access to community-based programs and services (within the health, education, social protection) designed for children and parents. In 2018, MoESTD representatives held meetings with representatives of local self-governments in order to identify the possibilities for improving the quality and increasing the coverage of children by preschool education.

Although SEDS has put a strong emphasis on the diversification of the PE programs as an important element for improving the inclusiveness, fairness and quality of the PE, and the enabling legal framework is in place, in reality, there is no essential application of diversification, both in terms of organizational and program aspects. Local governments have not yet taken on responsibility for the development of short-term high quality diversified programs in the preschool education. On the one hand, local governments are facing the challenges of additional funding (and employment) that the expansion of the offer of various programs would result in and, on the other hand, the diversification of the program is not sufficiently perceived as an important way to increase the coverage and fairness of the PE. Through the implementation of projects (such as the Kindergartens Without Frontiers Initiative) - the PUs/ LSGUs have been continually supported by the national level to develop various half-day and shorter programs,

through providing funds for equipping and adapting available space at the local level, professional advanced training of employees and horizontal exchanges; initiatives in the field of improvement of PEs at the level of local self-government. Additionally, during 2018, activities were also undertaken towards development of regulations in this area, so a draft rulebook was prepared, which will more specifically regulate the delivery of various programs and forms, other forms of work and services provided by preschool institutions.

During 2017 and 2018, the project "Kindergartens Without Frontiers 3 - Support to Improving System of Children Social Care and Preschool Education at the Local Level" was implemented in three preschool institutions (in Belgrade and Zrenjanin). The aim of this phase of the project was to explore the real modalities of a greater coverage of children with quality shorter programs in response to the specific needs of children and families in urban areas. The project provided for adaptation, furnishing and didactic material of 10 premises in these institutions and enabled the inclusion of more than 600 children aged 3 to 5.5 years in 27 different half-day and shorter programs.

Primary Education

The coverage in primary education in Serbia is almost universal according to the data of the Statistical Office of the Republic of Serbia ⁴⁴. In school year 2016/2017, 97.9% of children of school age stipulated by law attended primary schools. Thus, the minimum target value set in SEDS has been practically attained - 98% (ideally, the coverage rate would be 100% given that primary education is compulsory). The SEDS also sets as an aim a dropout rate in primary education of no more than 5% of the generation. Projections based on data provided by the SSO point to the conclusion that the droput rate is within this range. The methodology for calculating the number of dropouts is, however, not optimal (the difference in the number of students at the beginning and at the end of the school year), nor the practice of reporting the number of students by the institutions is quite reliable, so that completely valid valid data on the dropout rate in primary education system is not quite available

However, although they are not quite new, the results of the MIKS 2014 study 45 indicate almost universal coverage by primary education in the general population, but at the same time aslso show that 15% of Roma children of primary school age who live in Roma settlements are out of the education system.

One of the current measures for increasing the coverage are facilitated procedures for enrollment in primary school. Children from vulnerable groups can enroll in school

⁴⁴Education coverage rate is a ratio between the number of students enrolled into certain level of education ans the appropriate age group for that level of education.

⁴⁵Statistical Office of the Republic of Serbia and UNICEF (2014). Study of multiple indicators of position of women and children in Serbia in 2014 and Study of multiple indicators of position of women and children in Roma settlements in Serbia 2014, Final report. Belgrade, Serbia: Statistical Office of the Republic of Serbia and UNICEF

without evidence of their parents' residence and required documentation. Child's testing is performed only after the child is enrolled in school and is also available in Roma language.

In 2018, a competition for the selection of pedagogical assistants was conducted, based on which 50 new pedagogical assistants will be allocated to primary schools where the need for such support was greatest. According to the latest data, there are 261 pedagogical assistants - 221 in primary schools and 40 in preschool institutions. Of this, the work of 229 pedagogical assistants has been financed from the budget of the Republic of Serbia, and 32 from the budgets of local self-governments. This is the third measure of SBS aimed at stopping students from leaving the system, especially students from the Roma national community.

Representatives of all 50 schools where new pedagogical assistants will be engaged, attended "Training for planning, implementing and monitoring measures for preventing dropouts" (from the list of trainings of public interest). The result of the training is that each institution has developed a Dropout Prevention Action Plan, which is part of the Development Plan of institution.

The work of pedagogical assistants is still accompanied by various challenges, starting with their employment status, opportunities for professional development, understanding of their role by other employees, participation in the work of school teams. For this reason, the MoESTD formed a working group tasked to review the current rulebook and thereby raise the quality of their work and contribution in providing additional support to students. In this regard, efforts are underway to edit the description of the work of pedagogical assistants, as well as to develop a network of pedagogical assistants and instruments for measuring their results.

Secondary Education

The coverage by secondary education in the school year 2016/2017 was almost 90% according to the data of the Statistical Office of the Republic of Serbia. SEDS set a goal that at least 88% of the generation be enrolled in secondary education⁴⁶. According to the MIKS 2014 study, secondary school is attended by 22% of children of secondary school age from Roma settlements.

SEDS sets as a goal increasing enrollment in general secondary schools (grammar schools) and a proportionate reduction in enrollment in secondary vocational schools. The data show that in the previous period there was very little progress in achieving this goal. At the beginning of the school year 2017/2018, 26.2% of all students attending secondary school attended grammer schools (by around 2.5 percentage points more than in the school year 2010/2011). Profiles from the field Culture, art and public information

 $^{^{46}}$ This relates to different, but compatible indicators for the determination of coverage rate.

were attended by 2.3%. In total, this amounts to 28.5% of students attending general secondary and arts education, which is still significantly less than the targeted 45%.

In order to achieve full equality in education, in respect of students who due to developmental difficulties and disabilities need additional educational support, the Guidelines for Adapting the Secondary School Entry Exam for students who need additional educational support were adopted in school year 2017/2018. This document provides guidelines for adapting the space and conditions for taking entry exam, adapting the test, text of tasks and other written material, as well as other types of tasks.

The application of affirmative action measures for enrolling Roma students in secondary school under more favorable conditions yielded results. In the school year 2017/18, 1,969 Roma students enrolled in secondary schools, while in school year 2018/19, through affirmative action measures 2220 Roma students were enrolled (56% of them are Roma girls).

At the end of 2017, the Rulebook on Student Loans and Scholarships was amended⁴⁷, with the aim to set milder criteria for students without parental care, students with disabilities and students from Roma national minority. This enabled the increase in the number of scholarships awarded to Roma students, including those students who did not have excellent school success. A special ranking list is set for students from sensitive groups. In this way, the MoESTD has succeeded in increasing the chances of Roma students to receive scholarships, which resulted in a striking increase in the number of scholarships awarded to Roma students - in the school year 2017/2018 (303 scholarships) and even more in school year 2018/2019 (544 scholarships). It is noticeable that a continuously higher number of scholarships are granted to girls (always over 60%). Bearing in mind that the participation of Roma girl students in secondary education is significantly less than of Roma boys, granting more scholarships to girl students supports their inclusion in secondary education and reduces the existing gender gap. Granting scholarships to students of the Roma national community is part of the results of the third measure of the SBS aimed at reducing dropout rate and increasing the educational level of the students of this national community.

In June 2018, by announcing a competition for awarding student scholarships to students of secondary schools in the Republic of Serbia for the school year 2018/2019, information campaign to communicate milder criteria for students of Roma ethnicity was intensified. This was especially important because the planned number of scholarships for Roma students was increased from 300 to 500. Schools from the territories with a larger number of Roma students were contacted and information on new opportunities were communicated to everyone interested. Particular emphasis should be given to the good cooperation and the great engagement of the National Council of the Roma National Minority, which has been engaged in informing the community, and later on in issuing

⁴⁷Rulebook on student loans and scholarships, *Official Gazette of RS*, no. 46/10, 47/11, 56/12, 75/13 and 111/17

certificates of belonging to the Roma national minority and in helping to fill in and collect forms from students. Thanks to these additional efforts, a total of 963 students from the Roma community (out of a total of 24,000 secondary school students) applied for the Competition. This number confirms the effectiveness of the intensified information campaign.

In addition to these scholarships, further to competition open to Roma secondary school students with GPA 2.5 - 3.5, together with the Fund for Roma Education (REF), MoESTD granted 500 scholarships for the school year 2017/18, of which 67% were allocated to Roma girls. Mentoring support (201 mentors) was provided during 2015/16, 2016/17, and 2017/18 in which mentors were providing direct support to Roma students and regularly monitoring students' status according to all the prescribed criteria. One of the results of scholarships for secondary school students was the reduction in dropout rate to 7% (from initial 50% before applying the program). MPTNR will further extend support by scholarships through the IPA 2014 project - "Youth employability and active inclusion".

Within the project "Together to Secondary School - Support for children from vulnerable groups in transition to secondary school", the process of collaborative planning and providing support to students from vulnerable groups in transition to secondary education level is piloted. The project is implemented in 10 selected primary schools located in the territory of municipalities / cities where there is an increased need for interventions aimed at increasing the transition of students to secondary schools. Partners in the implementation of the project are Children's Foundation Pestaloci and CEP.

Higher Education

In higher education the coverage rate of the population aged 19 - 24 in the school year 2016/2017 was 54.2% which is by 10 percentage points more than in 2012, when the SEDS was adopted. SEDS did not specify target values in this segment.

Affirmative Action for enrollment in higher education institutions dates back to 2003/2004, and so far 1623 male and female students have been enrolled (51% are girls) pursuant to this Action. Enrollment in HEI based on the Program of affirmative measures for enrollment of Roma students within the quotas approved by the Government Decision for this affirmative measure is open to students who pass the entrance exam. Specifically, in academic 2016/17, 182 students enrolled in the first year, (88 young men and 94 young women), while in the academic year 2017/18, 154 students were enrolled (71 young men and 83 young women). In academic year 2017/2018, higher education institutions in Serbia were attended by 462 Roma students. Compared with available data for academic year 2010/2011, this makes a significant increase because at that time 204 Roma girls and boys were attending higher education. This, however, continues to represent an eight times lesser number of students than the one proportionate to the share of Roma in the general population (according to the 2011 Census).

As regards student scholarships and loans, students from vulnerable social groups, including members of the Roma national minority, also have the right to apply to be ranked within the specially allocated quota, under milder criteria, in accordance with the law and rulebook. At the Competition for awarding student scholarships to students of higher education institutions in the Republic of Serbia for the school year 2018/2019 of the 158 students who applied for the scholarship submitting certificate of the National Council of the Roma National Minority, 115 students were granted scholarship, and 18 students were granted student loans. The monthly amount of the scholarship, i.e. the loan is 8400 dinars.

In the case of university students, the measures of support include the tuition fee exemption, as well as the measures based on which student centres should allocate up to 10% of their accommodation capacities. The number of students admitted to student dormitories based on proven belonging to a vulnerable social group in school year 2017/2018 was 804 (aof a total of 17064 students), out of whom 65 Roma students (34 girls and 31 boys).

Adult education

According to the latest available data, in 2016 the rate of participation of adults in some form of formal or informal education or adult training at the national level was 19.8%, which is slightly more than in 2011 (16.5%), but significantly below the average of the EU member states (45.1%). In some form of education and training in the period of 12 months preceding the survey, women participate (21.4%) more than men (18%). The participation rate is the highest among the population aged 25-34 - 29.2%. The most frequent participants in lifelong education are females, aged 25 to 34, with completed higher education, who are employed and living in the city.

3. Improving the relevance of education

One of the four long-term goals set by SEDS is achieving and maintaining the relevance of education by aligning the structure of the education system with the immediate and developmental needs of individuals, economic, cultural, research, educational, public, administrative and other systems.

3.1. National qualifications framework

One of the crucial measures for increasing the relevance of education in Serbia is the adoption of the Law on the National Qualifications Framework ⁴⁸ (LNQF) in the beginning of April 2018. The objectives of the National Qualifications Framework in Serbia include, inter alia, the development of qualifications standards based on the needs of the labour market and the society as a whole, and ensuring that the entire education is oriented to learning outcomes building competencies which are defined by the standard of a given qualification, as well as the affirmation of the importance of key, general and intercurricular competences for lifelong learning. Qualifications are classified in NQFS into eight levels and four sub-levels and, in accordance with their type, they are classified into general, professional, academic and vocational qualifications.

As foreseen by the Law on LNQF, in 2018 NQFS Council was established, as an advisory body providing policy recommendations on the process of planning and development of human potential in accordance with public policies in the area of lifelong learning, employment, career guidance and counselling. In the reporting period, it held three sessions, at which Decision on the Establishment of 12 Sectorial Councils, the Rules of Procedure of the Council, the 2019 Work Plan of the Council, and the Guidelines for the work of the Sectorial Councils were adopted.

The Agency for Qualifications was established - the director of the Agency was appointed, and the first employees were recruited. The Agency will be fully stuffed in the next two years, and in addition to newly employed, it will be partly stuffed with employees from the Institute for Improvement of Education and ENIK / NARIK Centre.

Sectorial councils provided for in the Law on NQF are important tool for ensuring relevance of qualifications on labour market. The sectorial councils are expert and advisory bodies established in the form of partnership, whose main function is to determine the demand for qualifications on the labour market in the Republic of Serbia, through dialogue and immediate cooperation of the representatives of the labour and education domain. This cooperation is facilitated by the composition of such council. At the end of 2018, 12 sectorial councils were established.

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⁴⁸ Law on National Qualifications Framework, Official Gazette of RS, no. 27/2018

The process of drafting the report that will relate the NQFS with the European Qualifications Framework (EQF) has begun, which will ensure easier comparability and recognition of qualifications gained in Serbia with qualifications gained in other countries.

A unique database of qualifications that can be acquired in the Republic of Serbia, as well as the website dedicated to the NQFS operate within the MoESTD.⁴⁹ In 2018, new 14 qualification standards for educational profiles with the duration of 3 and 4 years were added. So far 140 qualifications have been entered in the qualifications database, of which 86 with the qualification standard.⁵⁰ Management of the NQFS register will be taken over by the Agency for Qualifications after its establishment.

3.2. Dual Education

In order to enable full implementation of the Law on dual education ⁵¹ (which was foreseen for the school year 2019/2020), several by-laws were adopted: Rulebook on program, of instructor training and more specific conditions and other matters of relevance for taking of instructor exam ⁵²; Rulebook on the manner of allocation of students for the on-the-spot training ⁵³; Rulebook on the Conditions and manner of Work, Activities and Composition of the Team for Career Guidance and Counselling in a Secondary School Implementing Educational Profiles in Dual Education ⁵⁴; Rulebook on the organization, composition and manner of work of the Commission for determining the fulfilment of the conditions for the performance of the on-the-spot training with an employer issued by the Chamber of Commerce of Serbia (CCIS)⁵⁵.

In school year 2018/2019, in order to increase clarity about which profiles fall under which category, efforts were made to have no more profiles called profiles with dual education elements, but to have only dual educational profiles. 19 educational profiles have been retained, and the new ones, developed by IIE specially for dual education, were added, so that the total number of dual educational profiles is 33.

In school year 2018/2019 the number of companies interested in the delivery of the onthe-spot-training for dual education profiles was significantly increased (600). Much the same, the number of schools involved in dual education was increased from 50 to 85 (around 23% of the total number of secondary vocational schools), and the entry quotas for the first year of secondary school pursuing the dual model of education were

⁴⁹Available athttp://noks.mpn.gov.rs

⁵⁰Available athttp://noks.mpn.gov.rs/baza-kvalifikacija 2/

⁵¹ Law on Dual Education, Official Gazette of RS, no. 101/2017

⁵²Official Gazette of RS, no. 70/2018

⁵³Official Gazette of RS, no. 102/2018

⁵⁴ Official Gazette of RS, no. 2/2019

⁵⁵ Official Gazette of RS, no. 46/2018

increased from 1,841 to 3,500. In 2018/2019. The total number of students in four respective grades is 4,500 students.

At the beginning of 2018, under the decision of the Government of the Republic of Serbia the Commission for the development and implementation of dual education and three-annual evaluation of achieved results was formed. During 2018, six sessions of the Commission were organized. Members of the Commission are representatives of the Government of RS, MoESTD, Serbian Chamber of Commerce, Standing Conference of Towns and Municipalities, schools, employers, and in the coming period, additional members are expected to be included. The Commission also provides guidelines, recommendations, opinions, proposals and reports, referred to relevant institutions and organizations, with the aim of ensuring quality implementation and development of dual education.

A working version of the Master Plan for the implementation of the Law on dual education in secondary vocational education was drafted.

The Erasmus Project Implementation of Dual Education in Higher Education of Serbia/DualEdu started with the assessment of the needs of higher education institutions (HEIs) and employers, based on which models of dual mode of education in higher education will be developed. The results of this project should contribute to the drafting of legislation in this area. In November 2018, the Ministry of Education, Science and Technological Development formed a Working Group tasked with the drafting of the Law on the dual model of higher education studies. The activities related to the drafting of the Law on the dual model of higher education studies are expected to be completed in 2019.

3.3. Innovation of curricula and study programs

Improved relevance of new curricula in primary education is accomplished, inter alia, by introduction of the compulsory status of the subject IT and computer science. A novelty in the first cycle of primary education involves the mandatory application of project-based classes i (36 hours per year), by which students' knowledge and abilities are developed through planning, research and teamwork in the framework of intracurricular and inter-curricular linking of the content, and using information and communication technologies in project activities.

New curricular concept of general secondary school education introduces a series of new elective programs, very relevant for economic and social sphere (for instance, Modern Technologies and Entrepreneurship; Education for Sustainable Development; Economy and Business). The programs will be focused on achievement of outcomes and development of competencies by means of various active learning methods such as project-based learning, research work, and the like.

Innovation in the system is the introduction of new classes in general secondary schools for students specially gifted for computer sciences and mathematics (IT classes). Since school year 2017/2018, the IT classes have been formed in eight general secondary schools, and in school year 2018/2019 in 36 general secondary schools. Students in IT classes learn according to a specialized curriculum and in classes with no more than 20 students.

New curricula in secondary vocational education are developed on the basis of qualification standards – a document defined on national level containing a set of data describing qualification in detail. It represents a basis for the development of educational / training programs and for assessment of the level of acquired competencies and the achievement of learning outcomes for a particular qualification. During 2018, 17 qualification standards for formal education were adopted, and 17 curricula.

Development of entrepreneurial spirit in children and young people plays a prominent role in teaching and learning curricula. Part of the new subject in primary education "technics and technology" is dedicated to developing entrepreneurial spirit as an intercurricular competence. Entrepreneurship is a compulsory subject in each of the new teaching and learning curricula in secondary vocational education based on outcomes and qualification standards. At the same time, some universities want to initiate programs for entrepreneurship, and some already offer selected courses, even on the master studies level. However, although development of entrepreneurship is placed high on the list of priorities in terms of development of competitiveness and relevance of higher education, it has not been properly realized yet.

3.4. Enrolment Policy

Another important segment of increasing the relevance of education concerns the enrolment policy, which for many reasons can still be considered problematic, but which also features gradual necessary adjustments. In the school year 2017/2018, the enrolment plan decreased the total enrolment quota for secondary vocational schools by 2.3%, in an effort to adjust the quotas with the demand for a certain number of vocational educational profiles. These changes included a quota reduction for four-year profile offers in the field of economics, law and administration, while increasing the quota for craft/three-year educational profiles in a large number of areas of work (construction 15%, forestry and woodwork 33%, textile and tanning 47% trade, catering and tourism 3%).

Establishment of student enrolment policy for secondary schools is regulated in more detail by the Guidelines for planning enrolment of students into secondary schools at local and regional level. These Guidelines are a particularly important step because it introduces for the first time the process of multi-stage planning which involves all relevant stakeholders at the local level and the school administration level. Two key

activities are the creation of a city / municipal proposal for a student enrolment plan and the development of a proposal for a student enrolment plan at the school administration level. Schools are obliged to submit and justify, via "Dositej" information system, the number and the structure of student's enrolment by area of work and educational profiles / directions, and on the basis of that, the school administration organizes meetings with all relevant participants in the process: representatives of local government, school principals, employers , regional chambers of commerce, branches of the National Employment Service, employers' associations and others that are relevant for decision making. In these meetings, a proposal for a student enrolment plan for all secondary schools in in the territory of a particular city or municipality is determined.

3.5. Other Measures for Improving the Relevance of Education

In April 2018, the Rulebook on Student Cooperatives was adopted ⁵⁶, regulating an area of importance for improvement of relevance of education in Serbia. Student cooperative can carry out production, trade and service activity, that is, carry out community and humanitarian services. The activity of student cooperative is a part of educational work and its goal is to enable students to master basic elements of the process of production and service provision; to provide professional guidance and develop entrepreneurial spirit; to create and foster positive attitude towards the work and creation; to instil work habits; raise awareness of collective work, cooperation and mutual assistance and solidarity; as well as to contribute to organization and development of school, local community and living environment.

A "student company" program is applied as an extracurricular activity in more than 200 secondary vocational schools. Student companies provide students with the opportunity to gain knowledge of market economy and entrepreneurship through the programs of "Youth Achievements" organisation during a school year, and they manage their companies from the establishment to the company's report and closing of the company. The students are led by mentoring teachers who have completed the accredited training of this organization.

Since school year 2017/2018 MoESTD has initiated a pilot project "Integration of financial literacy in the education system of the Republic of Serbia" – FinPis with the support of company Visa for South East Europe. The project implies integration of financial literacy into educational work and programmes/courses by means of creation of an environment enabling development of functional knowledge in this area, but also programs /courses through which financial literacy will be integrated and developed as a cross-curricular competence. Thirty schools and six preschool institutions have been involved in the project in order to ensure relevance and efficiency of the program, before

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⁵⁶Rulebook on student cooperatives, Official Gazette of RS, no. 31/2018-105

financial literacy becomes part of the education system on the national level. MoESTD and IIE have published a manual for teachers in financial literacy (March 2018).

Erasmus+ IF4TM project (Institutional Framework for Development of the Third Mission of Universities in Serbia) is underway, and its primary goal is to develop and implement at the universities in Serbia, in addition to the existing two missions related to education and research, the third mission which is made up of three pillars of development: technology transfer and innovation, continuous learning, and socially responsible behaviour of the university. Universities that are partners in the project, have already started to revise their internal regulations in order to create conditions for development activities, so the University of Kragujevac has established a Centre for Transfer of Technology, the Rulebook on the evaluation of extra-curricular activities, as well as the Rulebook on Intellectual Property Management at the university, and the University of Belgrade has upgraded the Strategy of Lifelong Learning and other documents relevant to the development of human capacities.

Amendments to the Law on Higher Education from 2018 have foreseen that each HEI shall have an Employers' Council, while previously the formation of this council was formulated as optional. The latest Rulebook on Accreditation of Study Programs also guarantees the inclusion of representatives of employers, professional or trade associations, labour market or chambers in the work of the sub-commission formed by the Commission for Accreditation.

Serbia has met all the prerequisites for full participation in the Erasmus + program. Since the General Call for 2019, the Republic of Serbia has the status of program country within the Erasmus + program. This means that as of 2019 the Republic of Serbia will participate in this program under the same conditions and with the same opportunities as EU member states. This program has succeeded and consolidated four programs in which Serbia participated in the period from 2007 to 2013: Tempus, Erasmus Mundus, Lifelong Learning Program and Youth in Action Program. Some of the projects under these four programs are still being implemented.

4. Increasing the Efficiency of Education

Efficiency of education system is usually perceived through the point of view of internal efficiency, most often from the point of view of completion rate of different levels of education, and from the point of view of use of the resources engaged in the system (human, financial and material assets).

4.1. Institutions Network

Network of educational institutions in Serbia is not aligned with the changed demographic situation, that is, with the significant decline in the number of children / students, or with the specificities on different levels of education (preschool level, secondary vocational education). In that sense, ill adapted network of institutions contributes to reduced efficiency of the overall system of education.

LFES from 2017 brought novelties regarding the adoption of acts on networks of public preschool institutions and public primary schools. It has foreseen that acts on networks of public preschool institutions and acts on networks of public primary schools shall be adopted by LSGUs on the basis of the criteria set by the Government of the Republic of Serbia. These acts are defined as planning acts by which spatial distribution of these institutions is planned according to their type and structure, and not as documents which only make an inventory of the current situation. The LSGUs are obliged to adopt these acts within one year from the date criteria have been set. If local self-governments would fail to adopt acts within the stipulated deadline, or if the acts would not comply with the prescribed criteria, the acts would be ultimately adopted by the MoESTD.

At the beginning of 2018, the Regulation on the criteria for adopting the act on the network of public preschool institutions and the network of primary schools was adopted, replacing the corresponding Regulation from 2010. One of the important novelties is obligation of LSGU to prepare, before adopting the act, a study containing network development plan made based on the trends of natural increase of children and students, as well as migration movements in the local self-government unit for public preschool institutions for a period of five years and for public primary schools for a period of four or eight years. The deadline for passing an act on the network of public preschool institutions is the end of March 2019.

In mid-March 2018, the Regulation on the criteria for adopting the act on the network of public secondary schools was adopted. Nine criteria were set: economic, equality, accessibility, organizational, status, demographic, geographical, cultural and optimization criteria. The established criteria enable the creation of a more rational

network of secondary schools, merging small schools into one institution (the minimum number of students is set at 200, under certain conditions).

A field analysis of the network of secondary schools was conducted for the needs of adoption of the act on the network of schools. The Act, i.e. Decision on the network of public secondary schools was adopted in June 2018, and was amended in August and December of the same year. According to this decision, 107 general secondary schools will be delivering general education programs; 39 secondary art schools will be delivering programs of general and art education, 44 combined schools will be delivering programmes of general and vocational education, or programs of general and art education. The decision also envisages that the programs of different levels of education and education or several different fields of work will be delivered by three educational centres.

Based on this act, decisions were made on the merger of 14 secondary schools, of which 4 are general secondary schools, which resulted in the rationalization of the number of employees in general administrative services. The next steps in 2019 relate to the continuation of horizontal rationalization and a pilot vertical rationalization of the network of schools (i.e. creation of educational centres), as well as the continuous monitoring of the efficiency of the school network in order to evaluate the nine criteria and measure the effects of the previous measures.

4.2. Digitization of Education and Unique Education Information System

The Law on the Foundations of Education System and the Law on Higher Education envisage the establishment of a Unique Education Information System (UISE), which consists essentially of four registers: 1) register of institutions; 2) register of employees 3) register of children, students and adults; and 4) register of accredited study programs. UISE also includes records maintained in schools, which are the source of data to be entered in the mentioned registers, as well as the system for assigning Unique Education Number (UEN), the purpose of which is to provide a unique identifier for each child, student, and adult in education system, and to provide anonymization of data on children, students, and adults, while at the same time enabling the calculation of complex statistical indicators for the evaluation of the education system.

In the previous period, the Ministry developed with its own human resources part of the UISE, which refers to the register of institutions and the register of employees, which were maintained and upgraded in 2018. In 2018, e-diary was provided, which provides records on educational work at the school, as well as records of students' success and conduct. It is important to note that through the e-diary, parents are provided with a continuous insight into the success and conduct of their children, and need not go to school to get information. Also, the e-diary is a very important source of statistical data and a large part of the data that are entered in the registers. By the end of 2018, the e-

diary has been introduced and actively used in about 600 schools, and it is expected that in 2019 e-diary will be introduced in all schools in the RS. The biggest obstacle to the introduction of the e-diary has been the lack of infrastructure, either in terms of Internet connection in all classrooms, or in terms of computers or other devices to enable teachers to use electronic diaries regularly in classroom in the same way as a paper diary. Currently, intensive efforts are made to overcome these obstacles.

During the same year, with the support of UNICEF, procedures for the allocation of UEN were developed, the Rulebook on UEN was prepared, the system for the allocation of UEN was developed, and the Rulebook on UEIS was prepared. Cooperation was established with the Statistical Office of the Republic of Serbia to establish and improve the framework for monitoring education and key indicators that are used to determine the input variables for the information system. Cooperation was also established with IEQV to define key education indicators in order to prepare appropriate reports for school administrations, institutions and the public (a set of dynamic indicators for planning and monitoring the development of education).

Although much work and resources have been invested in the development and establishment of a part of UEIS, the implemented part of the system has showed a number of shortcomings. Given the limited human resources, the developed part of the system is rather simple and does not provide adequate mechanisms that would allow management of the content of registers and guarantee that they are updated and correct. The constant need to generate different types of reports from the system, as well as for new functionalities, resulted in system's growth to unplanned dimensions and form in which maintenance of the system in a functional condition requires a large amount of work, and further system upgrading often requires re-implementation of already developed parts of the system.

Due to the on the long run unsustainable situation, that existed at the end of 2018, a team of experts was engaged which examined the current situation and made the conceptual design for a new system that would overcome all the previously observed shortcomings of the existing system. Further implementation based on the conceptual design is planned to be carried out by the Office for IT and E-Government (KITEU) of the Government of RS. The task of this Office is to conduct the public procurement procedure by the summer of 2019 to select a contractor to implement and establish a new system, and to establish and continue to maintain the system, including all necessary hardware infrastructure, in cooperation with the supplier. The implementation of the system is planned to start during the summer of 2019, and that the migration of existing data and the transition to data entering into the new system are planned to be carried out during the school year 2019/2020. The system is expected to get its final form, with all the mechanisms for the use of data and generation of reports, by June 2021.

4.3. Financing of Education

In the reporting period, no significant steps were taken in order to change the system of financing pre-university education. In the field of higher education, in 2018 Working Group for drafting the platform for the draft law on higher education financing was established. The main course of change should allow a performance-based financing model for universities⁵⁷ (i.e. in accordance with the achieved goals and achieved results of a particular higher education institution in a particular period), and should not be based on the number of students enrolled.

As a part of the activities of reforming the system of salaries in the public sector, prepared a catalogue of work posts in the education sector, which is an integral part of the overall catalogue of Work Posts in Public Services and other Public Sector Organizations, provided for in the Law on Public Sector Employee Salary System adopted in 2016. The implementation of this law was postponed for 2020 due to the need to carry out additional financial analyses.

The catalogue includes a list of work posts, a general / typical job description. Necessary qualifications / education and additional skills / examinations / work experience. Total of 116 work posts in the education sector have been inventories in this catalogue (including managerial work posts in the education sector, work posts in preschool, primary and secondary education, work posts in the area of student living standards, work posts in higher education; work posts in the organizations that monitor and develop the system of pre-tertiary education).

The new system of salaries in the public sector is based on the division into salary brackets and classes of pay coefficient. Employees in public services are divided into 13 salary brackets, and within each salary bracket they are divided into salary coefficient classes. During 2018, a proposal was made for the distribution of work posts in education and delivered to representative trade union for consideration. Most of the employees in education are placed in the 8th salary bracket in which there are 9 salary coefficient classes. This means that through the advancement in salary classes and coefficients, the achieved performance which is above the standard or expected for the given work post can be valorised through a significantly higher salary.

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⁵⁷Program of the Government of the Republic of Serbia by the candidate for Prime Minister Ana Brnabic

II Reports on Progress in Accordance with Education Levels

1. State of Play and Context by Education Levels before Activities Implemented in 2018

State of Play in Pre-University Education

The most important activities towards improving the quality of education in Serbia at the pre-university level relate to the change of the general curricular approach. For the first time new LFES transposes from the European Reference Framework (2006) in RS legislation key competences for lifelong learning, as an element of education quality, and prescribes general cross-curricular competences. More specifically, LFES prescribes 11 general cross-circular competencies for the end of compulsory primary and secondary education, which are all essential for achieving positive social outcomes: 1) competence for lifelong learning; 2) communication; 3) working with data and information; 4) digital competence; 5) problem solving; 6) cooperation; 7) responsible participation in a democratic society; 8) responsible attitude towards health; 9) responsible attitude towards the environment; 10) aesthetic competence; and 11) entrepreneurship and entrepreneurial competence.

An important novelty is that the new LFES prescribes that curricula must include general subject general competencies, subject specific competencies, learning outcomes and educational standards (that is, qualification standards for secondary vocational education). By these changes, competencies and outcomes (instead of the content) are put to the forefront, which should ensure greater relevance of new curricula.

As of 2003, Serbia has regularly participated in two of the largest and most influential international research of student achievements - TIMSS (Trends in International Mathematics and Science Study) and PISA (Program for International Student Assessment). TIMSS conducts the research of student achievements from mathematics and natural sciences in the fourth and eighth grade, while PISA examines the reading, mathematical and science literacy of fifteen-year old students.⁵⁸

In the last three TIMSS cycles (2011, 2015 and current 2019), researches have been conducted in the fourth grade of primary school in Serbia. According to the available data produced by the TIMSS research in 2015h, students from Serbia earned 518 points in mathematics and 525 points in natural science, which is above the average scale of 500 points. These achievements are at the level of the results achieved by students from other, more economically developed countries, but at the same time, there is a big difference compared to the most successful countries in this research.

secondary education.

⁵⁸ Students who take part in testing in Serbia attend the first grade of secondary school, but considering the nature of PISA testing it can be considered that it mainly measures the overall competencies of students developed during the previous education, which is eight years of elementary education and incomplete year of

The last available PISA results originate from 2012, when students from Serbia achieved results in all three types of literacy that are significantly below the OECD average.

Preschool education

The summarized results for 128 PIs that were subject to external evaluation during the last three school years, show that the vast majority of them fall in the category of institutions with good performance (grades 3 or 4) - the percentage of these institutions in three school years ranges from 85% to 100%.

A survey among the citizens⁵⁹ has shown that over 80% of them consider that preschool institutions provide quality educational services. Citizens see the lack of space, or more specifically, having too large groups (58%), as the biggest problems in the functioning of preschool institutions, followed by poor condition and obsolescence of equipment and technical aids (31%), followed by poor material position of employees (21%) and the hampering of creativity among the children (19%).

At the level of preschool education coverage, progress has been made since the adoption of the SEDS, and increase in coverage is noticeable year after year. More specifically, data from the Statistical Office of the Republic of Serbia show that in 2016/17 preschool education covered 52.3% of children from 6 months to school-starting age, or 58.9% of children aged from three to five and a half years old (55.5% in 2015). In 2017/18, preschool education covered 56.04% of children, or 61.3% (101.628) children aged three to five and a half years.

Network of PIs is characterized by insufficient capacity in terms of space for the expected coverage rate and by uneven geographical distribution.⁶⁰ There are significant differences between municipalities in regard to capacities of PIs which correlate to the degree of their socio-economic development (more affluent PUs are more likely to have more PIs, and higher average number of children in each facility).

There is also significant difference in terms of the number of children in the educational groups between different preschool facilities - this number is higher in institutions located in the administrative centre of the municipality than in the settlements outside of the administrative centre.

Primary education

At the level of primary education, there is currently one national exam - final exam at the end of primary education. However, the results of the final exam cannot be used, mostly

⁵⁹ Citizens' attitudes about satisfaction with preschool and primary education services in Serbia: Summary of survey findings (2017). USAID, European Movement, European Policy Center.

⁶⁰ Baucal, A., et al. (2016). Pre-school education in Serbia: situational analysis and recommendations. World Bank

for methodological reasons, without considerable reserve as a measure of the quality of achievements at the national level.

A survey of citizens' attitudes has shown that almost 80% of them are satisfied with the quality of educational services provided by primary schools.⁶¹ Compared to other parts of Serbia, the greatest satisfaction with the services of primary schools is reported in Belgrade. Citizens identified as the biggest problems in the functioning of primary schools the overburdening curriculum (44%), followed by the poor condition and obsolescence of equipment and technical aids (29%), and the obsolescence of curricula (29%) as well as a poor grading system (27%).

The results of the MIKS 2014 study also point to an almost universal coverage of primaryc education among the general population, however, at the same time, 15% of Roma children of the appropriate age are outside the education system. The regional survey on the situation of Roma in the Western Balkans from 2017 shows similar data - 84% of children from Roma settlements attend primary education.

Network of primary schools has been long unaligned with demographic trends, featured by a significant reduction in the number of students - in just 4 years, the number of students in regular primary schools has been reduced by 31,000, or by 5.5%. The ill adjustment of the school network is particularly evident in two ways. First, there is a large number of small primary schools in central city areas. Second, in certain remote rural areas, the education in in regional schools is organized in so-called "combined classes" in which children attending different grades are grouped into one class taught by one teacher. Teaching and learning in such classrooms presents a challenge and is generally of lower quality than in ordinary structure of the class.

LFES from 2017 brought novelties regarding the adoption of acts on networks of public preschool institutions and public primary schools. It has foreseen that acts on networks of public preschool institutions and acts on networks of public primary schools shall be adopted by LSGUs on the basis of the criteria set by the Government of the Republic of Serbia. These acts are defined as planning acts by which spatial distribution of these institutions is planned according to their type and structure, and not as documents which only make an inventory of the current situation. The LSGUs are obliged to adopt these acts within one year from the date criteria have been set. If local self-governments would fail to adopt acts within the stipulated deadline, or if the acts would not comply with the prescribed criteria, the acts would be ultimately adopted by the MoESTD.

⁶¹ Citizens' attitudes about satisfaction with preschool and primary education services in Serbia: Summary of survey findings (2017). USAID, European Movement, European Policy Center

⁶²Available at http://www.rs.undp.org/content/serbia/sr/home/presscenter/articles/2018/te_ak-polo_aj-roma-na-zapadnom-balkanu.html

⁶³ Data from internal document of MESTD (2017) - As technical assistance to MESTD, the World Bank conducted a functional analysis of public services in education, including the part related to the analysis of the school network, with the ultimate goal of improving the efficiency and effectiveness of public services.

General and art secondary education

SEDS sets as a goal increasing enrollment in general secondary schools (grammar schools) and a proportionate reduction in enrollment in secondary vocational schools. Namely, SEDS foresees that by 2020, at least 95% of those who have completed primary school (88% of the generation) will enrol in one of the secondary schools. The goal is that 39% of the generation enrols in four-year secondary vocational schools, 10 % in other secondary vocational schools, and 39% in general secondary and art schools. In other words, the goal set is that about 45% of all secondary school students attend general secondary and art education.

Bearing this in mind, it is important to point out that the rate of continuing education in the school year 2016/2017 for those who completed general secondary school was 91.8%. According to estimates based on the MoESTD's internal data, 8% of general secondary school students who enrol in the first grade of those schools do not complete this program within the expected duration of four years (an assessment based on data on the generation of students enrolled in general education school in 2013/2014).

Children from vulnerable groups, irrespective of their abilities, often lack the opportunity to get educated in general secondary and art schools, mostly because of the poor social status of their families who cannot afford to pay the expenses of their education outside the place of residence (transportation or accommodation elsewhere), and additionally because completing such schools does not lead directly to employment, they last longer and require investment. In the IEQV research on the attitudes of employees in general secondary schools, 16.4% of the respondents agreed that one of the important shortcomings of general secondary schools is low coverage of students from vulnerable groups and underdeveloped system of support and provision of conditions for their education – while 45, 6% partly agreed with this statement, and 38% of employees disagreed.

IEQV conducted a study in 2017 on the opinion of employees in general secondary schools on the quality, efficiency and relevance of the existing concept of general secondary school education.⁶⁴ As special qualities of general secondary education, the employees see it as the best preparation of students for further education, which provides good general education to students that enables their success in competitions and provides a supportive environment for the development of their personality. According to the employees in general secondary education, the advantages that this type of school offers are the possibility of a good choice of profession, student activism, developing working habits and encouraging lifelong learning. In the eyes of employees, general secondary schools foster good quality traditional education, but also modern approaches and innovativeness. On the other hand, it is important that every fifth respondent agrees

⁶⁴ MOESTD, LFES (2017). What is good in our general secondary school, and what needs to be changed? Attitudes of employees in general secondary school on the quality, efficiency and relevance of general secondary education

that teaching in general secondary schools is predominantly lecturing, and that the curriculum is too extensive, and that it is not adapted to the nature of these schools and the characteristics of students in terms of its structure and content. Almost every fourth employee mentioned the quality of teaching methods as one of the major shortcomings in general secondary schools.

A study of employees in general secondary schools showed that one third of teachers in their work need support in adapting the teaching to the needs of students, that is, in the process of individualization and differentiation of teaching. The same percentage of teachers has problems with the use of ICT in teaching, and 40% of teachers have indicated the need for support in the implementation of thematic-problem teaching and interdisciplinary approach.

Much the same, the same research shows, regarding the relevance of general secondary education, that almost half of the respondents believe that general secondary schools did not lose their specific identity of institutions that prepare the students well for the university (47.5%), 41.4% of respondents partly agreed with that, while every tenth employee believes that the general secondary schools have lost this distinction. The majority of respondents (69%) share the view that general secondary education empowers students to participate actively in social, cultural and scientific life, while 28% partly agrees with that, and 3% do not agree. In relation to this, 65% of employees believe that their school has established a continuous and rich cooperation with cultural, scientific and other organizations and institutions, so that the future cultural and intellectual elite has the opportunity to connect extracurricular knowledge and skills with the school knowledge.

When asked what general and interpersonal competences the teachers are best developing with their students, the results of the study have shown that general secondary school teachers best develop a responsible attitude towards the environment, communication and cooperation and a responsible attitude towards a democratic society.

Nearly 50% of the interviewed teachers expressed the need for support As regardsdeveloping students' entrepreneurship and entrepreneurial competence, 35% of teachers do not feel capable of developing students' digital competence, and 33% of respondents do not know how to develop students' competence for lifelong learning, which is certainly a significant percentage.

Network of secondary schools was created for the needs of far greater number of students, while in the next 15 years, as projections show, a further decline in the number of students in secondary education is expected, by about 9000. A particularly pronounced drop is expected all until school year 2022/2023.

Data from the end of the school year 2016/2017 show that 43.3% of state general secondary schools work in one shift, 55.7% in two shifts and one in three shifts. Of the 13 private general secondary schools, 8 work in one shift, and 5 in two shifts.

Secondary Vocational Education

Secondary vocational education has long been perceived in Serbia as part of the education system expected to play a major role in contributing to the economic development of the country, and in keeping with this, in the period before, and especially after the adoption of the Strategy, intensive efforts have been made towards developing and aligning vocational education programs to the standards of qualifications, including establishment of the catalogue of Standards of Qualifications, which is continuously updated.

The external evaluation of vocational schools was carried out previously based on general standards where a relatively high percentage of vocational schools received the highest grade, especially in comparison with general secondary schools. In the period from 2015 to 2017, in accordance with the MoESTD request, IEQV carried out the evaluation of 21 educational profiles in the system of secondary vocational education that after the evaluation exceeded from trial frames and became part of the "regular" vocational education system.

Final exams are currently the only national examinations that provide a picture of student achievements at the end of vocational education, and the Centre for Vocational Education and Adult Education has developed a methodology of assessment based on competencies in vocational education, which is the result of many years of research and gained experience through the execution of final and graduation exams as well as the applied assessment methods in the framework of educational profiles in the exam.

Participation of employers is facilitated on different levels of policy creation, and representatives of employers are also members of examination panels on final exams.

One of the most important measures aimed at increasing the relevance of vocational education is the establishment of a national model of dual education, thus at the end of 2017 the Law on dual education⁶⁵ was adopted, and its full implementation starts as of school year 2019/20. Correspondingly, the Law on dual education is an expression of one of the priority goals of the educational policy in Serbia. The main idea behind dual education implies acquisition of theoretical knowledge in school and practical in companies in a real working environment, bearing in mind that the schools cannot keep up with the speed of technological changes occurring on the market. By increasing the scope and quality of practical training, as well as by means of involving the industry in the process of drafting curricula, a system is created in which a qualification truly represents acquired competences, which in turn will result in greater employability of young persons. In this way, the industry, by investing in education, invests in their future employees and solves their staffing problems in the long run.

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⁶⁵ Law on Dual Education, Official Gazette of RS, no. 101/2017

In the school year 2017/2018, the total number of enrolled students in 19 educational profiles developed in accordance with the dual model was 1482 and additional 3077 of students who enrolled in some of the 43 education profiles with elements of dual model in a total of 128 vocational secondary schools and 205 companies.

Pursuant to the Law on Dual Education, the Government of the Republic of Serbia established the Commission for the development and implementation of dual education and three-annual evaluation of achieved results was formed. This Commission is made up of representatives of both sectors - education and industry.

Higher education

At the level of higher education, in school year 2016/2017 the coverage rate among population aged between 19 and 24 was 54.2%, and compared to 2012, when SEDS was adopted, it was higher by more than 10 percentage points. SEDS did not specify target values in this segment.

Affirmative Action for enrollment in higher education institutions dates back to 2003/2004, and so far 1623 male and female students have been enrolled (51% are girls) pursuant to this Action. Enrollment in HEI based on the Program of affirmative measures for enrollment of Roma students within the quotas approved by the Government Decision for this affirmative measure is open to students who pass the entrance exam. Specifically, in academic 2016/17, 182 students enrolled in the first year, (88 young men and 94 young women), while in the academic year 2017/18, 154 students were enrolled (71 young men and 83 young women).

Adult education

The adult education system in Serbia is first implemented, in practice, through the program of functional basic adult education. The program of functional basic adult education was initiated by the IPA project "Second Chance - Development of a Functional Basic Primary Education System in Serbia" (2010-2013) aimed at improving basic skills in the most vulnerable social groups by developing the concept of Functional Basic Adult Education (FBEA). Over 5,000 adults (persons older than 15) participated in the project, in 80 primary schools the program was conducted in, and in 75 secondary vocational schools that provided vocational training to adults, bearing in mind that, apart from the three-cycle functional basic adult education that was conducted in primary schools, adults had the opportunity to become trained for simple professions and in the framework of those three years receive a certificate of completion of a training program that is recognized on the labour market. Thanks to this project, the basis for the adoption of a legislative framework for the implementation of such concept of the basic adult education was laid, and through the project, besides the capacity of schools (over 1000

teachers were trained for the implementation of this program), new curricula for all subjects, as well as FBEA teaching and learning materials have been developed.⁶⁶

The second most common form of adult education in Serbia includes retraining, additional education and specialization programs, while trainings implemented by publicly recognized organizers of adult education activities (OROAs) are also represented in the form of non-formal education.

According to the latest available data at the national level in 2016 the rate of participation of adults in some form of formal or informal adult education or training was 19.8%, which is slightly higher than in 2011 (16.5%), but significantly below the average of the EU member states (45.1%).

Participation of women in some form of education and training in the period of 12 months preceding the survey is somewhat higher (21.4%) than of men (18%). The participation rate is highest among the population aged 25-34 - 29.2%. The most common participants in lifelong education are women, aged 25 to 34, with completed higher education, who are employed and live in the city.

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⁶⁶Available atwww.drugasansa.rs

2. Preschool education

2.1. Improving the quality

The new Foundations of Preschool Education Program⁶⁷ were adopted in September 2018. Metaphorically named "Take-off Years", the new Foundations of Preschool Education program aim to support the well-being of the child by developing an integrated approach to learning and development, emphasizing the importance of the game and building enabling and supportive relationships with peers and adults in a setting that provides inspirational environment for playing, research and learning. It is a unique conceptual starting point for the development of a program of pedagogical and educational work with children of different age, as well as for the development of criteria for monitoring and evaluating the quality of preschool education (PE) and the improvement and development of preschool institutions (PI), and this sector as a whole. The new concept of upbringing and education of preschool children is in line with contemporary theoretical approaches in this field, relevant educational policy documents, domestic and international examples of good practice and values based on the long-standing tradition of preschool education in Serbia.

The adoption of new Foundations of Preschool Education Program is the result of activities implemented in the period from October 2016 to June 2018 within the project *Improving the quality of preschool education through piloting of the draft, further development and finalization of new Foundations of Preschool Education*. The project was implemented as joint initiative of the IIE, the Institute for Pedagogy and Andragogy of the Faculty of Philosophy in Belgrade, UNICEF and MESTD.

A challenge for educational authorities, researchers and practitioners will be to develop an efficient approach to the implementation of the Foundations of Preschool Educations Program. For the first time in the domain of preschool education, the Rulebook on the Foundations of the Program prescribes the successive obligation to apply new program concepts in order to provide timely and necessary professional support to the institutions. The Rulebook includes as its integral part a list of cities / municipalities with defined timetable for introducing the obligation to apply the new program concept (in the period from 1 September 2019 to 1 September 2022). The list of local self-government units (LSGUs) where the Foundation of Preschool Education Program will be applied in their institutions as of 1 September 2019 includes: cities of Novi Sad, Cacak, Loznica, Pirot, Sremska Mitrovica, and Smederevo, city municipalities of Zemun and Vračar, and municipalities of Sremski Karlovci, Arandjelovac and Aleksinac.

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⁶⁷ Rulebook on Foundations of Preschool Education Program, *Official Gazette of RS – Educational Gazette*, no. 16/2018-1

Taking into account the need that all preschool institutions (162 institutions founded by LSGU) get support in the process of implementing new Foundations of the Preschool Education Program, the timely realization of the planned support activities for preschool institutions is the key challenge for the implementation of the new program concept. In the forthcoming period, support in the form of trainings, development of handbooks and guides, development of horizontal exchange mechanisms and mentoring support to institutions will be provided through the MESTD project *Inclusive Preschool Education* (in the framework of its second component), funded from the loan granted by the International Bank for Reconstruction and Development.

Trainings for preschool teachers and professional associates for the implementation of the new program concept are expected to begin in 2019. Complementary support towards the implementation of new programs of preschool education will also be provided through the IPA 2014 project - Towards lifelong learning. One of the three planned outcomes of this project is to support the reform of PIs as the initial basis for lifelong learning. The implementation of the project started in 2019; provision of expert support in PE planning and management for 50 LSGU/PI, as well as supply of equipment for 55 preschool institutions have been contracted.

In school year 2017/2018 of the 29 evaluated PIs, none of the institutions received a grade below 3, and 66% received the highest grade. This reduced discrimination parameter concerning results raises the question of whether the criteria on which the institutions are valued are set too low or a problem exists in the evaluation process itself, because according to other expert assessments, the quality of education in PI is not quite satisfactory. Specifically, it is estimated that the PE practice is of an uneven quality, insufficiently diversified and does not respond to the needs of children and parents.⁶⁹

In this regard, it is important to point out that the framework for evaluating the work of preschool institutions has been revised by adopting a new Rulebook on standards of work quality of institutions ⁷⁰ (published on 2 August 2018). The revision included a large number of innovations in the evaluation framework. Thus, for example, the number of quality areas was reduced (from 7 to 4), the number of standards was reduced (from 29 to 15), some standards were redefined, and others "replaced" with completely new statements. Indicators have also been redefined to make them more precise and measurable.

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⁶⁸ The project *Inclusive Preschool Education in Serbia* is funded from the loan granted by the International Bank for Reconstruction and Development (in the total amount of EUR 47 million). The overall goal of the Project is to improve preschool education accessibility, quality and equity, especially for children from vulnerable social groups. The second component of the project *Inclusive Preschool Education in Serbia* envisages support activities for the implementation of the new Foundations of Preschool Education Program through the development of training programs and all the accompanying materials for preschool teachers and professional associates for their implementation, including the training for the heads of preschool institutions.

⁶⁹Baucal, A., et al. (2016). Pre-school education in Serbia: situational analysis and recommendations. World Bank ⁷⁰ Rulebook on standards of work quality of institutions, *Official Gazette of RS – Educational Gazette*, no. 14/2018-1

Based on the results and experiences gained in the implementation of the five-year cycle of external evaluation and opinion of the employees in institutions, the need was identified to revise certain standards and indicators of quality in preschool institutions, and to improve the procedures of external evaluation. The need to adapt the quality framework and the approach to quality assurance to specificities of preschool education and to strengthen support to institutions in improvement of work quality, has been identified. Pursuant to Minister's Decision a Working Group has been formed and tasked to revise the PE quality framework, including specially to define standards and indicators in the areas of quality in line with the new program concept. The working group was comprised of representatives of IEQV, IIE, MoESTD and PI practitioners. A new quality framework, notably standards and indicators, were piloted in one preschool institution before adoption. In the framework of the public debate on the proposal of standards, on the website of IEQV, which led the entire activity, there was an e-poll where all stakeholders could provide their suggestions and comments.

In order to execute external evaluation of the quality of work of PIs on the basis of the adopted revised framework, i.e. the standards for evaluation of PIs work, it is necessary to develop instruments and prepare the necessary resources for its full implementation and to train evaluators for evaluation (respecting the specificities of the PU activity). During 2018, joint activities of IEQV, MoESTD and the Implementation Unit of the *Inclusive Preschool Education Project* were initiated in order to operationalize activities in the domain of support for the implementation of the revised quality framework. The next steps in 2019 will include the development of a handbook for self-evaluation and the organization of a training for the self-evaluation of schools and preschool institutions.

Bearing in mind the above, it is also important to point out that during the year 2018, the MoESTD, IEQV and UNICEF implemented the project "Improving the quality of preschool education through the improvement of mechanisms for evaluation of preschool institutions and development of support system" in 32 preschool institutions in Serbia. The project aimed to empower PI employees to implement the self-evaluation process. Professional support to institutions was provided by education advisors in school administrations and external consultants.

Rulebook on Competence Standards for the profession of Preschool Teachers and their Professional Development ⁷¹ was adopted on 30 August 2018. The competence of preschool teachers is defined in this document through three areas: 1) direct work with children, 2) development of cooperation and learning community; 3) development of professional practice. Every area of competence is specified through several competences given in the dimensions of knowledge, skills and values.

The competence of preschool teachers is recognized in SEDS and in international educational policy documents from the domain of preschool education as one of the key

⁷¹Rulebook on Competence Standards for the profession of Preschool Teachers and their Professional Development, *Official Gazette of RS – Educational Gazette*, no. 16/2018-1

elements of the quality of education. By defining the standards of teachers' competencies, the preconditions have been provided for developing good quality preschool education through harmonized action at the level of the education system, the level of the preschool institution and on the individual plan of professional development of preschool teachers, along the lines of this defined competencies.

Competence standards assert the idea that being competent is more than a sum of individual competencies as a set of separate skills and knowledge about certain matters which an individual must possess in order to successfully perform certain tasks. A competent preschool teacher is professional in his work, which implies autonomous and responsible acting in accordance with the ethical nature of the preschool teacher practice, and the complex, dynamic and contextually conditioned pedagogical practice. The competence of preschool teachers is based on the creative application and review of professional knowledge, skills and values in a changing social and pedagogical context. Development of competencies is a process for which the preschool teacher is not responsible alone, since it requires a systematic approach that will support such a process.

Preschool teacher's competence standards are the guidelines intended for:

- decision makers in the field of preschool education related to the creation of systemic measures and activities which support the development of thus conceived competence of preschool teachers;
- creators of the initial education programs for preschool teachers and of the accreditation system;
- the system of professional development (job entry, licensing exam, professional development and promotion);
- education advisers related to the development of a system of support for competence development in practitioners;
- managers and professional services of preschool institutions related to creating professional development and supportive environment for reflective practice of preschool teachers;
- preschool teachers, related to assessing their own competencies, planning and monitoring their professional development in order to develop professional practice.

The draft document was initially prepared in the IIE, and its finalization was carried out through the project Piloting the draft Foundations of Preschool Education (MoESTD, IIE, Institute for Pedagogy and Andragogy of the Faculty of Philosophy in Belgrade, and UNICEF).

With the setting of a list of 47 practitioners, the Network of Practitioners for Support to Preschool Education⁷², was established as a result of a joint initiative of MoESTD, IIE, IEQV, UNICEF and the Institute for Pedagogy and Andragogy of the Faculty of Philosophy, University of Belgrade. The network of practitioners was established with a goal to contribute to improvement of the quality and equity of preschool education; to provide support to institutions in view of further development of different segments of quality and equity in preschool education; to support development of quality programs and policies; to support sharing of good innovative practice among institutions; to provide support to the development of inclusive practices in preschool institutions, preschool groups, as well as on the local level. The strengthening of the Network of Practitioners for Support to Preschool Education is also planned within the 2nd Component of the Inclusive Preschool Education project.

In 2018, a draft Rulebook on conditions for the establishment, beginning of operation and performance of preschool institution activity was prepared. It⁷³ was adopted at the beginning of 2019. This Rulebook regulates in more details conditions regarding space, equipment, didactic aids and staff which a preschool institution must meet in order to start its operation and pursue its activity.

On 12 April 2018, the Minister of Education, Science and Technological Development and the Minister of Health jointly adopted the Rulebook on Conditions and Manner of Implementing Alimentation in Preschool Institutions⁷⁴. This rulebook has introduced more rigorous rules regarding children alimentation in PU, defined diet for children with special needs, and regulated the status of associate nutritionists.

Development of the system of accreditation of preschool education programs and institutions is seen as important strategic orientation / measure in SEDS and SEDS AP that should provide significant contribution to raising the quality of PE. In the Action Plan, two actions have been dedicated to this aim - the establishment of an accreditation body (PU-PSO5) and the accreditation process itself (PU-PSO6). The existing legislation, however, does not recognize the accreditation of preschool institutions and programs. The current system of verification of institutions is the only procedure in which approval is given for performing preschool educational activities⁷⁵. Earlier analyses have shown that this is a dispersed model in which different aspects are regulated in different rulebooks and which is oriented on formal accomplishment of structural requirements in quantitative, but not in qualitative sense. Certain steps in this context were made during 2018, when draft rulebook was prepared, which prescribes conditions for the establishment, start of work and performance of the activity of a preschool institution.

⁷³ Rulebook on conditions for the establishment, beginning of operation and performance of preschool institution activity, *Official Gazette of RS – Educational Gazette*, no. 1/2019.

 $^{^{72}}$ Minister's decision no. 119-01-75/2018-07/2, of 10 July 2018 $\,$

⁷⁴ Rulebook on Conditions and Manner of Implementing Alimentation in Preschool Institutions, *Official Gazette of RS*, no. 39/2018

⁷⁵ In the period 1 January – 30 September 2018, opinions on preschool programs in the verification procedure were issued for five public and 62 private preschool institutions

This Rulebook was adopted at the beginning of 2019. It regulates in more detailed requirements regarding space, equipment, didactic aids and staff which a preschool institution must meet in order to start its operation and pursue its activity. An additional document has been prepared as well: a draft Procedure for giving opinions on preschool programs in the process of verification of public and private preschool institutions, and on preparatory preschool program in the process of verification of primary schools that implement the program of educational work with children in the year before entering school.

2.2. Increasing the coverage

On the level of the coverage of preschool education, progress has been achieved since the adoption of the SEDS, and increase in coverage is noticeable year after year. Data of the Statistical Office of the Republic of Serbia show that in 2017/18, preschool education covered 56.04% of children, or 61.3% (101.628) children aged three to five and a half years.

Increased capacity of state PIs and increased number of private institutions has also affected increase in the number of children involved in the process of preschool education. Compared to 2015, when there were 192,005 children in the PE system, in 2018 this number was 10% higher and amounted to 212,719. Overall growth can mostly be attributed to increased enrolment in private institutions (by almost 14,000 more than in 2015) than to enrolment in state institutions (almost 7,000 more children than in 2015).

Increased enrolment in private PIs can be explained by the simulative measure in the sphere of public-private partnership – which included private kindergartens into the system of subventions in certain towns. This was mostly the case in Belgrade which features a growth in enrolment of children in private institutions by more than 10,000 in comparison to 2015. On the other hand, in Belgrade, as a result of the optimization of the existing space, capacity to receive around 2,000 preschool children have been provided in primary school facilities. In spite of this, data for 2018 show that on the country level 11,067 children were admitted above the quota, and 7,887 children were not admitted because of lacking capacities (both in public and private PI).

Despite these positive trends, the current coverage rate is still not on a satisfactory level, except for the attendance of the compulsory preparatory preschool program (98.2% in 2017/2018). Regarding the equity of this segment of the education system, there are two negative phenomena: significant differences between municipalities in terms of coverage of preschool education (more affluent municipalities are more likely to have higher enrolment rates than less affluent municipalities), and children from Roma settlements

in Serbia are mostly excluded from PE. Findings of MIKS studies⁷⁶ are taken as reference data on coverage rates for Roma children. The last such study was conducted in 2014 and it showed that among children aged 36-59 months from Roma settlements, 6% attended organized educational programs in early childhood. Of the children of the appropriate age, 63% has attended preparatory preschool program. The next MICS study in Serbia is planned to be conducted in 2019, and a comparison of its findings with the findings of the 2014 study will provide an opportunity to draw conclusions about the current trends.

Owing to the Law on Financial Support to Families with Children⁷⁷ from 2017 support to including children from vulnerable social groups in the PE system has been significantly improved through the reimbursement of the costs of their stay in preschool institutions, for children being the beneficiaries of financial social assistance. Children of preschool age being beneficiaries of financial social assistance are entitled to reimbursement of expenses for staying in PI, who received the Verification Decision of the ministry responsible for education, on the amount of the participation of the beneficiaries in the price of the service established by the decision of the local self-government unit. Also, this law regulates covering of the costs of stay of the children from materially deprived families in the PI. Children of preschool age from materially deprived families, depending on the financial standing of a family, are entitled to an allowance for the costs of the stay in a preschool institution, based on the Verification Decision of the ministry responsible for education. The method and conditions for cost recovery have been defined by the competent authority of the local self-government unit.

Increasing the coverage of children by preschool education and greater equity of this coverage requires improvement of the organization of services at the level of local self-government and allocation of larger funds for preschool education. The response to these challenges will be partly provided within the project of the Ministry of Education, Science and Technological Development "Inclusive Preschool Education in Serbia". The overall goal of this project is to improve the accessibility, quality and fairness of PE, especially for children from vulnerable social groups. It has been planned, among other, to provide around 17,000 new places for children aged 3 to 5,5 years in new, renovated or predesignated facilities in at least 30 cities and municipalities in the Republic of Serbia. The project is also intended to provide subsidies to local governments to ensure that the most vulnerable families get priority in the enrolment of their children aged 3 to 5.5 years in preschool education programs, free of charge. Grants for at least 30 municipalities will make it possible for the most vulnerable and economically deprived families and their children to have access to community-based programs and services (within the health, education, social protection) designed for children and parents.

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⁷⁶ Statistical Office of the Republic of Serbia and UNICEF (2014). Study of multiple indicators of position of women and children in Serbia in 2014 and Study of multiple indicators of position of women and children in Roma settlements in Serbia 2014, Final report. Belgrade, Serbia: Statistical Office of the Republic of Serbia and UNICEF

⁷⁷ Official Gazette of RS, no. 113/2017 and 50/2018

Through the project "Support to the reform of the system of preschool education" (Service Contract) within IPA 2014 project - Towards Lifelong Learning, expert support for 50 LSGUs is planned in respect of their planning and management of PE - in the domain of developing local strategies and action plans, optimizing the network of preschool institutions and promoting the importance of including children in the preschool education system.

Also, during 2018, for the needs of the implementation of the project "Inclusive Preschool Education", two units were formed: Project Management Unit with the Ministry of Education, Science and Technological Development, in charge of coordinating all project implementation activities, as well as the Central Fiduciary Unit with the Ministry of Finance, which is in charge of all procurement and financial management during the project.

For the purpose of more efficient implementation of the project and monitoring the achievement of results, two advisory bodies were formed: A working group, that provides technical expertise to the Project Management Unit, and is comprised of MoESTD experts and includes a contact person in the Ministry for each of the project components, and the Consultative Group, made up of representatives relevant ministries and institutions, that provides general advice and guidance on policies in the field of PE, related programs and grants and other activities at local, regional and national level.

During 2018, representatives of the MoESTD started holding meetings with representatives of LSGUs in order to identify the possibilities for improving PE quality and increasing the coverage of children. Talks involved representatives of local self-governments which are among the top 35 on the ranking list of towns and municipalities, which was prepared for the project "Inclusive Preschool education".

Rank list of towns and municipalities⁷⁸ was developed for the needs of the project "Inclusive Preschool Education" based on data obtained from the Government of the Republic of Serbia, MoESTD, the Statistical Office of the Republic of Serbia, as well as based on certain researches conducted by international organizations such as UNICEF, OECD, etc. When planning the construction of new facilities or reconstruction or predestination of existing facilities for the implementation of the preschool education programs, the towns and municipalities will be contacted in accordance with the list, from the first ranked onwards.

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⁷⁸ The main criterion for ranking on the list was the assessment of the need for expanding the number of vacancies in kindergartens, based on data obtained from local governments. The estimate was based on the number of children born in the territory of the city or municipality, number of children enrolled in preschool education programs and the number of children remaining on the waiting list for enrollment. An important criterion for ranking on the list was the socio-economic profile of local self-government, prepared on the basis of the level of economic development (salaries, pensions and budget revenues of the city or municipality, population growth rate, unemployment rate and level of education). Additional criteria were the number of families with children aged 3 to 5.5 who receive some form of financial social assistance (family financial support, child allowance, etc.) and the percentage of Roma children from birth to the age of 14 years.

The project "Kindergartens Without Borders 3 - Support to Improvement of System of Social Care for the Children and Preschool Education on Local Level" was implemented in the period from December 2016 to July 2018 by UNICEF, MoESTD and CIP - Centre for Interactive Pedagogy. The overall goal of the project was to improve the quality of social care for children and PE through strengthening the capacities of local self-government to create conditions for wider inclusion of children in quality programs in cooperation with PI and other actors. The project was implemented in three PIs (PI "Cukarica" and PI "Chika Jova Zmaj" in Belgrade, and PI "Zrenjanin" in Zrenjanin). The project provided for the adaptation, furnishing, and equipping with didactic aids of 10 premises in these institutions and enabled the inclusion of more than 600 children aged 3 to 5.5 years in 27 different half-day and shorter programs. Project activities support the linking of practitioners from various PIs and other institutions through training, horizontal exchanges, conferences, study visits. Through seminars, on-line trainings and mentoring support preschool teachers and professional associates have been strengthened to improve the quality of everyday practice and develop various half-day programs.

The SEDS AP action, which foresees introduction of at least half-day preschool program for one school year for all children aged between three and 5.5 years (PU-PSO2), presupposes the introduction of a systemic measure that implies the obligation to provide conditions for its implementation (not the obligation to attend them for children). It should be kept in mind that the existing legislation did not foresee the implementation of this action - RS budget allocated funds for the implementation of preparatory preschool program, a program of educational work with children with developmental difficulties and children at hospital treatment. Certain possibilities for providing mechanisms for significant investments in the construction of new facilities and expansion of spatial capacities (and new employment) from the local government budgets are opened through the implementation of projects supported by the MoESTD. Strategic commitment at the national level should be recognized by the LSGUs as the founders of the PIs, responsible, under the Law, for planning and optimizing the PI network in accordance with the criteria set by the Government. Increasing the coverage of children cannot be accomplished solely through project support, because such an approach does not provide for sustainability in the attainment of these goals.

Although SEDS has put a strong emphasis on the diversification of the PE programs as an important element for improving the inclusiveness, fairness and quality of the PE, and the enabling legal framework is in place, in reality, there is no essential application of diversification, both in terms of organizational and program aspects. Local governments have not yet taken on responsibility for the development of short-term high quality diversified programs in the preschool education. On the one hand, local governments are facing the challenges of additional funding (and employment) that the expansion of the offer of various programs would result in and, on the other hand, the diversification of the program is not sufficiently perceived as an important way to increase the coverage and fairness of the PE. Through the implementation of projects (such as the Kindergartens Without Frontiers Initiative) - the PUs/ LSGUs have been continually

supported by the national level to develop various half-day and shorter programs, through providing funds for equipping and adapting available space at the local level, professional advanced training of employees and horizontal exchanges; initiatives in the field of improvement of PEs at the level of local self-government. Additionally, during 2018, activities were also undertaken towards development of regulations in this area, so a draft rulebook was prepared, which will more specifically regulate the delivery of various programs and forms, other forms of work and services provided by preschool institutions.

In order to increase the inclusiveness of preschool education, MoESTD has supported the project "Support to Improving the Quality of Educational Work with Children with Developmental Disabilities" implemented by UNICEF and the Initiative for Inclusion <code>VelikiMali</code> in three PU: PI "Zvezdara" and PI "11. April" from Belgrade and PI "Pcelica" from Sremska Mitrovica. The project was based on supporting the exercise of rights of children with developmental disabilities to a quality PE and creating an inclusive, enabling and non-discriminatory environment in the PU. Project activities have shown that it is possible to create a model of "open development groups", which implies that children with disabilities and difficulties can be fully included in regular groups. Accordingly, it has also been shown that it is possible to redefine the role of special education teachers —, so they provide support to preschool teachers in working with children who have joined regular groups.

2.3. Increasing the relevance

The applicable regulations define the competence of the MoESTD in respect of carrying out PE activity (Law on Ministries, LFES, Law on Preschool Education). The PE activity is carried out in the preschool institution. The preschool institution also carries out activities of alimentation, care, and preventive-health and social protection. In this respect, at the level of concept and practice there is an integrated child care within the PU.

Adoption of new Foundations of the program of preschool education and the Competence standards for the profession of preschool teachers and their professional development are important steps in the further development of the system of preschool education, based on modern approaches to child, preschool institution and the PE system. The new concept more strongly supports continuity in education, which is achieved by laying the foundations for lifelong learning and development of educational competencies, and connecting with school, family and local community.

The realization of the project "Kindergartens without Borders 3" has contributed to improving the quality of social care for children and preschool education through strengthening the capacity of local self-governments to create conditions for wider inclusion of children in quality programs in cooperation with PI and other actors. With

Project support, Zrenjanin drafted the PE Development Strategy. It prepared the following documents: Situational analysis in three selected urban municipalities on socioeconomic status and PE status; Analysis of the fairness of the PE system in selected urban municipalities and preschool institutions, and prepared Checklist for assessing achievement, the principle of equality at the level of preschool institutions, revised instruments for data collection and management related to preschool age children at the local level (created through IMPRES project⁷⁹). The instrument was transposed in the form of electronic applications and software that serves as a support for keeping and managing data on children at the local level and for strategic planning of educational capacities.

The project Inclusive Preschool education is planned to provide grants for at least 30 municipalities for developing initiatives and project proposals in the part related to the improvement of inter-departmental cooperation at the local level and ensuring quality access to community services (within the framework of health, education, social protection) for children and parents. Through the project "Support to the reform of the system of preschool education" (Service Contract) within IPA 14 *Towards Lifelong Learning*, expert support for 50 LSGUs has been planned in respect of their planning and management of PE - in the domain of developing local strategies and action plans, optimizing the network of preschool institutions and promoting the importance of including children in the preschool education system

Within the project "Respecting differences and preventing violence in preschool institutions in Serbia", implemented by the CIP (Centre for Interactive Pedagogy) and UNICEF, with the support of MoESTD, a conceptual model "Kindergarten as a safe and enabling environment for learning and development" was created. The aim of the project is to promote a safe, secure and enabling environment in which each child will have equal opportunities to learn and develop competences that are important for growing up and living in a democratic, civil society (respect for others, cooperation, proactivity, responsibility, etc.) which children's perspective will be respected, and children will be active participants in their own development. The project will be implemented first in four PUs, in four different regions of Serbia. The first trainings delivered were attended by 104 participants, and mentors started their first visits to preschool institutions. In the upcoming period two more training modules will be held, and progress in the piloting of this conceptual framework will be monitored. Development of a special handbook is also planned.

2.4. Increasing the efficiency

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⁷⁹Project Improving Preschool Education in Serbia (IMPRES) - 2011-2014, is a joint project of the Ministry of Education, Science and Technological Development of the Republic of Serbia and the European Union for which the EU has allocated EUR 3.75 million from the Pre-Accession Funds (IPA) for Serbia.

Network of educational institutions in Serbia is not aligned with the changed demographic situation, that is, with the significant decline in the number of children / students, or with the specificities on different levels of education (preschool level, secondary vocational education). In that sense, ill adapted network of institutions contributes to reduced efficiency of the overall system of education.

At the beginning of 2018, the Regulation on the criteria for adopting the act on the network of public preschool institutions and the network of primary schools⁸⁰ was adopted, replacing the corresponding Regulation from 2010. One of the important novelties is obligation of LSGU to prepare, before adopting the act, a study containing network development plan made based on the trends of natural increase of children and students, as well as migration movements in the local self-government unit for public preschool institutions for a period of five years and for public primary schools for a period of four or eight years. The deadline for passing an act on the network of public preschool institutions is the end of March 2019.

Component 2 of the Project Inclusive Preschool Education has envisaged support for the improvement of information system in PE sphere, including links for the exchange of data with the Ministry of Labour, Employment, Veteran and Social Affairs and Ministry of Health. Professional basis for the amendment of bylaws is planned to be prepared in 2019, and prescribe the keeping of records and pedagogical documents concerning educational work, in accordance with the requirements of the new program concept⁸¹. Corresponding working group has been formed, and the rulebook is planned to be published and applied as of the beginning of new school year (September 2019).

2019 Priorities

Priority 1

Preparation of a professional basis for the drafting of a bylaw which will prescribe the keeping of records and pedagogical documentation on educational work, in accordance with the requirements of the new program concept, and the drafting of a draft Rulebook on conditions for the carrying out of various programs and forms, and other forms of work and services performed by PU.

Priority 2

Monitoring and support to the implementation of activities under the 2nd component of the project Inclusive Preschool education (improving the quality of PE).

⁸⁰ Regulation on the criteria for adopting the act on the network of public preschool institutions and the network of primary schools, Official Gazete of RS, no. 21/2018

⁸¹ Law on amendments to the Law on preschool education, adopted in February 2019 (Official Gazette of RS, no. 10/2019) mostly relates to electronic recordkeeping in preschool institutions.

Priority 3

Monitoring territorial coverage and coverage of children with institutional PE.

Priority 4

Determination of the fulfilment of the prescribed conditions related to preschool program in the procedure of verification of the PU, or to preparatory preschool program in the process of verification of primary schools for its delivery.

Priority 5

Support preparation and implementation of projects and initiatives in the PE activity, in order to increase the coverage of children and to expand program offer; cooperation with relevant professional associations, representatives of the academic community, competent institutions, representatives of trade unions, civil society organizations.

Actions under the Action Plan:

PU-PSO1 - Harmonisation of legislation of social care and preschool education with SEDS

PU-PSO2 - Introduction of, at least, half-day preschool education program for all

children aged between 3 and 5.5 in the period of one school year

 $PU\mbox{-}PSO3$ - Definition and adoption of quality standards

PU-PSO4 – Development and adoption of foundation of the preschool education programme

PU-PSO5 – Establishing accreditation body for preschool institutions and programmes

PU-PS06 - Accreditation of preschool institutions and programmes

PU-PSO7 - Increasing the coverage of children aged 3-5.5 and a greater equity of coverage

PU-PSO8 - Establishing a local system of children's social care and preschool education

3. Primary education

The coverage in primary education in Serbia is almost universal according to the data of the Statistical Office of the Republic of Serbia ⁸². Thus, the minimum target value set in SEDS has been practically attained - 98% (ideally, the coverage rate would be 100% given that primary education is compulsory). The SEDS also sets as an aim a dropout rate in primary education of no more than 5% of the generation. Projections based on data provided by the SSO point to the conclusion that the droput rate is within this range. The methodology for calculating the number of dropouts is, however, not optimal (the difference in the number of students at the beginning and at the end of the school year), nor the practice of reporting the number of students by the institutions is quite reliable, so that completely valid valid data on the dropout rate in primary education system is not quite available

According to the data of the Statistical Office of the Republic of Serbia for the beginning of the school year 2018/2019 primary school (or classes) with developmental disabilities are attended by 0.9% of the total primary school age population (a total of 4719 students). This places Serbia among the countries with the smallest percentage of students who attend primary education outside conventional primary schools.

3.1. Improving the quality

After a several-year-long break, in 2018, national student testing (on a sample) was conducted - the knowledge of students of the 7th grade in mathematics, history and physics was tested. The results of this testing are not yet available. Therefore, for the time being, the most relevant indicators of the quality of student achievement are the results that Serbian students achieve in international research.

In school 2017/18, 107 primary schools were evaluated, and the results were processed for 92 primary schools, whose average grade of the overall quality of work was about 2.9. In other words, a total of 75% of schools are rated with grade 3 or 4 for general quality of work, with three times more schools with grade 3 (56.5%). Approximately 23% of primary schools evaluated were rated with grade 2 for the overall quality of work. Grade 1 appears in slightly more than 2% of schools from this sample.⁸³

In respect of curricula innovation, it should be noted that in the school year 2017/2018 an amended and updated curriculum has been rolled out for students of the fifth grade of

⁸²Education coverage rate is a ratio between the number of students enrolled into certain level of education ans the appropriate age group for that level of education.

⁸³Institute for Education Quality nd Valuation, The quality of work of educational institutions in the Repubic of Serbia — Results of external evaluation in school year 2017/18, available at http://vrednovanje.ceo.edu.rs/sites/default/files/izvestajiEE/Izvestaj skolska 2017-2018.pdf

primary education, i.e. three subjects have been introduced as compulsory: IT and computer science, Technology and Physical and Health Education. As of school year 2018/2019, the same changes have been introduced for students of the sixth grade of primary education. In the coming school years, for the generation of students who started the fifth grade in the school year 2017/2018, curricula will be successively changed for the seventh and eighth grades of primary education.

The new LFES, as well as the amendments to the Law on Primary Education, provided the legal basis for the adoption of new curricula for primary education, harmonized with the new regulations, and above all with the pedagogical concept of programs oriented to the learning process and outcomes, as planned in AP SEDS.

In the context, a new Rulebook on the curricula (teaching and learning plan) for the first cycle of primary education and on the syllabi (teaching and learning program) for the first grade of primary education⁸⁴ as well as the Rulebook on the syllabus for the second grade of primary education ⁸⁵, which will be applied starting from school year 2019/2020. In 2018, also new syllabi for native languages of minorities – for the first grade of primary education were published⁸⁶.

In 2018 the Rulebook on curricula for the fifth and sixth grade of primary education and syllabi for the fifth and sixth grade of primary education⁸⁷ was adopted, and rolled out in school year 2018/2019 for the fifth grade students, while as of school year 2019/2020 it will be applied for the sixth grade students. In 2018 also the Rulebook on curricula for the seventh and eighth grade of primary education⁸⁸, was adopted, and it will be applied as of school year 2020/2021 for the seventh grade students, and as of school year 2021/2022 for the eighth grade students.

The adoption of new curricula has laid down the basis for the implementation of the curricular reform, envisaged in the current education strategy and under the applicable legal solutions. In the following period, at the level of primary education, curricula will be developed for the third, fourth, seventh and eighth grades.

Support to the implementation of reformed curricula and teaching and learning programs in 2018 was also provided through the professional development of teachers, professional associates and principals through the Teacher Training Program for the

⁸⁴ Rulebook on curricula for the first cycle of primary education and syllabi for the first grade of primary education, *Official Gazette of RS – Educational Gazette*, no. 10/2017-1, 12/2018-1, 15/2018-1, 18/2018-1, 1/2019-18

⁸⁵ Rulebook on syllabi for the second grade of primary education, *Official Gazette of RS – Educational Gazette*, no. 16/2018-47

⁸⁶ The curricula were published in the Rulebook on Amendments to the Rulebook on curricula for the first cycle of primary education and syllabi for the first grade of primary education, *Official Gazette of RS – Educational Gazette*, no. 15/2018-1

⁸⁷ Rulebook on curricula for the fifth and sixth grade of primary education and syllabi for the fifth and sixth grade of primary education, *Official Gazette of RS – Educational Gazette*, no. 5/2018-77, 18/2018-1

⁸⁸ Rulebook on curricula for the seventh and eighth grade of primary education, *Official Gazette of RS – Educational Gazette*, no. 18/2018-1

implementation of curricula oriented towards learning outcomes. It is a three-day program (one day it is delivered as "online" training) aimed at developing competencies for planning and delivering outcomes oriented curricula, and includes: getting acquainted with the new concept of teaching and learning programs; global, operational planning and preparation for classes; ; outcome- oriented methods, techniques and activities; project-based classes; entrepreneurship; and monitoring and evaluation of learning.

Complementary measures with new curricula related to changes in the content and manner of keeping records in primary school⁸⁹ which were also made in 2018. The Rulebook will be amended in the part that regulates the keeping of records in the second, third and fourth grade, in accordance with the new curriculum.

In the course of 2018, 225 decisions were issued on approving textbooks and/or textbook sets. In respect of approval of textbooks and/or textbook sets, the catalogue of textbooks for the first and fifth grade of primary education has been published (these textbooks are used from school year 2018/2019).

One of the most important projects, which was implemented by the MESTD within its program of work in 2018, is the project "Educational content through a digital textbook / digital classroom", which is included in the 2018 Plan of priority objectives and activities of all public administration bodies and Government services for enhancing IT sector in Serbia (adopted by the Council for Innovative Entrepreneurship and Information Technologies in December 2017) ranked fourth on the Priority List of a total of nineteen Priority Projects.

The purpose of the project is to improve teaching and learning process by introducing new technologies and providing support to teachers in the introduction and implementation of innovations in educational work. Terms of references included 1) training of 2,000 teachers for active work with modern technology and modern designed e-textbooks, 2) equipping 2.000 classrooms / laboratories with modern equipment for digital education and high-speed internet, as well as 3) procurement of appropriate digital content.

During 2018, 2,000 laptop computers and projectors, including a laptop and projector stands, were delivered to schools where teachers interested in using textbooks in digital form for first and fifth grade classes work (selected on the basis of a public competition).

A public call was also made to the publishers to whom textbooks for the first and fifth grade of the primary school were approved in the printed version, included in the catalogue of approved textbooks. The public call referred to delivery of approved textbooks in digital form, i.e. digital textbooks to determine their conformity with the appropriate approved textbook. The list of textbooks for the first and fifth grade in digital

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⁸⁹Rulebook on the content and manner of keeping records and issue of public documents in primary school, *Official Gazette of RS*, no. 66/2018-38, 82/2018-6

⁹⁰ Available at http://www.mpn.gov.rs/udzbenici/

form includes 106 titles from 11 publishers. Public procurement was undertaken for the referred digital textbooks, those conforming with selected textbook in printed form, and already chosen by the applying teachers within the regular procedure of textbook selection. The delivery of digital textbooks – activations codes to schools, i.e. teachers who applied for Public call is under way. In addition to teachers, digital textbooks are also used by students in classes where instructions are provided by these teachers.

About 2,000 teachers of the first and fifth grade of primary school were trained for active work with modern technology and modern designed e-textbooks. The training covered aspects of modern digital education, including the creation of conditions for applying modern concepts of distance learning and e-learning, e-services connectivity (such as digital classroom and e-diary), networking of teachers and students, creating and using teaching content more accessible to students, etc. This training for teachers was organized by IIE.⁹¹ Evaluation of the training has shown that teachers have significantly improved their digital knowledge and that they apply the acquired digital skills more often in their teaching.

AP SEDS has set as a special action the application of existing educational standards and their implementation (PU-PSO2). The major changes concern the revision of the quality standards for the work of institutions that have been formulated in the newly adopted Rulebook on work quality standards for institutions⁹². Based on the results and experiences arising from the implementation of the five-year cycle of external evaluation and opinion of the employees in institutions, the need was identified to revise the standards and indicators of the quality of work of institutions, and the procedures of external evaluation. The revision included a large number of innovations in the work evaluation framework. Thus, for example, the number of areas was reduced, the number of standards was reduced, some standards were redefined, and others replaced with completely new statements. Indicators have also been redefined to make them more precise and measurable. The priority activities in 2019 relate to training of employees in education for the application of educational standards, as well as for the process of self-evaluation of the work of institutions.

In the context of the Evaluation of Student Learning Achievement (PU-PSO5) action, it is important that for the first time after 2004 in Serbia, national testing of students was carried out, specifically of students of the seventh grade of primary school. The test was conducted in May 2018 on a representative sample of students (about 3,000 students from 148 primary schools) in three subjects: Mathematics, Physics and History. The report with the results of this testing will provide useful data on the level of knowledge

⁹¹ Appropriate handbook was bublished as well - Šćepanović, D., Lečić Cvetković, D. and Marić, F. (2018). Digital Classroom / Digitally Competent Teacher - Introduction of E-Textbooks and Digital Educational Materials - Teacher's Handbook in the framework of the Pilot Project "2000 Digital Classrooms". Belgrade: Institute for Improvement of Education.

⁹² Rulebook on work quality standards for institutions, *Official Gazette of RS – Educational Gazette*, no. 14/2018-1

of Serbian students from these three subjects, as well as data on how and in what way students learn in school and which factors influence the educational achievements of students (based on anonymous questionnaires for students, teachers and school principals).

AP SEDS has set as one of the actions the analysis of the experience and the improvement of exams in primary school (PU-PSO1). In 2018 the Institute for the Education Quality and Evaluation, in accordance with its competencies, prepared the Report on the realization and results of the final exam at the end of primary education for the school year 2017/2018 and the Report on the results of the final exam of national minority students for the school year 2017/2018. Continuous efforts have been made towards improving the procedures for conducting the final exam - The Expert Instruction for conducting the final exam was last improved for the school year 2017/2018.⁹³ This will be followed by an adaptation for the needs of the final exam in the school year 2018/2019. The Expert Instructions for conducting the final exam at the end of primary education for the school year 2017/2018 was adopted.

AP SEDS foresees the establishment of a unique system of awards and rewards for students for good educational achievement at the level of the Republic of Serbia (PU-PSO8). Every year, on the basis of the Expert Instructions on organizing competitions and examining primary and secondary school students, the MoESTD issues a calendar of competitions/examinations of primary schools. A novelty in this context is that the organizers of the competitions/examinations are obliged to submit the report on the conducted competition to the Ministry using a special form⁹⁴, which will facilitate the regular updating of knowledge about educational achievements of students and rewarding of those best in competitions and examinations.

3.2. Increasing the coverage

In 2018, the MoESTD undertook activities to recruit additional 50 pedagogical assistants for work in primary schools. The candidate's selection was made on the basis of applications received at the public competition. A total of 125 candidates applied in two public calls, out of whom 80 candidates were eligible. Out of this number, 59 candidates attended the initial training for pedagogical assistants delivered by the University of Kragujevac, which is a condition for their work in schools. According to the latest data, there are 261 pedagogical assistants within the system, of which 221 in primary schools.

Representatives of all 50 schools where new pedagogical assistants will be engaged, attended "Training for planning, implementing and monitoring measures for preventing

⁹³Expert Instructions for the conduct of final exam at the end of primary education for school year 2017/2018, available at http://www.mpn.gov.rs/wp-content/uploads/2017/04/STRUCNO-UPUTSTVO-UPIS-KONACNO-180517-1.pdf

⁹⁴Available athttp://www.mpn.gov.rs/prosveta/osnovno-obrazovanje-i-vaspitanje/

dropouts" (from the list of trainings of public interest). The training covered 212 participants, of whom 176 males and 36 females. The result of the training is that each institution has developed a Dropout Prevention Action Plan, which is part of the Development Plan of institution)

In 2018 MPTNR continued the implemntation of the project Free textbooks, based on which in the school year 2018/2019, the right to free textbooks was exercised by about 84,000 students in the territory of the Republic of Serbia, which included about 830,000 textbooks. The procurement of free textbooks is regulated by the Law on Textbooks. Article 10 paragraph 1 of the Law stipulates that, in accordance with the available funds of the budget of the Republic of Serbia, in order to enable equal access to education, the Government shall make a decision on financing the preparation and / or procurement and allocation, and/or co-financing of preparation and / or procurement and assignment textbooks and manuals, especially for students and students and trainees who are socially and materially deprived, as well as for students with developmental difficulties or disabilities In school year 2018/2019, the MoESTD provided free textbooks and other teaching resources from the textbook sets chosen for use use in classes by the schools, specifically for primary school students who need this type of support the most, respectively:

- students from socially / materially vulnerable families (beneficiaries of financial social assistance);
- students with developmental disabilities (who attend the primary education according to the individualized education program and students who do not pursue education according to individualized education program but who need custom textbooks (large-print, Braille, electronic form) and
- primary school students who are third or every next born child who is in the system

In 2018, the Rulebook on the method of organizing instructions for students on long-term home or hospital treatment on long-term home or hospital treatment, in particular: students' coverage, goals and objectives of education, forms of work and organization, monitoring and evaluation of educational work, records, relationship between health institutions and schools (team work) and other questions relevant for the way of organizing educational work.

3.3. Increasing the relevance

⁹⁵ Rulebook on the method of organizing instructions for students on long-term home or hospital treatment, *Official Gazette of RS*, no. 66/2018-36

Concurrence of the needs of the individual and of the social and economic environment within education, according to modern understanding, is reflected in teaching and learning orientation to the development of competencies that will ensure the desired benefits both on the individual and the social plan. Developed competencies should therefore contribute to economic growth and successful employment, but also to the improvement of human health, quality of life and their social and civic engagement. The relevance of education is reflected in how well the educational system defines educational outcomes in relation to the competences necessary for the 21st century and how successful the educational process is in achieving these outcomes.

Improved relevance of new curricula in primary education is accomplished, inter alia, by introduction of the compulsory status of the subject IT and computer science. A novelty in the first cycle of primary education involves the mandatory application of project-based classes i (36 hours per year), by which students' knowledge and abilities are developed through planning, research and teamwork in the framework of intracurricular and inter-curricular linking of the content, and using information and communication technologies in project activities.

Development of entrepreneurial spirit in children and young people plays a prominent role in teaching and learning curricula. Part of the new subject in primary education "technics and technology" is dedicated to developing entrepreneurial spirit as an intercurricular competence.

In April 2018, the Rulebook on Student Cooperatives was adopted ⁹⁶, regulating an area of importance for improvement of relevance of education in Serbia. Student cooperative can carry out production, trade and service activity, that is, carry out community and humanitarian services. The activity of student cooperative is a part of educational work and its goal is to enable students to master basic elements of the process of production and service provision; to provide professional guidance and develop entrepreneurial spirit; to create and foster positive attitude towards the work and creation; to instil work habits; raise awareness of collective work, cooperation and mutual assistance and solidarity; as well as to contribute to organization and development of school, local community and living environment.

Since school year 2017/2018 MoESTD has initiated a pilot project "Integration of financial literacy in the education system of the Republic of Serbia" – FinPis with the support of company Visa for South East Europe. The project implies integration of financial literacy into educational work and programmes/courses by means of creation of an environment enabling development of functional knowledge in this area, but also programs /courses through which financial literacy will be integrated and developed as a cross-curricular competence. Thirty schools and six preschool institutions have been involved in the project in order to ensure relevance and efficiency of the program, before

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⁹⁶Rulebook on student cooperatives, *Official Gazette of RS*, no. 31/2018-105

financial literacy becomes part of the education system on the national level. MESTD and IIE have published a manual for teachers in financial literacy (March 2018).

Increasing the relevance of new curricula is also reflected in novelties oriented towards the development of positive social outcomes of education. In primary education, introduction of health education (as part of the subject Physical and health education) holds a special place. Within this subject, students will learn about healthy lifestyles, proper and healthy nutrition, and so on.

In the past period, the MoESTD has undertaken significant activities in the field of prevention of violence in schools. Numerous trainings covered tens of thousands of students, teachers and parents within the following activities: Strengthening the capacity of schools to identify and respond to child and youth trafficking situations; Strengthening the capacity of schools for the prevention of digital violence; Strengthening the capacity of schools to prevent violence in sports activities; Prevention of gender-based violence; Prevention of violence and discrimination in schools from multicultural environments; Strengthening the support system for parents, students and teachers in protecting students from violence in schools (SOS hotlines for reporting violence).

Fostering a democratic culture in schools is a project (2017-2019) that seeks to improve the quality of education through the promotion of democratic culture, with the application of anti-discriminatory approaches based on the standards and practices of the Council of Europe. The main activities of the project include the implementation of a framework of competences for democratic culture and education for human rights in the school environment, as well as mutual learning between the schools participating in the project - a total of 20 primary and secondary schools.

3.4. Increasing the efficiency

At the beginning of 2018, the Regulation on the criteria for adopting the act on the network of public preschool institutions and the network of primary schools⁹⁷ was adopted, replacing the corresponding Regulation from 2010. One of the important novelties is obligation of LSGU to prepare, before adopting the act, a study containing network development plan made based on the trends of natural increase of children and students, as well as migration movements in the local self-government unit for public preschool institutions for a period of five years and for public primary schools for a period of four or eight years. The deadline for passing an act on the network of public preschool institutions is the end of March 2019.

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⁹⁷ Regulation on the criteria for adopting the act on the network of public preschool institutions and the network of primary schools, *Official Gazete of RS*, no. 21/2018

2019 Priorities

Priority 1

Adopting curricula for primary school grades for which they have not been adopted so far

Priority 2

Implementation of the final exam at the end of primary education

Priority 3

Professional training of teachers, preschool teachers and professional associates for the implementation of new curricula

Priority 4

Adoption of bylaws for the enforcement of the Law on primary education

Priority 5

Development of entrepreneurship as a cross-curricular competence

Priority 6

Approval of textbooks or textbook sets in accordance with new curricula

Priority 7

Implementation of the project Free textbooks

Priority 8

Implementation of the project Teaching content through digital textbook / digital classroom

Actions under the Action Plan:

PU-PSO1 - Harmonization of laws and by-laws in the area of primary education with SEDS
PU-PSO2 - Implementation of educational standards and their improvement
PU-PSO3 - Primary schools network optimization
PU-PSO4 - Reducing dropout rate from primary education
PU-PSO5 - Evaluation of educational achievements of students

 $PU\mbox{-}PSO6$ - Strengthening of the educational function of primary school

 $PU\mbox{-}PSO7$ - Analysis of experiences and improvement of the final exam in primary school

 $PU-PSO8- Establishing \ uniform\ system\ of\ rewards\ and\ rewarding\ students\ for\ good\ educational\ achievements\ at\ the\ level\ of\ the\ Republic\ of\ Serbia$



4. General and Art Secondary Education

4.1. Improving the quality

At the level of secondary education, no national examination is currently being conducted (final exam or matriculation), but it is stipulated by statutory regulations. At the end of 2017, the Rulebook on general and artistic matriculation program was adopted, and in the beginning of 2018 the Rulebook on vocational matriculation and final exam program was adopted. The final exam will take place for the first time in the school year 2019/2020, and the matriculation in the school year 2020/2021.

The main source of data on quality of education at this level are the results of external evaluation of educational institutions. The quality of work was assessed on the basis of 30 quality standards related to key areas of school work. Due to the small number of art schools that are evaluated during one school year, they are presented in the annual reports of IEQV on external evaluation collectively with secondary vocational schools. In school year 2017/18, 11 art schools and eight grammar schools were the subject of external evaluation. The data show that the vast majority (almost 80% of general secondary schools) are classified as good (grades 3 or 4)⁹⁸ - with two thirds of schools, rated by grade 3 for the overall quality of their work. On the other hand, this also means that one out of five general secondary school does not achieve the quality standards at a satisfactory level (grades 1 or 2), of which 4 schools have also received a grade 1 for the overall quality of their work. Compared to vocational schools, in the process of external evaluation general secondary schools somewhat less frequently receive grades 1 and 2, and also grade 4.⁹⁹

At the level of high school education, the reform of curricula is in progress. At the beginning of July 2018, the Rulebook on the Syllabus for the first grade of the General secondary school was published,¹⁰⁰ and the syllabus for the second grade is about to be finalized. This involves the first major changes introduced in general secondary (grammar) schools in the last 20 years.

All syllabi are based on the general goals and outcomes of education and the needs of the first grade students. They are oriented to learning processes and outcomes, rather than to content that now has a different function and significance. The content is in the function of achieving outcomes that are defined as students' functional knowledge indicating what the student will be able to do, undertake, perform or carry out owing to

⁹⁸The general quality of work of the institution can be rated with 1, 2, 3 or 4, with 4 being the highest grade (the standard achieved to the greatest extent)

⁹⁹Institute for Education Quality and Valuation, Quality of work of educational institutions in the Republic of Serbia – Results of external evaluation in school year 2017/18, available at http://vrednovanje.ceo.edu.rs/sites/default/files/izvestajiEE/lzvestaj skolska 2017-2018.pdf

 $^{^{100}}$ Rulebook on the Syllabus for the first grade of the General secondary school, *Official Gazette of RS* – Educational Gazette, no. 12/2018-93

the knowledge, attitudes and skills that he has acquired and developed during one year of learning a particular subject. Thus conceived syllabi imply that achievement of the outcome leads to the development of competences, including both those general - subject specific, and general - inter-subject and key competences. An overview of the outcomes given in the individual syllabi shows how the foundations are laid down for the development of key and general inter-subject competences that students should acquire by the end of general secondary education.

In addition to this main change in the curricular paradigm, the other important reform principles are: electoral character (greater choice of electoral programs in order to enable a better preparation of students for continuing their education, their choice of profession, as well as a greater student satisfaction with education); interdisciplinary nature (exceeding subject boundaries by linking different disciplines into meaningful units, aimed at developing the functional knowledge and competencies of students); gradual introduction of innovations (i.e. gradual preparation of schools, teachers and students for the implementation of new syllabi). Innovation of programs evolves towards teaching oriented to outcomes and development of competences.

The new curricular concept of general secondary education introduces a number of new elective programs: Modern technologies and entrepreneurship; Applied sciences; Education for sustainable development; Health and sports; Basics of geopolitics; Economy and business; Individual, group and society; Art and design. Students choose two programs in the first grade and may continue them in the second grade or choose two new programs. In the third grade, students choose the elective programs that they will be required to study in the third and fourth grades. The following elective programs are offered: Applied Sciences 1 with a focus on medical science; applied sciences 2 with a focus on technical sciences; Education for sustainable development; Art and design; Basics of geopolitics; Economy and business; Religions and civilizations; Methodology of scientific research; Modern technologies and entrepreneurship. Out of the offered elective programs for the first and second grade, that is for the third and fourth grade, accordingly to students' interests, available human resources and equipment, the school develops its own list from which students choose two programs. Programs are of interdisciplinary character and are aimed at achieving outcomes and developing competencies through various active methods such as project-based classes, research work, and the like. It is crucial to achieve general inter-subject and key competences. Electoral programs are semi-structured, thus the IIE website offers literature to teachers that will help them deliver classes more easily. The new curriculum for general secondary education defines the weekly student load of 33 hours (instead of the current 31).

Consequently, the Rulebook on the level and type of education of teachers, professional associates and assistant teachers in general secondary schools has been aligned with

these curricular changes¹⁰¹ – namely the rulebook now determines who can perform instructions and other forms of educational work in the electoral programs.

In the course of 2018, extensive teacher trainings were provided for the implementation of outcomes oriented teaching. Trainings were attended by several thousands of teachers, professional associates and general secondary school principals.

It is a three-day program (one day it is delivered as "online" training) aimed at developing competencies for planning and delivering outcomes oriented curricula, and includes: getting acquainted with the new concept of teaching and learning programs; global, operational planning and preparation for classes; outcome- oriented methods, techniques and activities; project-based classes; entrepreneurship; elective programs and monitoring and evaluation of learning.

AP SEDS has set as a special action the completion of existing educational standards and their application. General achievement standards for the end of general secondary education and secondary vocational education in the segment of general-education subjects were adopted in 2013 for 8 general-education subjects, and in 2017 they were adopted for the subject Serbian as a non-native language, and in 2018 for 8 native languages of national communities for students who attend school in their native language. In 2018, their application was put into practice when a national testing of students in secondary education was carried out for the first time. The test was conducted on a representative sample of third-grade students from 135 high schools, in three subjects: Mathematics, Physics and History. An analysis of data is under way, which will provide in the coming period very valuable information on the quality of student achievements at the national level. The main challenges in this field concern the limited capacity of the IEQV Examination Centre. Providing for new job positions and filling existing ones is one of the important tasks for improving this aspect of education quality.

Significant changes also relate to the revision of the quality standards for institutions that was embodied in the new Rulebook on work quality standards for institutions. The revision included a large number of innovations in the work evaluation framework. Thus, for example, the number of areas was reduced, the number of standards was reduced, some standards were redefined, and others replaced with completely new statements. Indicators have also been redefined to make them more precise and measurable. The priority activities in 2019 relate to training of employees in education for the application of educational standards, as well as for the process of self-evaluation of the work of institutions.

¹⁰¹Rulebook on the amendments to the Rulebook on the level and type of education of teachers, preschool teachers, expert associates and assistant teachers in general secondary school, *Official Gazette of RS – Educational Gazette*, no. 13/2018-64

 $^{^{102}}$ Rulebook on work quality standards for institutions, *Official Gazette of RS – Educational Gazette*, no. 14/2018-1

An important action within AP SEDS relates to the development of a final examination system in secondary education: general, art and vocational matriculation (PU-SE05). In March 2017, the concept of final exams in secondary education was completed, and at the end of 2017, the Rulebook on the general and art matriculation program was adopted, which was introduced to schools at specially organized conferences. The program determines the goal, content and structure and other important elements of the matriculation. Students who complete four-year general secondary education or art education (or secondary vocational education) will be taking matriculation exam starting from school year 2020/2021. The process of organizing and implementing matriculation exams will be delivered through a project funded with the EU IPA funds for 2015 (components related to the preparation of tests, informing the education sector, preparation of higher education institutions, collections of tasks for preparation of matriculation exam, information system for exam support, etc. .). One component of this project will address development of achievement standards for subjects such as Psychology, Sociology, Philosophy and others. The project started on 8 January 2019.

In 2018, the Guidelines for adapting the entrance exam for secondary school students who need additional educational support¹⁰³, with a view of ensuring full equality in education. The document includes instructions to schools how to adjust the entrance exam to a student who needs additional educational support due to developmental difficulties or disability.

The entrance exam procedures in music schools and art schools were also improved. Coding was introduced wherever possible and segments of the exam and of student results achieved were separated. Further progress in this area (Introduction of Specific Evaluation Systems in Art Education - PU-SE06) requires the definition of educational outcomes in this type of education and the engagement of experts to develop specific evaluation systems in different domains of art education.

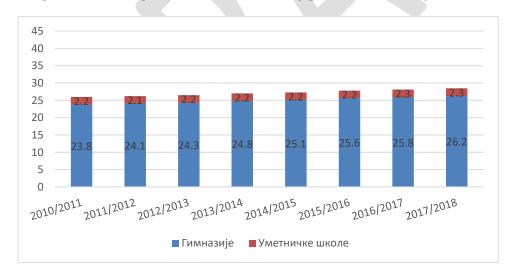
In April and May 2018, PISA research in Serbia was organized by the Institute for Psychology. The research was conducted in about 180 secondary schools with the participation of about 8,300 students who had the opportunity to solve tasks that included reading, mathematical, scientific and financial literacy. The inclusion of the financial literacy test, as well as the student welfare surveys, was supported by the SIPRU. For the first time, this research has been carried out entirely on computers, which makes Serbia one of the countries that conduct this research in the most up-to-date way. Not all schools could provide their own equipment, so in some schools technical support was provided by the Institute. The results of the PISA 2018 research are expected at the end of 2019.

¹⁰³ Guidelines for adapting the entrance exam for secondary school students who need additional educational support, available at http://www.mpn.gov.rs/wp-content/uploads/2018/05/SMERNICE-ZA-PRIJEMNI-ISPIT-ZA-SAJT-160518.pdf

The AP SEDS sets, as one of the measures to support students who attain high achievements, the establishment of a unique system of awards and rewarding of secondary school students for high educational achievement (PU-SE08). In 2018, the Fund for Young Talents granted awards to 1624 secondary school students for results achieved in 2017 in recognized local and international competitions, which is an increase of 15% compared to the previous year. The MoESTD also awards up to 10 scholarships to young researchers – students of last grades (III and IV) of secondary schools who have demonstrated their ability to engage in research work and have won one of the first three places at the International Knowledge Olympiad (World, European or Balkan) in the field of mathematics, physics, informatics, astronomy, biology and chemistry.

4.2. Increasing the coverage

The data show that in the previous period there was very little progress in achieving this goal. At the beginning of the school year 2017/2018, 26.2% of all students attending secondary school attended the general secondary schools (by around 2.5 percentage points more than in the school year 2010/2011). Profiles in the field of Culture, art and public information were attended by 2.3%. In total, this amounts to 28.5% of students attending general secondary or arts education, which is still significantly less than the targeted 45%.



Graph 1. Percentage of students attending general secondary or art education

Source: Statistical Office of the Republic of Serbia

Of all students who attended general secondary schools in school year 2017/2018, 41% were boys (27,050) and 59% were girls (38,258). Of all students who attended art schools in school year 2017/2018 (5772), 32% were boys (1864) and 68% were girls (3908).

Most of the measures aimed at increasing the coverage of secondary education are general, i.e. are not directed at the specific type of education on that level, in this specific case at general secondary schools and art school. In this respect, the prominent role is plaid by the affirmative measures for enrolment of Roma students in secondary schools, which are regulated through an adequate legal framework and show good results (for more details see section on Inclusive education). It is worth mentioning that at the end of 2017, the Rulebook on student loans and scholarships¹⁰⁴ was amended with the aim of establishing milder criteria for students without parental care, students with disabilities and students belonging to the Roma national minority. In June 2018, further to announcement of a competition for awarding student scholarships to students of secondary schools in the Republic of Serbia for the school year 2018/2019, information campaign to communicate milder criteria for students of Roma ethnicity was intensified. Schools from the territories with a larger number of Roma students were contacted and information on new opportunities were communicated to everyone interested.

In accordance with the recommendations of the SEDS, a feasibility study related to introducing mandatory status to secondary education is currently being carried out. The results of this study are expected in 2019.

Measures for increasing the coverage of general secondary school education can be seen as including all the activities towards increasing the attractiveness of enrolment for these profiles through improving the quality and relevance of teaching and learning (orientation towards competence development, introduction of elective programs). One of such measures is the introduction of the so-called IT classes in general secondary schools throughout Serbia, taken in response to students' interests and towards the development of competences that open the door to further education and the promising segment of the labour market.

4.3. Increasing the relevance

Increasing the relevance of general secondary and art education is first of all pursued through new legal and program documents which provide for education oriented to outcomes, and development of student competencies. A bigger number of laboratory exercises and project-based teaching are expected to contribute to this. In addition, increasing the relevance of education and strengthening the pedagogical function of the school can also be viewed through placing the emphasis on the development of cross-curricular through the introduction of elective courses. The data collected by the MoESTD through the questionnaire for general secondary schools ("Change management in general secondary education") show that out of 22,933 students of the first grade, 1056 have chosen Language, media and culture as elective course, while 5556 students opted

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 $^{^{104}}$ Rulebook on student loans and scholarships, *Official Gazette of RS*, no. 46/10, 47/11, 56/12, 75/13, and $^{111/17}$

for Sport and Health (figures are given only for elective courses that are more closely related to certain inter-curricular competencies).

Further modernization of general secondary education includes also the introduction of special classes in general secondary in which for students specially gifted for computer sciences and mathematics are acquiring general secondary education according to a special curriculum. In school year 2018/2019, such classes were formed in 36 general secondary schools founded by the Republic of Serbia, the autonomous province or the LSGU. During 2018, all teachers of IT subjects who teach in IT classes in general secondary schools attended professional trainings.

An additional direction in efforts to increases the relevance of general secondary education is the introduction of IB programs of international matriculation in several general education schools in Serbia. Three state general education schools are in the process of authorization, funds for teachers' training in program delivery have een provided, and the disbursement of financial grants for equipping the cabinets in accordance with the IBO standards has been also planned. The Rulebook on the International Matriculation Program is being prepared.

4.4. Increasing the efficiency

Decline in the number of students in secondary education was not followed by a decrease in the number of classes and schools. Compared to 2000, the number of students in the school year 2017/2018 is 23% lower, the number of classes is 11.5%, and the number of schools has increased by almost 7%. This has resulted in a decrease in the average number of students per class - the average number of students in the general secondary schools for the whole country in the school year 2017/2018 was 23.6 students. In art schools, the average number of students per class was 14.

In mid-March 2018, the Regulation on the criteria for adopting the act on the network of public secondary schools¹⁰⁵ was adopted. Nine criteria were set: economic, equality, accessibility, organizational, status, demographic, geographical, cultural and optimization criteria. The established criteria enable the creation of a more rational network of secondary schools, merging of small schools into one institution (the minimum number of students is set at 200, under certain conditions).

A field analysis of the network of secondary schools was conducted for the needs of adoption of the act on the network of schools. The Act, i.e. Decision on the network of public secondary schools ¹⁰⁶ was adopted in June 2018, and was amended in August and

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¹⁰⁵ Regulation on the criteria for adopting the act on the network of public secondary schools, *Official Gazette of RS*, no. 21/2018-9

 $^{^{106}}$ Decision on the network of public secondary schools, *Official Gazette of RS*, no. 49/2018-3, 62/2018-5 and 94/2018-4

December of the same year. According to this decision, 107 general secondary schools will be delivering general education programs; 39 secondary art schools will be delivering programs of general and art education, 44 combined schools will be delivering programmes of general and vocational education, or programs of general and art education. The decision also envisages that the programs of different levels of education and education or several different fields of work will be delivered by three educational centres.

Based on this act, decisions were made on the merger of 14 secondary schools, of which 4 are general secondary schools, which resulted in the rationalization of the number of employees in general administrative services. The next steps in 2019 relate to the continuation of horizontal rationalization and a pilot vertical rationalization of the network of schools (i.e. creation of educational centres), as well as the continuous monitoring of the efficiency of the school network in order to evaluate the nine criteria and measure the effects of the previous measures.

2019 Priorities

Priority 1

Activities on the implementation of matriculation

Priority 2

Continuation of reform of general secondary education

Priority 3

Continuation of introduction of IB program of international matriculation

Priority 4

Introduction of new art profiles (digitization of design educational profiles)

Priority 5

Expansion and support to IT classes in general education schools

Actions under the Action Plan:

PU-SE01 - Harmonization of laws and bylaws in the field of general secondary and artistic education with SDES

 $PU\text{-}SE02 \text{ -} \\ \text{Improvement of the existing educational standards and their implementation}$

PU-SE03 - Secondary school network optimisation

PU-SE04 - Evaluation of educational achievements of students

PU-SE05 - Development of system of final exam in secondary education: general, artistic and vocational matriculation exams

PU-SE06 - Introduction of specific evaluation systems in artistic education

PU-SE07 - Strengthening the educational function of secondary schools

PU-SE08 - Establishing uniform system of rewards and rewarding of secondary school students for good educational achievements at the level of the Republic of Serbia (organized by MoESTD)

 $PU-SE09 - \textit{Establishing uniform public system of funds and foundations for support to gifted and talented students \\$

5. Secondary vocational education

Secondary vocational education accounts for the largest segment of the system of secondary education in Serbia. More specifically, in school year 2017/18 in Serbia there were 310 secondary vocational schools, 45 combined secondary schools comprised of general secondary schools and vocational schools and 4 combined art and vocational schools.¹⁰⁷

In schhol year 2017/2018 secondary vocational schools were attended by 183.332 students, of which the largest number enrolled for profiles in the area of econmicy, law, and administration (33.097), as presented in the Table below.

Table 1.Number of students by sector

SECTOR	NUMBER OF STUDENTS
Economy, law, and administration	33097
Electrical engineering	27163
Health and social protection	23844
Machine engineering and metal processing	21646
Trade, catering and tourism	20228
Agriculture, food production and processing	13931
Transportation	12863
Chemistry, non-metals and graphic work	8910
Geodesy and civil engineering	5898
Culture, art, public information	5772
Other (personal services)	3088
Textile and leather	2946
Forestry and wood processing	2638
Geology, mining and metallurgy	1099
Hydrometeorology	209

Source: Statistical Office of the Republic of Serbia, 2018.

However, there is a difference in the preferences of boys and girls, thus boys mostly opted for profiles in the field of electrical engineering (24,881), while girls opted for economics, law and administration (21,623) (Statistical Office of the Republic of Serbia, 2018).

About 4,500 students have been enrolled in dual educational profiles, while 2,969 students enrolled in school year 2018/2019.

 $^{^{107}\,}Available\,at\,\,\underline{http://data.stat.gov.rs/Home/Result/11030104?languageCode=sr-Latn}$

5.1. Improving the quality

As regardsquality of programs in secondary vocational education (SVE), it requires consideration from multiple angles. First, it is necessary to consider the quality of the vocational segments, ie. syllabi for vocational subjects and vocational training, then the quality of general subjects, and further on also the whole of these two complementary segments. Also, when considering the quality of the work of the institutions, with the popularization of learning by doing now, the quality of both schools and companies where learning through work is implemented should be taken into account at the same time. In this respect, it is important to emphasize that the work on improving the quality of programs, the same as in previous years, mostly involved the revision of the vocational subjects segment and the improvement of the opportunities for learning through work, primarily through the development of dual education

Great progress has been made with the adoption of Law on the National Qualifications Framework of the Republic of Serbia which has set this framework and established the concept of learning outcomes that enables learning to be evaluated through the establishment of the principle that any achievement can be measured and evaluated, regardless of the way in which it was acquired.

An important instrument that is currently being developed, actually being filled in, is the NQFS Register. The NQFS register consists of three sub-registers:

- 1. subregister of national qualifications,
- 2. qualification standard sub-register and
- 3. subregister of publicly-recognized organizers of adult education activity (PROA) with employers with whom PROAs implement practical work.

The Register will be run by the Qualification Agency, in electronic form. The data from the registry will be publicly available through the official website of the Agency, which will be run bilingually - in Serbian and English. This register is important both for ensuring the quality of the program and for all analyzes and monitoring aimed at improving system efficiency and better alignment with the labor market.

The list of qualifications also allows the standardization of qualification exams since qualifications are entered in the regster with the determinants which provide summary information on qualifications and are sufficient for their basic recognition and transparency.

In 2018, new 14 qualification standards for educational profiles with the duration of 3 and 4 years were added. So far 140 qualifications have been entered in the qualifications database, of which 86 with the qualification standard. 108.

¹⁰⁸Available athttp://noks.mpn.gov.rs/baza-kvalifikacija 2/

The final exams are currently being implemented in accordance with the methodology developed for the profiles that reach the final year in the given year (PU-SV01).

IIE actively and continuously works on the accreditation of external examiners (members of the final and matriculation exam panel in vocational education representing the industry) and so far 521 persons have gained this status.

The Law on NQFS has also foreseen the establishment of several structures, which are mostly, still in the process of establishment. A NQFS Council was established, as an advisory body that will provide policy recommendations on the process of human resource planning and development. Decisions have been made to establish a Qualifications Agency and 12 Sectoral Councils¹⁰⁹, but they have yet to become fully operational¹¹⁰.

The Ministry has collected applications from professional organizations and institutions for membership in sectoral councils, and given the specific nature of each economic sector, the main guidelines for their work will be general. Each sectoral council will adopt its own rules of procedure.

As for the Qualification Agency, its director has been appointed and the first employment contract has been signed. The full staffing of the Agency will be achieved in the next two years, and besides the newly employed, it will be partly stuffed with employees from the Institute for Improvement of Education and the ENIK / NARIK Center.

As has been the case so far, vocational education reform, often due to the structure of the education system itself, evolves slower than it is desirable given the rapid changes taking place in industry labour domain. Establishing new bodies and providing conditions for work requires time and, consequently, only upon building up its capacities, the

¹⁰⁹ Decision on the Establishment of the Sectorial Council for the Sector of Social Sciences, Journalism and Information, Official Gazette of RS, no. 104/2018; Decision on the Establishment of the Sectorial Council for the Industrial Development Sector, Official Gazette of RS, no. 104/2018; Decision on the establishment of a sectorial Council for the information and communication technologies, electrical engineering, automation and electronics sector, Official Gazette of RS, no. 104/2018; Decision on the Establishment of the Sectorial Council for the Education Sector, Official Gazette of RS, no. 104/2018; Decision on the Establishment of the Sectorial Council for the Other Services Sector, Official Gazette of RS, no. 104/2018; Decision on the Establishment of the Sectorial Council for the Agriculture, Food, Forestry, Fisheries and Veterinary Sector, Official Gazette of RS, no. 104/2018; Decision on the Establishment of the Sectorial Council for the Business Administration Sector, Official Gazette of RS, no. 104/2018; Decision on the Establishment of the Sectorial Council for the Natural Sciences, Mathematics and Statistics Sector, Official Gazette of RS, no. 104/2018; Decision on the Establishment of the Sectorial Council for the Transport and Transport Services Sector, Official Gazette of RS, no. 104/2018; Decision on the Establishment of the Sectorial Council for the Trade, Catering and Tourism Sector, Official Gazette of RS, no. 104/2018; Decision on the Establishment of the Sectorial Council for the Arts and Humanities Sector, Official Gazette of RS, no. 104/2018; Decision on the Establishment of the Sectorial Council for the Health and Social Protection Sector, Official Gazette of RS, no. 104/2018.

¹¹⁰ Official Gazette of RS, no. 66/18; Official Gazette of RS, no. 68/18; Official Gazette of RS, no. 104/18

Qualification Agency will be able to implement the process of drafting qualifications standards in accordance with the new rules.

The initiative for developing and adopting the standards for a new qualification may be submitted by the Sectoral Council, Council for Adult Vocational Education and Training, the National Education Council, the National Council for Higher Education, the National Employment Service, the higher education institution, the state body and other legal entity (company, PROA, etc.). The Council shall, within 30 days from the date of receipt of the material, establish a proposal for the qualification standard and submit it to the MoESTD. Within 30 days from the day of receiving the proposal, MoESTD shall issue an act on the adoption of the qualification standard and submit it to the Agency, for registration in the Register.

It should be emphasized that the procedure for drawing up reports on linking NQFS with EQF has been initiated, which will ensure easier comparability and recognition of qualifications gained in Serbia with qualifications gained in other countries.

For school year 2018/2019 MESTD has developed a series of new educational profiles, innovated and modernized a number of existing ones, while some of the profiles that were piloted became part of the regular system. For all these profiles, qualification standards and outcomes-based curricula have been developed, as well as modern norms regarding space, equipment and teaching aids, and the type of professional qualifications of teachers, professional associates and assistant teachers (PU-SV03). In the development of curricula for specific profiles, also certain particularities have been defined, such as instruction requirements and student division into groups, where appropriate and necessary.

Professional development of vocational school directors is also addressed by new regional project of *Kultur Kontakta - "Effective Quality Assurance through Successful Change Management - Capacity Building for VET School Directors*". In the framework of the previous regional project of Kultur Kontakta "*Improving the Cooperation between the School and Industry*" a handbook was prepared for organizers of practical trainings in the tourism and catering sector was prepared, with the view of improving the quality in the field of practical training in vocational schools.. Also, two rounds of trainings for its implementation were delivered in 2018.

Dual Education. Assurance of quality of learning through the dual model and several other topics, one of which is a student assignment, have been highlighted as the main challenges since the adoption of the Law on dual education. Bearing this mind, a significant step forwards was made by adopting by-laws falling within the scope of competence of the MoESTD, i.e. adoption of the Rulebook on the detailed conditions, method of work, activities and composition of the Career Guidance and Counseling Team

in secondary schools that implements educational profiles in dual education¹¹¹, the Rulebook on the manner of allocating students for learning through work¹¹², and the Rulebook on the training program, conditions and other questions of relevance for taking the instructor's exam¹¹³.

At the beginning of 2018, under the decision of the Government of the Republic of Serbia the Commission for the development and implementation of dual education and three-annual evaluation of achieved results was formed. During 2018, six sessions of the Commission were organized. Members of the Commission are representatives of the Government of RS, MESTD, Serbian Chamber of Commerce, Standing Conference of Towns and Municipalities, schools, employers, and in the coming period, additional members are expected to be included. The Commission also provides guidelines, recommendations, opinions, proposals and reports, referred to relevant institutions and organizations, with the aim of ensuring quality implementation and development of dual education.

In 2018/2019, about 600 companies expressed interest for the on-the-spot-training of students who enrolled in dual educational profiles. However, in order to ensure that students receive the best conditions for learning at the workplace, these companies have yet to undergo the accreditation process.

Training of instructors envisaged by the Law on dual education and defined in more detail by the aforementioned Rulebook, should ensure that company employees who have undergone training for instructors work and received instructor's license in accordance with the conditions prescribed by the Rulebook, will be working students. Companies decide whom they will send for training, but also general criteria have been set to guide their decisions.

In accordance with the Law on dual education, the mentioned training is organized by the Chamber of Commerce of Serbia, and an integral part of the rules governing the licensing of instructors is the Training Program of Instructors created by the Institute for Improvement Education. The training program for instructors is aimed at developing the competencies of instructors for the implementation of learning through work and comprises five areas:

- Implementation of the legislative framework in on-the-spot-training
- Planning and preparation of the on-the-spot-training
- Delivery of the on-the-spot-training

¹¹¹ Rulebook on the detailed conditions, method of work, activities and composition of the Career Guidance and Counseling Team in secondary schools that implements educational profiles in dual education, *Official Gazette of RS*, no. 2/2019

 $^{^{112}}$ Rulebook on the manner of allocating students for learning through work, *Official Gazette of RS*, no. 102/2018

¹¹³ Rulebook on the training program, conditions and other questions of relevance for taking the instructor's exam, *Official Gazette of RS*, no. 70/2018

- Monitoring and evaluation of competencies in the on-the-spot-training
- Support to student's development in the on-the-spot-training

The training program describes in detail the competencies, the expected outcomes of knowledge, skills and attitudes and gives recommendations for training content.

As the Law on dual education stipulates that training for instructors is organized by CCIS, even before the full implementation of the Law, in 2018 CCIS has started to deliver traainings for instructors, within the framework of the project "Development of dual education in Serbia", which it implements together in cooperation with the Federal Chamber of Austria and with the financial support of the Austrian Development Agency, One round of training was carried out by experts from the Austrian Institute for Research and Development, while the second round of trainings was delivered by Serbian trainers who whp has been delivering adult trinings even before the introduction of dual education. Along with the trainings organized by CCIS, the German International Cooperation Organization (GIZ) also provided trainings for instructors. So far, 344 instructors have been trained.

In the coming period CCIS is expected to announce a public call for recruiting trainers who will be training instructors in the future.

5.2. Increasing the coverage

Considering the specificities of dual education and the limited number of profiles and places within them, as well as the need for better planning of enrollment in secondary vocational schools, the enrollment of secondary school students is specially regulated by the Guidelines for planning enrollment of students into secondary schools at local and regional level. These Guidelines are a particularly important step because it introduces for the first time the process of multi-stage planning which involves all relevant stakeholders at the local level and the school administration level. Two key activities are the creation of a city / municipal proposal for a student enrolment plan and the development of a proposal for a student enrolment plan at the school administration level. Schools are obliged to submit and justify, via "Dositej" information system, the number and the structure of student's enrolment by area of work and educational profiles / directions, and on the basis of that, the school administration organizes meetings with all relevant participants in the process: representatives of local government, school principals, employers, regional chambers of commerce, branches of the National Employment Service, employers' associations and others that are relevant for decision making. In these meetings, a proposal for a student enrolment plan for all secondary schools in in the territory of a particular city or municipality is determined. The guidelines provide general criteria for the development of a plan, but it must primarily reflect local needs. After this phase, the school administration makes a consolidated proposal for enrollment encompassing all the units of local self-government and the

district that it covers, and in doing so, assess the current situation, trends and needs, as well as evidence of the readiness of employers to be involved in dual education.

In addition to schools and companies from a particular city, participation will also include schools and companies from the surrounding area, which will provide maximum territorial coverage. In the end, the final text of the competition is prepared at the MoESTD, after the approval of the enrollment plans. On that occasion, it is taken into consideration whether the criteria at the level of the school and the local self-government unit are met. Criteria for the enrollment plan in 2018 are presented in the table below.

Table 2. Criteria for Enrolment Plan

Criteria on school level

- The number of classes at the school level should not be increased compared to the 2017/2018 school plan. An exception are communities with significant increase in the number of students who complete primary education.
- In schools where in 2017/2018 actual enrollment was such that classes could not be formed in accordance with the instructions, rationalization should be executed.
- Plan combined classes exclusively for three-year educational profiles within the same field of work pursuant to 15 + 15 principle. Profiles can be combined only if both have the qualification standard, or if both are without a qualification standard.
- The number of part-time students older than 17, who for the first time enroll in high school, should be planned very rationally, in line with the realization in the previous year, and only for educational profiles that the school plans to enroll and as fulltime.

Criteria on LSGU level

- Increasing the coverage of general secondary education, wherever there are prerequisites and organizational opportunities for that.
- Wherever realistically possible, increase the planned number of classes with educational profiles related to ICT, and enrollment in education profiles based on the qualification standard.
- Plan to increase the coverage of students who are educated pursuant to dual model in accordance with the prescribed criteria and provided company support for learning through work.
- The number of groups / classes / departments of music and art schools should not be increased compared to the 2017/18 school plan, further to an analysis of last year's actual enrollment.
- Combining classes in fine arts schools is possible only pursuant to the principle 10 + 10, and/or 7 + 7 + 7/14 + 7.
- The number of planned places on the level of district / school administration should not exceed 3% compared to the number of

- Secondary schools for students with developmental difficulties and disabilities should plan enrollment according to the number of students who complete elementary education under the IEP 2 program and the size of the groups prescribed by law.
- 8th grade students attending primary school in the same district / school administration.
- Ensure evenly planning of places correlated to the number of students who complete elementary education in different districts that are under the jurisdiction of the same school administration. Permissible deviations of 1% with explanations (migrations, pupils' homes, unique schools, etc.).
- Plan a sufficient number of places in three-year educational profiles because of the minimum threshold for enrollment in fouryear educational profiles. The local self-government unit must have at least 15% of the planned places for three-year educational profiles (at least one class).
- Three-year educational profiles should not be replaced by fouryear profiles.
- When planning enrollment, take into account the availability of education for boys and girls.

From this Table it can be seen that gender equality was also taken into account, as well as sufficient representation of different types of profiles in the local self-government unit so that even students with lower achievements could have enough choice. Also, schools for students with developmental difficulties or disabilities have not been neglected.

In the spring and autumn of 2018, the IIE organized a number of promotional workshops and training for teachers dedicated to learning through work, as well as a review of student achievements entitled "Learning through Work and Development of Entrepreneurial Competencies of Students" in Subotica. Some of these activities were registered within the *European Vocational Skills Week*, or implemented within the Danubian Transnational Program "Learning by Doing - Targeted capacity building of VET partnerships in the Danube Region for the effective modernization of VET systems. 114

¹¹⁴ Available athttp://zuov.gov.rs/projekat-learning-by-doing/

Dual Education. As regardscoverage and dual education, MoESTD has also issued guidelines for planning the enrollment of students for educational profiles by dual model, which specifically emphasize the obligation of employer to submit Statement of Intent for the inclusion into dual education that any school that plans to implement educational profiles by dual model must obtain and submit to the competent school administration. In order to prevent possible abuse, CCIS independently of the schools, collects data on the readiness of the companies to support schools as a corrective and controlling mechanism when making a final decision on the proposal for the enrollment plan for each individual school. CCIS is also in charge of keeping the register of dual education contracts, they inform employers on dual education through regional chambers of commerce, they are in charge of conducting exams for instructors, issuing licences to instructors and keeping a register of issued instructor licences.

The two Rulebooks adopted on the basis of the Law on Dual Education are also aimed at ensuring the coverage of dual education and the equity of the system, of which the first Rulebook on the method of allocating students for learning through work which defines distribution of students for learning through work, in secondary schools in which learning through work for a particular educational profile, takes a dual model, and especially deals with situations when learning through work is carried out with several employers. The Rulebook defines the process of "pairing" students and employers with the leadership of the Career Guidance and Counseling Team (CGC) and with the involvement of parents. This process can be considered, in some way, as a prevention of dropouts because it is of great influence for staying in the educational profile and mutual satisfaction of students and employers. Therefore, this process takes place through several stages, from defining desires, to getting to know each other and the final decision. The CGC team is responsible for coordinating all participants in the process and mediating between students and employers. The work of the aforementioned Team for CGC is defined in the Rulebook on the detailed conditions, method of work, activities and composition of the Career Guidance and Counseling Team in secondary school that implements educational profiles in dual education. The Rulebook shows that particular attention was paid to the representation of all relevant actors in the process so that the best interests of students and employers could be aligned.

In order to ensure the awareness of all participants in education and the availability of timely and relevant information on dual education, in December 2018, MoESTD started with the realization of the promotion of the National Model of Dual and Entrepreneurial Education, which envisages visits to 10 cities in Serbia and to promote, in addition to the Law on Dual Education, three Rulebooks, student cooperatives, the concept of financial literacy and the National Qualifications Framework. The promotion shall be realized in the form of visits to cities and municipalities where schools, employers, parents, students of primary, secondary schools and other interested parties shall be informed about dual education, the law, regulations, procedures, and shall have the opportunity to get answers from MoESTD representatives about all the doubts and the challenges they face. Each of

the activities will consist of two parts - the first part where the representatives of MoESTD and other city officials and local self-government officials shall address the participants and share some basic information on dual and entrepreneurial education, present examples of good local practices and the activities of MoESTD. In the second part of the activity, each target group will be approached according to needs, in the following way:

- Students (primary school students and secondary school students) interactive workshops shall be used for this group, aimed at informing them about the model of dual and entrepreneurial education, the advantages of the model and the current results of the implementation of this model. Workshops will also serve as a tool for education on the establishment of student cooperatives and the opportunities they offer. Ultimately, students will be educated on financial literacy. The workshops will be designed in such a manner to be interesting and informative for students at the same time.
- Teaching staff (teachers) will be educated on the topic of career guidance and counseling and the opportunities offered by dual and entrepreneurial education to students.
- Teaching staff (directors) will be educated on the topic of the National Qualifications Framework of Serbia (NQFS).
- Companies tribunes to discuss how the Ministry and schools can better cooperate with employers and what are the employers' experiences in employing this kind of educational staff will be organized for the representatives of this group. A legal framework on the model of dual and entrepreneurial education will also be presented.

Within the mentioned promotion, on average per city, promotional activities will include 18 schools and companies, which will exceed the originally planned number of 174 schools and companies.

5.3. Increasing the relevance

Inclusion of employers into the process of developing profiles based on the standard of qualifications represents a continuation of efforts to improve the quality and relevance of vocational education. As mentioned above, innovation of the profile is continued, so in the school year 2018/2019 students haad 14 new educational profiles (PU-SV03) to opt for.

As regardscooperation with employers, the Law on Dual Education has significantly improved the section related to cooperation in achieving learning through work. As regardsdeveloping a profile program for those who have a qualification standard, there is a contribution from employers, but significant progress is expected only starting from 2019 through the work of the Sectoral Councils (PU-SV07). Based on the data of the Institute for the Promotion of Education, 521 representatives of employers are involved in the work of examination boards.

All revised curricula contain the subject entrepreneurship.

Activity that is still not realized is the establishment of a framework for master education, partly due to the division of competencies with the Ministry of Economy, which in 2018 did not implement a plan in this area (PU-SV02).

Dual Education. In the school year 2017/2018, there were no dual educational profiles (19) and educational profiles with elements of dual education (43). In 2018/2019 school year, in order to increase clarity about which profiles fall under what category, it was intended to no longer have profiles titled profiles with dual education elements but only dual educational profiles. 19 educational profiles were retained, and the new ones have been added which IIE has developed for the purposes of dual education, so the total number of dual educational profiles is 33:

- 1. Industrial mechanic
- 2. Electrical technician of information technology
- 3. Operator of basic construction works
- 4. Mechanic of motor vehicles
- 5. Locksmith welder
- 6. Electromechanical networks and plants
- 7. Electrician
- 8. Logistics and Freight Forwarding Technician
- 9. Cook
- 10. Baker
- 11. Butcher
- 12. Operator in the food industry
- 13. Confectioner
- 14. Tourist-hotel technician
- 15. Machine technician for computer construction
- 16. Computer control technician for CNC machines
- 17. Mechatronics technician
- 18. Machining operator
- 19. Furniture maker
- 20. Metal processing operator
- 21. Aviation technician
- 22. Air traffic technician
- 23. Mechatronic for radar systems
- 24. Air rescue technician
- 25. Mechatronic for rocket systems
- 26. Air traffic safety technician
- 27. Aviation technician for aircrafts and engines
- 28. Aviation technician for electrical equipment of aircrafts
- 29. Aviation technician for electronic equipment of aircrafts
- 30. Mechatronic for airport transport systems

- 31. Merchant
- 32. Fashion tailor
- 33. Waiter

In the school year 2018/2019, the number of companies interested in the realization of learning through work for dual educational profiles has increased significantly, from 205 to 600 companies. The number of schools engaged in dual education has also been increased from 50 schools to 85 schools (around 23% in relation to all secondary vocational schools), as well as the number of places for enrollment of students in the first grade of secondary school for education by the dual model of education from 1841 to 3500. Total number of students in the dual model of education in the year 2018/2019 was 4500.

5.4. Increasing the efficiency

Action *The alignment of the network of vocational schools and the offer of educational programmes (profiles) with the needs of the economy* (PU-SV05) requires the coordination of several institutions, and the rationalization of the network also carries significant challenges, some of which relate to the lack of data and some to the resistance encountered by the MoESTD in contact with schools. However, from the school year 2018/19, 14 vocational schools were merged into 7 new schools. Schools are merged in cities where schools have already functioned in the same building or the functioning of special schools has become nonrational. In one case, there was no merging of schools due to non-compliance of attitudes with the local self-government unit.

In a certain number of schools for the position of assistant teacher, more people were hired than the regulations allowed, so 150 job positions were rationalized for the position of assistant teacher in vocational schools. In a number of cases there have been technological surpluses (PU-SV04).

Unfortunately, as student registers are still not operational, monitoring of dropouts or other student-related data is still difficult and, if necessary, some data can be obtained from secondary schools, but they are largely unsystematic and, in a number of cases, unreliable.

2019 Priorities

Priority 1

Increasing the number of students, schools and companies in the dual education system

Priority 2

Creating new and modernizing existing dual profiles in accordance with the needs of the economy

Priority 3

Continuation of work on the Master Plan for the implementation of the Law on dual education in secondary vocational education

Priority 4

Beginning of activities related to the development of the framework for monitoring and evaluation of dual education

Priority 5

Implementation of dual models of studies for higher education

Priority 6

Adoption of bylaws that will closely regulate the implementation of the provisions of the Law on NQFS

Priority 7

Strengthening the capacities of established institutions and bodies

Priority 8

Connecting NQFS with EQF

Priority 9

Developing a NQFS Register, including the Register of Qualifications

Priority 10

Developing the concept of recognition of previous learning

Priority 11

Creating new and modernizing existing profiles in accordance with the needs of the economy

Priority 12

Strengthening the quality of teaching through teacher training in vocational schools

Priority 13

Further rationalization of the network of secondary vocational schools

Priority 14

Monitoring the career development of vocational school students after completing their education

Actions under the Action Plan:

PU-SV01 - Standardization of qualifications exam	
PU-SV02 - Introduction of crafts education	
PU-SV03 - Development of educational programmes based on the qualification standards	
PU-SV04 - Flexible organisation of classes	
PU-SV05 - Matching the vocational school network and offer of educational programmes (profiles) with the	
needs of the economy	
PU-SV06 - Reducing dropout rate	
PU-SV07 - Involvement of employers in the process of programming, development and implementation of SVE	
PU-SV08 - Establishing the system of monitoring and evaluation of vocational education	
$PU\text{-}SV09 - \text{Defining a clear division of responsibilities, roles and tasks of all the actors in charge of SVE} \\ \text{management}$	

6. Higher education

In school year 2018/2019, 46,350 students enrolled in basic academic studies, of which 25,299 funded from the budget of the Republic of Serbia and 21,051 self-financing. State higher schools enrolled 10,239 students, of which 5,499 were funded from the budget, and 4,740 were self-financing. Private colleges enrolled 6,728 students, and private higherschools 1,582 students.¹¹⁵

6.1. Improving the quality

In 2018, the University of Belgrade was between 300th and 400th place on the Shanghai list, as well as in the past few years ¹¹⁶. However, As regardsthe list of narrow scientific fields, the University of Belgrade was ranked in 27 areas, which is significantly higher than in 2017 when it was ranked in 18 areas. The progress in the field of research and innovation is also indicated by the fact that according to the Global Competitiveness Index Serbia has improved its ranking for 5 places in 2018, and from all pillars of competitiveness it is best ranked within education and skills as well as the capability for inovation ¹¹⁷.

As regardsnational quality monitoring, 2018 was primarily dedicated to the establishment of the National Body for Accreditation and Quality Assurance in Higher Education (NAB), whose legal basis was given by the Law on Amendments to Higher Education Law of 2018. After the official establishment of the NAB, a period of more detailed regulation of work followed, as well as the period of transfer of competencies from the body that was in charge of quality monitoring (i.e. the Accreditation and Quality Assurance Committee (CAQA)) prior to this change. For these reasons, all requests for accreditation of the programs and institutions were processed quite slowly, and given the large backlog in the processing of requests, until March 2019, the admission of new requests was suspended¹¹⁸. On the basis of a public invitation on July 19, 2108, the Director of the NAB was elected, and on August 30, 2018 the Commission for Accreditation and Quality Assurance was established as expert body of the NAB. As stated in the description of the work of the body, the NAB has changed the methods and procedures for the process of accreditation and quality assurance in higher education established by the previous Accreditation and Quality Assurance Commission to meet all the requirements of the European Standards and Guidelines, and a special emphasis was

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¹¹⁵Education Statistics, no. 346 - year LXVIII, 26 12 2018 available at http://publikacije.stat.gov.rs/G2018/Pdf/G20181346.pdf

¹¹⁶ Available at http://www.shanghairanking.com/ARWU2018.html

¹¹⁷The Global Competitiveness Report 2018, available at http://reports.weforum.org/global-competitiveness-report-2018/

¹¹⁸ Available at https://www.kapk.org/sr/%d0%bf%d0%be%d1%87%d0%b5%d1%82%d0%bd%d0%b0/

put on the NAB's independence as a key holder of accreditation and quality assurance process. NAB determined as a priority to implement a new methodology of accreditation and quality assurance process in accordance with the principles of quality of the European Higher Education Area, the European Standards and Guidelines for Quality Assurance in the European Higher Education Area, as well as the legal regulations of the Republic of Serbia.

The independence of the NAB should be provided by its internal bodies (director and Board of directors) as well as the election procedure for reviewers within the Commission for Accreditation and Quality Assurance as expert body of the NAB. However, this independence also provides for the self-provision of funds, i.e. The National Accreditation Body is financed from the income from fees for accreditation and quality assurance of higher education institutions. The more complex the process of quality assurance is, higher the funds and therefore one of the consequences is an increase in the price of accreditation.

The Commission for Accreditation and Quality Assurance has five subcommittees for the scientific fields in which the number of members is determined depending on the percentage representation of programmes in this field. This commission has 17 members elected by the Board of Directors of the National Accreditation Body, elected for five years at the proposal of the National Council for Higher Education of the rank of prominent professors, scientists, artists and experts within the appropriate educational and scientific field i.e. educational and artistic field.

Accreditation of programmes and institutions during 2018. In the course of 2018, the NAB processed cases taken over from the previously competent CAQA received by 30 August 2018, but due to the harmonization of standards and forms with the Law on Higher Education, the admission of new applications was postponed until 01 March 2019.

The accreditation process was also improved through amendments to the three Rulebooks:

- Rulebook on standards and procedure for accreditation of higher education institutions ¹²⁰
- Ruleook on standards and procedures for accreditation of study programmes
- Rulebook on standards for initial accreditation of higher education institutions and study programs

Extremely important is the fact that the process of accreditation is finally almost fully aligned with the requirements of the European Association for Quality Assurance in Higher Education (ENQA). The only requirement that is not met due to logistical reasons

¹¹⁹ Organizational structure available at https://www.nat.rs/organizacija/

¹²⁰All three Rulebooks published in the Official Gazette of RS, no. 13/2019

is that each review team has a member from abroad, but this is respected As regardsdoctoral studies. One of the biggest objections to the previous procedure, and at the same time what the evaluation of the accreditation cycle showed, was the manner of work of the reviewers. Namely, up to these changes, CAQA decided on the accreditation of the programme or institution based on the independent reports of the reviewers, and there was a defect recognized here in the fact that the quality of the review reports varied considerably, that is, some of the reports were very poor and unsatisfactory and that they were inconsistent and contradictory. An important novelty is that from now on there shall be one report developed according to the form that shall be standardized. The reviewers now have to agree and come up with a common version of the report that must have a clear description of the elements that were evaluated.

Another important novelty is about the methodology itself. The standards have been improved and the documentation submitted by the faculties has been changed, i.e., supplemented by additional sources of evidence of standard performance. What has been reduced to reviewing the self-evaluation reports so far has now been replaced by a thorough review of all the evidence the institution offers to meet the standards. For example, if the institution reports that there are a number of units in the library that are required for the program, reviewers will be able to search for book lists or go to the library to determine the relevance of these library units for the programme. Quantitative indicators are no longer sufficient, the reviewers will review exams, attend lectures, and, if they deem it necessary, talk to students in order to gather objective evidence of the achievement of standards. Reviewers have a mandatory corpus of documentation they need to review, but if they consider that more information is needed to assess the fulfillment of a standard, they have the freedom to supplement the evidence and the Source of Evidence.

The changes have been communicated with the Senate of the University of Belgrade and student bodies, so it is expected that the first cycle of accreditation will be realized successfully, although slower than it was the case previously.

During 2018, the Rulebook on Standards for Self-Evaluation and Quality Assessment of Higher Education Institutions and Study Programmes and the Rulebook on Standards and Procedure for External Quality Assurance of Higher Education Institutions were prepared (and adopted at the beginning of 2019).¹²¹

One of the major challenges is the very work of NAB and CAQA, since the NAB still does not have its own premises or sufficient administrative support. Also, the reviewers' lists, as before, have their own deficiencies, and for some areas there are not enough experts or there is concern with potential reviewers that even though the process is anonymous, they might experience some type of pressure.

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¹²¹ Official Gazette of RS, no. 13/2019

Internationalization at universities in RS. The essence of internationalization is the preparation of students for life and work in an intercultural and globalized environment, and therefore internationalization is essential for improving the quality of higher education in Serbia. Internationalization is primarily ensured by the introduction of global perspectives in teaching, learning and research, but also by building international and intercultural competencies among students, as well as among teaching and administrative staff. From the above it can be seen that this is a complex and comprehensive process that needs to permeate the various processes at universities. However, at universities, internationalization is, for the most part, implemented through student mobility for the time being¹²². The mobility programmes that universities in Serbia and the faculties within them can use are Erazmus +, CEEPUS III (Central European Exchange Programme for University Studies, Campus Europae (International Student Mobility Programme implemented under the aegis of the European University Foundation based in Luxembourg) and others (HE-CE29).

Under the bilateral cooperation programmes in 2018, 63 students were scholarshiped, and 59 through the inter-university cooperation. From the CEEPUS III programme, about 300 scholarship months for teachers and students (HE-CE28) were realized.

Previous data from the Eurostudent Survey¹²³ show a trend that students from Serbia rarely have the opportunity to spend part of their studies abroad. Most students who spend some time during their studies outside the country study in camps or study trips that do not last for a long time (from a few weeks to a month or two months) (16%). About 3.2% leave for apprenticeships and 1.5% for some form of studis (specialist, master...) and more often those are the students of master studies.

Student mobility is monitored within Serbia's participation in the above mentioned programmes, most often using quantitative indicators, but there is not much research that has dealt with the experiences of Serbian students in these programmes. Association of Balkan alumniers conducted a survey in 2018^{124} among students - participants of foreign mobility programmes at different levels of study (basic, master and doctoral studies) on experiences during the mobility period, as well as their opinion on the internationalization of higher education institutions in Serbia. Respondents were from 9 universities of Serbia in total; The most frequent were the University of Belgrade (33.6%), the University of Kragujevac (29.2%), the University of Novi Sad (21.7%) and the University of Nis (7.9%), and countries they went to were Germany (19.8%), Spain (13.8%), Italy (13%), Poland (10.7%), Netherlands (7.1%) and USA (6.3%). The biggest number of respondents was included in international mobility programmes lasting one semester, in basic or master studies. The second ranked duration of mobility was up to a

http://database.eurostudent.eu/#topic=mobility_type_all&countries=%5B%22RS%22%5D

¹²² HERE team (2018). Challenges in higher education. Belgrade: Tempus Foundation.

¹²³ Data published in 2018, based on a study from 2017, available at

¹²⁴HERE team (2018). Challenges in higher education. Belgrade: Tempus Foundation.

year, also with the highest number of students in basic and master studies. Programmes up to two years of mobility were used mostly by students in master studies.

The research dealt with, in addition to students' experiences, also how systemic mobility was, so it turned out that the diploma supplement did not always contain a reference to a period spent abroad. Most respondents answered that the period of mobility (during basic and master studies) is clearly visible on the diploma supplement. However, about 30% of respondents from different levels of education responded that the period of mobility is not visible in their diplomas, and most of them in basic and doctoral studies.

Students rely heavily on the Internet and outside sources of information, as teachers rarely inform students about scholarships and programmes. The majority of respondents, 57.8% (said they learned about the mobility programme via the Internet, and only 10% of respondents found out about scholarships through teachers. The offices for international cooperation at universities are variously active in promoting programmes and fostering cooperation, so on a scale of 1 to 5 The University of Kragujevac (4.23) received the best average grade rating followed by the University of Novi Sad (3.44), the University of Belgrade (3.12) and the University of Nis (average grade 3.05).

The highest percentage of students who believe that their institution has a clear internationalization strategy comes from the University of Kragujevac (44.6% of students from that university).

Working version of the Strategy of Internationalization of Higher Education in Serbia for the period 2017-2025 was defined in October 2016. It is based on the Strategy for the Development of Education until 2020, within which there are several measures for opening and internationalization of higher education¹²⁵. There was still no public debate, so adoption is not expected soon.

In order to improve the international openness of the HE system, 83 foreign language assistant professor have been engaged in philological departments of relevant faculties.

Non-university higher education institutions (academies and higher schools). The quality of non-university HEI work has long been a major issue. Strengthened controls were not sufficient to eliminate irregularities, so the amendments to the Law on Higher Education from 2018 additionally legally regulated some aspects of their functioning. This primarily refers to the articles of the law regulating the work and the election of the bodies of these institutions in order to overcome the ambiguities incurred during the transitional period in which the institutions harmonized their acts with the new law. Also, provisions were added that create the legal basis for conflict of interest resolution in employment, provisions that facilitate student mobility, and provisions for harmonization with other

¹²⁵The strategy of internationalization of higher education in Serbia for the period 2017-2025. October, 2016

education regulations that have been enacted after the entry into force of the Law on Higher Education. The position of the manager of the academy of vocational studies and higher schools is introduced, whose competencies are prescribed by the Law (the position of managers exists also at the university), and HEI can also prescribe additional competencies by an internal act.

Based on a pilot project involving the merging of some higher schools, it was decided that in 2019 all higher schools that meet the quality criteria will be merged into Academies. It is estimated that there will be 12 of them¹²⁶. For the quality assurance system and the process of accreditation and external checks, quality standards for the Academies are to be defined that will arise from the merger of higher schools.

6.2. Increasing the coverage

In academic year 2017/2018, higher education institutions in Serbia were attended by 462 Roma students. Compared with available data for academic year 2010/2011, this makes a significant increase because at that time 204 Roma girls and boys were attending higher education. This, however, continues to represent an eight times lesser number of students than the one proportionate to the share of Roma in the general population (according to the 2011 Census).

As regards student scholarships and loans, students from vulnerable social groups, including members of the Roma national minority, also have the right to apply to be ranked within the specially allocated quota, under milder criteria, in accordance with the law and rulebook. At the Competition for awarding student scholarships to students of higher education institutions in the Republic of Serbia for the school year 2018/2019 of the 158 students who applied for the scholarship submitting certificate of the National Council of the Roma National Minority, 115 students were granted scholarship, and 18 students were granted student loans. The monthly amount of the scholarship, i.e. the loan is 8400 dinars.

In the case of university students, the measures of support include the tuition fee exemption, as well as the measures based on which student centres should allocate up to 10% of their accommodation capacities. The number of students admitted to student dormitories based on proven belonging to a vulnerable social group in school year 2017/2018 was 804 (aof a total of 17064 students), out of whom 65 Roma students (34 girls and 31 boys).

¹²⁶Available athttp://www.novosti.rs/vesti/naslovna/drustvo/aktuelno.290.html:743851-Sarcevic-Formiranje-Akademije-poslovnih-strukovnih-studija-najbolje-resenje

As regardsdoctoral studies, one recent study published in 2018 ¹²⁷ indicates that all faculties have formal conditions that should lead to the enrollment of "quality students", i.e., those with sufficient knowledge and the capacity for research work in the field, and that the candidates are ranked on the basis of precisely defined and well-known criteria, but that the process itself is not transparent enough. In the light of priorities of MoESTD to eradicate corruption and ensure the integrity of education at all levels, such findings should be further considered.

The financial aspect of doctoral studies is also not an insignificant aspect. The same research suggests that tuition fees are too high, as are indirect costs. Students point out that the admission quota for budget-funded students is very low at all faculties and often the process of student ranking is non-transparent. The MoESTD recognized this problem and as one of the steps towards the solution it envisaged in the budget for 2019 the increase of scholarships for students at doctoral academic studies from 40,000 dinars to 46,000 dinars.¹²⁸

6.3. Increasing the Relevance

The Serbian Parliament of the Republic of Serbia adopted in September 2018 the Law on Amendments to the Law on Higher Education. As stated in the explanation, amendments to the law have been adopted in order to achieve a better connection between the economy and the society as a whole and to influence the improvement of students' functional knowledge and increase employability. Amendments to the law envisage that each higher education institution should have a council of employers, while in the previous formulation the formation of this council was given as a possibility. Amendments

In 2018, the constituent sessions of the organs of the Conference of the University of Serbia (CUS) were held for the new three-year mandate.

The CUS Assembly elected the Rector of the University of Belgrade, prof. Dr. Ivanka Popovic, for the new President of CUS. Rector of the State University in Novi Pazar, Dr Miladin Kostic was elected Vice President of CUS, as well as Rector of the University "Singidunum" prof. Dr Mladen Veinović. Rectoral Council and the Assembly considered

¹²⁷Group for Analysing and Creating Public Policy (2018). Quality of doctoral studies in the field of social sciences and humanities in Serbia. Belgrade: Group for Analysing and Creating Public Policy.

¹²⁸Available athttp://www.mpn.gov.rs/veci-iznos-stipendija-za-studente-na-doktorskim-akademskim-studijama/

¹²⁹Official Gazette of RS, no. 73/2018.

¹³⁰The National Council for Higher Education adopted in February 2019 the Rulebook on Standards and Procedure for the Accreditation of Study Programmes, which guarantees the involvement of employers, professional or vocational associations, labour markets or chambers in the work of the subcommittee established by the Accreditation and Quality Assurance Commission. The subcommittee contains at least two members from the appropriate field, three teachers of higher education institutions from the list determined by the National Council for Higher Education and one student proposed by the Student Conference of the Universities of Serbia (SCUS) or SCAVSS (Student Conference of Academies of Vocational Studies of Serbia).

issues of determining membership in sectoral councils formed by the National Qualifications Framework Council, which should ensure greater relevance of the programme to the HEIs¹³¹.

The Law on Higher Education of the Republic of Serbia, through certain legal solutions allows for the institutionalization of cooperation between companies and HEI, and certain measures from the Law practically impose this cooperation. In addition to articles related to student practice, Article 80 of the Law on Higher Education has enabled, under appropriate conditions, the engagement of the so called lecturers not under employment contract in professional-applied subjects, which formally legalizes the engagement of people from the economy in teaching. 132

In the current practice, we can see some good examples of successful cooperation that might turn into a national model.

The model of cooperation between the UNIVERSITY CENTRES FOR CAREER DEVELOPMENT AND COUNSELING FOR STUDENTS AND LOCAL SELF-GOVERNMENT IN THE ORGANIZATION AND IMPLEMENTATION OF STUDENT PRACTICE is the result of a joint initiative of the Standing Conference of Cities and Municipalities of Serbia and the University Center for Career Development and Counseling for Students of the University of Belgrade. This model rests on the respect of all the quality standards on which BG practice programme is based in an attempt to be adapted and applied in a much wider context, as a good practice example, at the level of 5 city administrations and 5 state universities, and after the pilot phase also to a larger number of local self-governments and higher education institutions. The BG practice programme was initiated and designed by the Centre for Career Development of the University of Belgrade and is implemented on the basis of the Protocol on Cooperation between the University of Belgrade and the City of Belgrade Administration and involves numerous public companies, municipalities, secretariats and cultural institutions as "providers" of practice. During 4 years of implementation of this programme, which is developed through a unique model, over 850 students from 22 faculties within the University of Belgrade were given the opportunity to have first work experience in their profession. The number of institutions involved has grown from year to year and in 4 years the number of places for practice has doubled.

Source: HERE team (2018). Challenges in higher education: cooperation with the economy and institutions - proposal of concepts and mechanisms for implementation at higher education institutions. Belgrade: Tempus Foundation.

Foreign languages provide students with opportunities for development and easier employment, and it is therefore good for the offer of languages to be as broad as possible. An analysis of the presence of foreign language subjects at the main faculty has shown

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¹³¹Available athttp://www.konus.ac.rs/vesti.php

¹³² Here team (2018). Challenges in higher education: cooperation with the economy and institutions - proposal of concepts and mechanisms for implementation at higher education institutions. Belgrade: Tempus Foundation.

that English is the most prominent in all surveyed universities. The largest number of respondents (about 120) responding to the Survey "Examination of Individuals' Opinion on Internationalization of Higher Education in Serbia" (HERE Team, 2018) replied that at all four universities most of the language courses that are part of the study programme are taught during all the years of study. However, the number of respondents (about 60) who answered that foreign language courses still exist only in one semester or do not exist at all (about 25 respondents) is also significant.¹³³

When we talk about university missions, apart from the two that are usually implied, which are the creation and accumulation of academic knowledge and its transfer, we speak, more and more, about the third mission of the university that is related to the use of knowledge beyond the academic context, i.e. for the purposes of economic development and prosperity. This includes various activities that can be seen through three dimensions: Trasnfer of Technology and Innovation, Continuous Education and Social Responsibility. And in the AP, although not designated as the "third mission", HE-CE26 and 27 actions primarily include activities for development and transfer of innovations as well as encouraging entrepreneurial activities of HEIs and students. Through the Erasmus Project IF4TM (Institutional Framework for Development of the Third Mission of Universities in Serbia, IF4TM), HEIs and universities in Serbia will be supported in capacity building for the implementation of the third mission through all three dimensions. Universities that are partners in the project have already started with the revision of their internal regulations in order to create conditions for development activities, so the University of Kragujevac has established a Center for Transfer of Technology, the Rulebook on the evaluation of extra-curricular activities, as well as the Rulebook on Intellectual Property Management at the University, and the University of Belgrade has improved the Stretegy of Lifelong Learning and other documents relevant to the development of human capacities. Other universities have also reviewed their regulations in light of the three dimensions and EU practices in the field and are working on alignment.

6.4. Increasing the efficiency

According to Eurostudent data, most students do not stop their studies for at least two semesters, however, with the duration of studies, the frequency of interruptions of studies increases, so among those who are between 25 and 29 years of age, about 15% have already stopped studying at least once. Most of them (61.4%) mainly cite one reason for this, the loss of motivation, most often (34.5%) as well as the financial aspect (32%) while the smaller number suggests finding a job. The competent bodies have not yet adopted some form of protocol for monitoring and preventing dropouts from higher education (HE-CE07). The very HEIs, with the HE-AS07 action, are also responsible for preventing dropouts and conducting analyzes that can help in this matter. In order to

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¹³³ HERE team (2018). Challenges in higher education. Belgrade: Tempus Foundation.

ensure efficiency, universities began to monitor the execution of teaching on a daily level. Thus, for example, at the University of Kragujevac, timetable, i.e. schedule of teaching (lectures, exercises and laboratory exercises), is published before the beginning of the semester and the management of the faculty supervises teaching (VO-AS01).

Tutoring systems and all measures that are implemented starting from studying and working, strengthening of career centers and offering relevant programs also serve as prevention of dropouts, so it depends on the HEI to assess which measure is the most necessary. What is lacking, and what is the most important instrument for effective prevention measures for dropouts, is a good data collection and processing system.

The Law on Higher Education added a point that enables students who participate in international mobility programmes to transfer ESP points (European system of transfer and accumulation of points) between different study programmes at all levels and types of studies. The Law is supplemented also in the part referring to the use of data from registry managed by MoESTD, since the status of users of such data is assigned to the Agency for Qualifications, or it has the competence to monitor and measure the effects and the implementation of (new) qualifications on employment and lifelong learning, which is why it is necessary that they use and collate the data from the mentioned registers and the Central register of compulsory social insurance.

The result of data processing from the mentioned registers will be the development of statistical reports and indicators on the basis of which the National Qualifications Framework Council will make recommendations to the Government in the process of human resource planning and development, enrollment policy and linking higher education and labour market, in accordance with the strategic documents of the Republic of Serbia. The statistical reports produced by the processing of these data shall be public since their purpose is also to inform the public about the effects of acquiring qualifications according to school and study programmes with the goal to provide relevant information for planning the future of young people in the Republic of Serbia.

The merging of higher schools into academies should also contribute to both the quality and the efficiency of financing of the HE.

6.5. Measures Not Directly Listed in AP

As the dual system of education is recognized as a desirable strategic goal in SVE, but also a priority goal of the RS Government in general¹³⁴ and in the first years of implementation it turned out that in the economy there is an interest in partnership with educational institutions, in the following period, MoESTD saw as a priority the introduction of the dual model in higher education. As in SVE, dual studies in the HE, as a method of studying, aim to increase students' competences and their greater competitiveness in the labour

¹³⁴Available athttps://www.srbija.gov.rs/view_file.php?file_id=2148&cache=sr

market. As we can notice a discrepancy in the socio-economic environment between skills (especially the so-called soft skills) and knowledge acquired at the HEIs and those demanded by employers, student practice that has so far been realized has obviously not provided enough relevant experience. For the year 2019, the drafting of the Law on Dual Higher Education was announced and through the Erasmus project, the *Implementation of Dual Education in Higher Education of Serbia / DualEdu*, an assessment of the needs of HEIs and employers was put in progress, based on which models of dual method of education in higher education will be developed. The results of the project should inform about the development of legal regulations in this area.

One of the important areas that can be addressed in terms of the quality and effectiveness of studying is the issue of corruption at the HEI and the integrity of the HE system. In cooperation with the Council of Europe, within the project "Strengthening the Integrity and Combating Corruption in Higher Education", which is part of the joint programme framework of the European Union and the Council of Europe, Horizontal Facilitation for the Western Balkans and Turkey in 2018, courses on academic integrity for students were developed (presented in February 2019). These courses will be available to all universities and faculties that are able to adapt the visual identity of the certificate and to make courses part of the study program in accordance with their programme. The idea is that students attend two courses and pass the exams electronically with the supervision of the teacher and thus educate themselves on important topics in the field of integrity and clarify all the doubts they may have about their academic work.

Actions under the Action Plan:

HE-CE01 - Development of admission procedure for undergraduate studies based on baccalaureate

HE-CE02 - Introduction of alternative paths for entry into higher education

HE-CE03 - Access to the second cycle of higher education

HE-CE04 - Introduction of studies with work ("part time" studies)

HE-CE05 - Ensuring accessibility of all three study cycles to students from vulnerable groups

HE-CE06 - Development of programme for increasing coverage in priority areas

HE-CE07 - Reducing dropout rate in higher education

HE-CE08 - Strengthening accountability of HEIs for the quality of higher education

¹³⁵Available at https://www.paragraf.rs/dnevne-vesti/080119/080119-vest7.html

¹³⁶Work Plan of the Government of RS for 2019,available at https://www.srbija.gov.rs/dokument/370535/plan-rada-vlade-republike-srbije.php

HE-CE09 - Introduction of quality indicators into HE
HE-CE10 - Improving accreditation system
HE-CE11 - Improving quality assurance system - establishment of national accreditation agency
HE-CE12 - Introduction of educational performance analysis
HE-CE13 - Programme for improving efficiency
HE-CE14 - Defining core competences for professions (a set of mandatory knowledge and competencies)
HE-CE15 - Improving student participation in improving quality of teaching process
HE-CE16 - Establishment of apprenticeship system
HE-CE17 - Improving criteria and procedures for election and advancement of teaching staff
HE-CE18 - Development of support to teaching staff for teaching and scientific work
HE-CE19 - Adjustment of the number of teachers needed by fields
HE-CE20 - Introduction of intersectional engagement of teachers
HE-CE21 - Promotion of implementation of the student-cantered learning concept
THE COOR
HE-CE22 - Harmonization of learning outcomes and student workload (ECTS)
HE-CE22 - Harmonization of learning outcomes and student workload (ECTS) HE-CE23 - Improvements in implementation of new methods of learning, information technologies and elearning
HE-CE23 - Improvements in implementation of new methods of learning, information technologies and e-
HE-CE23 - Improvements in implementation of new methods of learning, information technologies and elearning
HE-CE23 - Improvements in implementation of new methods of learning, information technologies and elearning HE-CE24 - Promotion of cooperation with employers and businesses
HE-CE23 - Improvements in implementation of new methods of learning, information technologies and elearning HE-CE24 - Promotion of cooperation with employers and businesses HE-CE25 - Promotion of research component of higher education
HE-CE23 - Improvements in implementation of new methods of learning, information technologies and elearning HE-CE24 - Promotion of cooperation with employers and businesses HE-CE25 - Promotion of research component of higher education HE-CE26 - Strengthening the innovative potential and increasing innovative outcomes
HE-CE23 - Improvements in implementation of new methods of learning, information technologies and elearning HE-CE24 - Promotion of cooperation with employers and businesses HE-CE25 - Promotion of research component of higher education HE-CE26 - Strengthening the innovative potential and increasing innovative outcomes HE-CE27 - Strengthening the entrepreneurial component of higher education

HE-VE02 - Strengthening the role of Conference of Academies of Vocational Education
HE-VE03 - Introduction of research in vocational education
${ m HE\text{-}VE04}$ - Adjustment of admission policy in the field of vocational education
HE-VE05 - Promotion of expected outcomes of vocational education
HE-VE06 - Promotion of competences of teaching staff of vocational education
${ m HE-VE07}$ - Strengthening the cooperation of HEI in the field of vocational education with businesses
${ m HE-AS01}$ - Modernization of study programmes in accordance with the needs of labour market and with the degree of scientific and technological development achieved worldwide
HE-AS02 - Redefining the key competences for undergraduate academic studies (UAS)
HE-AS03 - Redefining the key competences for master academic studies (MAS)
${ m HE-}AS04$ - Encouraging the development and offer of study programmes of high quality
HE-AS05 - Introduction of ranking of study programmes
HE-AS06 - Promotion of teaching methodology and technology
HE-AS07 - Preparation of freshmen for classes in higher education
HE-AS08 - Developing interests of potential students for studying at UAS
HE-AS09 – Introduction of possibility to apply modules at master studies
HE-AS10 - Introduction of short programmes (short cycle)
HE-AS11 - Organization of studies in the field of arts
HE-DA01 - Inclusion of doctoral academic studies students in scientific and research projects
HE-DA02 - Strengthening the research capacities and excellence
HE-DA03 - Establishing cooperation with commercial, business and public sectors
HE-DA04 - Improvement of doctoral academic studies quality assurance
HE-DA05 - Development and organisation of "doctoral academic schools"

HE-DA06 - Promotion of doctoral academic studies in the field of arts

HE-DA07-Introduction of post-doctoral academic advanced training



7. Adult education

In school year 2017/2018, 6012 students were enrolled in primary adult education schools, of which 3211 were male and 2801 women. The number of schools registered for the FBEA in 2018 was 73¹³⁷.

Within the framework of informal adult education there are various measures implemented by the Government of the Republic of Serbia - retraining in the field of information technology¹³⁸, training programmes conducted by the National Employment Service ¹³⁹ but also international projects (e.g. E2E project¹⁴⁰ financed from the funds of the Swiss Development Agency and the Youth Employment Promotion funded by the Government of Germany through the GIZ YEP project ¹⁴¹).

7.1. Improving the quality

In 2018, the minister's decision to grant the status of a publicly-recognized organizer of adult education activities have so far received 27 organizations / institutions for a total of 52 adult-oriented programmes for acquiring competencies and qualifications required by the labour market. The organizers are mainly secondary vocational schools and organizations from the non-formal education system. Nevertheless, the MoESTD records show that the number of trainings that were held is smaller than the number of accredited ones (PE-AE01 142).

Improving quality, in addition to ensuring the quality of training programmes, was also focused on strengthening the competencies of teachers who execute FBEA. The "Integrated FOO Exercise Training Programme", Module 1, was realized for FBEA teachers in 6 places in Serbia, encompassing 266 teachers. In the coming period, the implementation of modules 2 to 6 will continue, but good practices and challenges identified during these training will be used to further improve the system (PE-AEO2). In 2018, the *Rulebook on the contents and method of record keeping and issuing public documents for basic adult education* was adopted (Official Gazette of RS, No. 65/18).

¹³⁷Available athttp://www.stat.gov.rs/sr-Latn/oblasti/obrazovanje/obrazovanje-odraslih-i-celozivotno-ucenje

¹³⁸Available athttps://www.srbija.gov.rs/tekst/329909/it-prekvalifikacije.php

¹³⁹Available athttp://www.nsz.gov.rs/live/trazite-posao/edukacija

¹⁴⁰Available athttps://znanjemdoposla.rs/

¹⁴¹Available athttp://odskoledoposla.org/obuke-za-zaposljavanje-kod-unapred-poznatog-poslodavca/

¹⁴²The list of registered PROA for specific programmes, available at http://www.mpn.gov.rs/obrazovanje-odraslih/

The next steps will also include the completion of the legal framework, since, for example, there is still no system of evaluating the quality of institutions for formal and informal adult education at all levels (PE-AE05).

The shortcomings of the system that would enable better quality control are primarily reflected in the lack of integrated and relevant data in this sector. For example, there are training programmes in the workplace as envisaged in AP (PE-AE03) but also with an increasing number of organizers, there is difficulty in collecting information on the number and success of trainings. The diversity of training providers also makes it difficult to collect data due to various competent bodies over various organizers - for example, National Academy of Public Administration, Serbian Chamber of Commerce, etc.

7.2. Increasing the coverage

Basic adult education (based on the functional basic adult education model) was implemented in 64 primary schools in the territory of 15 school administrations, attended by 6090 adults.

External secondary education for students older than 17 years was realized in 121 secondary schools, in the territory of 16 school administrations, attended by 351 attendants.

On the basis of internal data of MoESTD, retraining, additional training and specialization in 2018 was realized in 178 secondary schools, in the territory of 17 school administrations. The number of adult attendees who attended the programme was 4018.

As we have mentioned, PROA trainings are not yet fully recognized by employers and the National Employment Service, nor are they with the attendees. Promotional campaigns that are planned should improve this relationship, but fulfilling planned activities such as e-learning and diversification of course offers should probably also contribute to greater coverage. It is also necessary to speed up the process of adopting the rulebook on the recognition of previous learning.

7.3. Increasing the relevance

The programmes that received the minister's decision on accreditation were developed in cooperation with local employers and other social partners, in order to respond to the demands of the local labour market and employers for qualified work force (PE-AE01). However, the impression is that there is still certain disagreement between employers and organizers, since training is not fully recognized by employers and NES, i.e. they do not provide the same chance of employment as formal regular education. Therefore, the interest of the trainees for the above training decreases. In order to better synchronize the organizer's activities and respond to the real needs of the labour market, in the

coming period, PROA networking will be undertaken to improve the standardization of the process. Also, more will be done on the promotion, visibility and availability of quality programmes.

The introduction of short training courses designed in such a manner so that after the completion of the course, the student receives ECTS is not yet implemented (PE-AE04) nor is the establishment of a "university" for senior citizens (PE-AE07).

Recognition of previous learning is one of the essential mechanisms As regardsincreasing the relevance and coverage of adult education. The goal of recognizing previous learning is to ensure the promotion of adult participation in lifelong learning processes, the individualization of processes and paths of adult learning, as well as the mobility and employability of the workforce. The Institute for the Promotion of Education together with the Working Group has developed the Concept of Recognition of Previous Learning in the Republic of Serbia¹⁴³ while the adoption of the Rulebook on Recognition of Previous Learning was foreseen in the fourth quarter of 2018. Unfortunately, this Rulebook was not passed.

However, it should be emphasized that the NQFS Law defines that qualifications can also be obtained through the procedure of recognition of previous learning (1-3, 5 level NQFS level 1-3, 5 and exceptionally NQFS level 4) and that the same law defines the procedure for acquiring qualifications through the procedure of recognition of previous learning. Through this procedure, qualification or its segments are acquired with the PROA through a special procedure in which, in accordance with the standard of qualification, the knowledge, skills and attitudes acquired on the basis of work or life experience are assessed, after which an appropriate public document or certificate is issued, in accordance with the law governing adult education.

Sectoral councils have the authority to propose lists of qualifications by levels and types that can be acquired by recognizing previous learning.

Piloting the existing concept and determining the final validation model for non-formal and informal learning is envisaged to be implemented with the support of IPA 14 from 2019.

In order to improve the offer, in 2018, MoESTD worked on developing a methodology for monitoring the implementation of career guidance and counseling programmes based on service standards and, in cooperation with the NES, enabled better information for students and the unemployed. 144

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¹⁴³Decision on determining the Annual Adult Education Plan in the Republic of Serbia for 2018: 60 / 2018-9, available at http://pravno-informacioni-sistem.rs/SlGlasnikPortal/eli/rep/sgrs/vlada/odluka/2018/60/2/reg ¹⁴⁴Decision on determining the Annual Adult Education Plan in the Republic of Serbia for 2018: 60 / 2018-9, available at http://pravno-informacioni-sistem.rs/SlGlasnikPortal/eli/rep/sgrs/vlada/odluka/2018/60/2/reg

7.4. Increasing the efficiency

As one of the most important areas, e-learning and distance learning that did not even take place in regular education, in the case of AE it would significantly contribute to the efficiency of the system in view of the large differences in user needs and capabilities, i.e. those who wish to attend training but due to logistic reasons will not be able to attend a particular programme. There is currently no activity information in this field (PE-AE06). The system of evaluating the quality of institutions for formal and informal adult education at all levels is a missing link in order to optimize this form of education.

2019 Priorities

Priority 1

Improving the competencies and qualifications of unemployed and employed adults of importance for personal and professional development, employment, job maintenance and career advancement through lifelong education and learning programmes and activities in formal education (FBEA, Secondary adult education – external secondary education students, adults older than 17 years, retraining, additional qualification and specialization of adults in secondary education).

Priority 2

Realization of programmes and acquisition of competences and qualifications of employed and unemployed persons with the Publicly recognized organizer of adult education activities (PROA AE).

Priority 3

Realization of programmes and other activities of informal education and training of adults within the NES, other state bodies and institutions, associations and chambers, where unemployed and employed persons acquire competences and qualifications of importance for personal and professional development, employment, maintenance of employment and career advancement as well as career management and decision making on further education and employment.

Priority 4

Improving the competences of the employed and working people in adult education (programme executives - teachers, lecturers, trainers, instructors, expert associates, andragogical assistants).

Priority 5

Improving the legislative framework in adult education and improving inter-sectorial cooperation in the implementation of strategic goals in adult education.

Actions under the Action Plan:

PE-AE01 - Establishing the network of publicly recognised activity organisers of adult education (PROA)

PE-AE02 - Promotion of primary adult education functionalization

PE-AE03 - Developing programmes of education and on-the-job training of adults (workplace learning);

PE-AE04 - Introduction of short training courses for acquiring required knowledge and skills, with ECTS

PE-AE05 - Introduction of a system for evaluating the quality of institutions for formal and informal adult education at all levels;

PE-AE06 - Introduction of e-learning into adult education

PE-AE07 - Establishment of "university" for senior citizens

8. Education of National Minorities

Attendance in the languages of national minorities

In the Republic of Serbia, teaching at the level of primary and secondary education is conducted in nine languages. In addition to Serbian, in their mother tongue, education is attended by male and female members of **eight national minorities: Albanian, Bulgarian, Bosnian, Hungarian, Romanian, Ruthenian, Slovak and Croatian national minorities.** An overview of the number of students and the number of schools is given in the tables below.

Table 3. Attendance in the language of the national minority in primary education - number of students, number of schools

	School year 2017/2018		School year 2018/2019	
Language of teaching	Number of students	Number of schools	Number of students	Number of schools
Albanian	4 497	16	4322	16
Bosnian	12 374	21	12124	27
Bulgarian	36	1	76	2
Combined Bulgarian- Serbian ¹⁴⁵	/	/	38	1
Hungarian	13 090	72	13 066	74
Romanian	825	14	790	17
Ruthenian	389	3	87	2
Slovak	2502	11	2403	17
Croatian	245	5	240	6

Table 4. Attendance in the language of the national minority in secondary education - number of students, number of schools

	School year 2017/2018		School year 2018/2019	
Language of teaching	Number of students	Number of schools	Number of schools	Number of students
Albanian	2 770	5	2 686	4
Bosnian	1 429	6	2 178	10

¹⁴⁵Starting from the school year 2018/19, bilingual teaching is conducted in Bulgarian and Serbian language

	School year 2017/2018		School year 2018/2019	
Language of teaching	Number of students	Number of schools	Number of schools	Number of students
Bulgarian	149	2	157	2
Hungarian ¹⁴⁶	5 394	36	5228	36
Romanian	166	2	133	2
Ruthenian	63	1	327	1
Slovak	419	3	392	3
Croatian	167	1	178	3

Elective subject / programme Native language / speech with elements of national culture

Elective subject or programme *Native language / speech with elements of national culture* has been studied in 14 languages of national minorities in the school year 2017/2018, while in the school year 2018/2019, opportunity to study this subject / programme is offered to members of 15 national minorities: Albanian, Bosnian, Bulgarian, Bunjevac, Vlach, Hungarian, Macedonian, Roma, Romanian, Ruthenian, Slovak, Slovenian, Ukrainian, Croatian and Czech. Trends in attending this electoral programme are given in Table 5.

Table5. Native language / speech with elements of national culture (number of students / schools) - last three school years

School year	Number of students	Number of schools
2018/2019	13939	321
2017/2018	15950	310
2016/2017	11509	314

The status of this elective subject / programme has been enhanced by the adoption of the Technical Instruction on the formation of classes and the manner of financing in primary and secondary schools for the school year 2016/17, as well as the Technical Instruction for the school year 2017/18. The novelty brought up by this document allows a school that conducts an elective subject or programme Native Language / Speech with elements of national culture, can form a group at the level of the cycle, that is, the group consisting of first-to-fourth-grade students (first cycle students) and / or group made by students from the fifth to the eighth grade (students of the second cycle). Also, groups for the elective subject / programme Native language / speech with elements of national culture, can be formed at the level of several schools in one municipality, with the consent of the

¹⁴⁶Hungarian also includes Hungarian-German

competent school institution. National Councils of National Minorities actively participate in informing parents about the importance of studying mother tongue and speech, as well as in forming departments / groups for this elective subject / programme.

The Ministry of Education, Science and Technological Development promotes the possibilities of learning the language and culture of national minorities through various forms of extra-curricular and facultative activities (winter and summer schools, workshops ...) and other forms of work. Within the framework of the project of the Council of Europe and the European Union that supports South East Europe and Turkey in meeting European standards, as well as the approximation of European Union legislation during the enlargement process, activities are being implemented - strengthening the protection of national minorities in Serbia - and one of the goals is directed to strengthening education in minority languages. Through the analysis of the model of education in Serbia and European countries, the model of learning the language of social environment will also be analysed.

Serbian as non-native language

In the course of 2018, a new concept of the subject Serbian as a non-native language for the entire up to-university education was adopted and it was developed by the IIE in cooperation with the OSCE Mission to Serbia. This teaching and learning programme has been produced in two formats according to the European Reference Framework for Living Languages, and is designed to enable members of national communities studying in their mother tongue to achieve linguistic functional knowledge that will enable them to be more easily involved in the wider community. A compulsory lexicology dictionary for the first education cycle has been prepared and can be downloaded from the IIE site.

Textbooks in the languages of national minorities

In April 2018, a new Law on Textbooks was adopted ¹⁴⁷. The law defined textbooks in the language and script of the national minority (Article 5) in the same way as the previous law:

A textbook in the language and script of the national minority is considered:

- 1) A textbook in the language and script of a national minority issued in the territory of the Republic of Serbia;
- 2) a textbook in the language and script of a national minority, which is a translation of textbooks approved in the Serbian language;
- 3) an addition to the textbook used to implement a custom part of the teaching and learning programme for subjects of importance to the national minority;
- 4) a textbook in the language and script of a national minority issued in a foreign country, which has been approved in accordance with this Law.

¹⁴⁷ Law on Textbooks, Official Gazette of RS, no. 27/2018.

The law also highlights the prohibition of discriminatory content in textbooks, while underlining the importance of implementing the principle of equal opportunities and respect for diversities (Article 13). The novelty adopted by the new law is the establishment of the Centre for Low-Circulation Textbooks (Article 15) which stipulates that "The Public Publisher shall, for the purposes of publishing low-circulation textbooks referred to in Article 11 of this Law establish the Centre for Low-Circulation Textbooks as a special organizational unit. Public publisher shall publish a low-circulation textbook if the publisher themselves do not issue this low-circulation textbook." Also, Article 38, Obligations of the publisher of textbooks, stipulates that the publisher shall be obliged to "6) pay funds in the amount of 2% of the net income realized from the sale of textbooks in the previous calendar year no later than March 31 of the current year, if they do not publish low-circulation textbooks ». After that, the Centre for Low-Circulation Textbooks was established as an organizational unit and an integral part of the Public Enterprise "Institute for Textbooks". The establishment of the Centre greatly contributes to the provision of textbooks in the language and script of the national minority as lowcirculation textbooks. Active work with representatives of the Centre on finding solutions for printing missing textbooks in the languages of national minorities is taking place.

In order to obtain the missing textbooks in the languages of national minorities that implement the entire teaching in their mother tongue, the MoESTD has signed memoranda in 2016 and accompanying annexes on cooperation in the field of printing missing textbooks in the language and script of the national minority with the Institute for Textbooks and 8 National Councils of National Minorities (Albanian, Bosnian, Slovak, Croatian, Bulgarian, Hungarian, Romanian and Ruthenian national minorities). These memorandums set forth printing of 184 textbooks, some of which are translations into the language of the national minority, while some titles are originally prepared by the author. By the end of 2018, 115 textbooks were printed out of this number.

Textbooks in the languages of national minorities were published in the Catalogue of primary education textbooks approved for the school years 2016/17, 2017/18, 2018/19¹⁴⁸. In May 2018, a Supplement to the Catalogue of textbooks - primary school - Textbooks in the languages of national minorities for school year 2018/2019 was published, and in the period from May to December 2018, the MoESTD issued 41 decisions authorizing the publication and use of textbooks in the languages of national minorities. The total number of textbooks in the language of the national minority in the school year 2018/19 is 1,705 and all are available to students, both in the languages in which the entire teaching takes place, as well as textbooks for elective programmes in the language of the national minority.

Since the reform of the curricula and teaching and learning curricula of the first and fifth grades of the primary school temporarily stopped the implementation of the memorandum for the first and fifth grade, the MoESTD mapped the needs for new

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¹⁴⁸Available athttp://www.mpn.gov.rs/udzbenici/

textbooks that shall be prepared according to the new Curriculum for Teaching and Learning.

The implementation of the memoranda related to textbooks in Albanian and Bosnian language were not implemented according to the dynamics that was drawn up, which was caused by certain decisions and procedures of national councils of the Albanian and Bosnian national minorities. In 2018 elections were held for members of national councils of national minorities - MoESTD is ready, in agreement with national councils, to find the optimal solution in order to speed up the process of publishing missing textbooks.

Interculturality, tolerance, desegregation

Interested students in the Republic of Serbia have the opportunity to learn the languages and culture of national minorities through various forms of extra-curricular activities, i.e. facultative classes through winter and summer schools, camps, workshops ... or other forms of work.

Project " Encouraging democratic culture in schools "is a two-year activity co-financed by the European Union and the Council of Europe, and it falls within the framework of the European Union - Council of Europe Programme entitled "Horizontal Support for the Western Balkans and Turkey". The programme is implemented by the Education Department of the Council of Europe in cooperation with the Office of the Council of Europe in Belgrade. The overall objective of the project is to improve the quality of education by encouraging a democratic culture in a formal education system through the application of anti-discrimination approaches based on the standards and practice of the Council of Europe.

The specific objectives of the project are to: a) enhance the competencies of teachers, students and citizens in the community about the concept, policies, practices and benefits that inclusive education and democratic culture play in schools; b) strengthen and increase the resources of pilot schools for eliminating prejudices and discriminatory access to vulnerable groups, as well as to reduce the number of cases of school violence. Expected results of the project are:

- Identification of good practice cases of democratic culture in schools that will be promoted in the education and training system in the country and region;
- Action plan prepared with projected activities and manner in which experience from pilot schools will be used to develop a strategic plan.

20 pilot schools (10 primary and 10 secondary schools) were selected, which were given the opportunity to introduce measures and activities for combating discrimination and mechanisms for monitoring these measures. The schools were selected from Becej, Belgrade, Bor, Jagodina, Kraljevo, Nis, Novi Pazar, Pančevo, Banatsko Novo Selo, Pozarevac, Subotica, Turija, Veliko Gradište, Vladičin Han, Žabalj and Đurđevo. The

project lasts for 24 months and is being implemented in cooperation with the Ministry of Education, Science and Technological Development through activities involving a wider group of relevant stakeholders, including also the Institute for the promotion of education, research institutes, selected pilot schools, local communities, media, non-governmental organizations, experts, academic as well as international organizations / donors in Serbia. These 20 selected schools participating in the project "Encouraging democratic culture in schools" will promote the concept of democratic culture in school through teaching and extracurricular content, training of employees, establishment of practices and activities where through the provision of new knowledge, skills and understanding, developing attitudes and behaviours, students learn how to defend their democratic rights and take responsibility.

Through the implementation of the project of the Council of Europe and the European Union for the support of South East Europe and Turkey "Horizontal Facility" HF-33 -Strengthening the Protection of National Minorities in Serbia, an analysis of selected curricula, subject competencies and educational standards was carried out. The results show a heterogeneous situation in terms of presence and attitudes towards national minorities in the educational framework in the Republic of Serbia. It is important to emphasize that official documents related to education, that is, standards and curricula (especially to assignments and teaching units) for certain school subjects that this report deals with (Nature and Society and Music Culture in the first cycle; Serbian Language and Literature and Geography in the second cycle, and Geography, Sociology and the Constitution and Citizens' Rights in the third cycle), directly address the topic of national minorities or their cultural heritage, and present positive trends or examples. While recognizing the legislator's determination to include national minorities as an integral part of these documents, the analysis shows that this intent is not clear due to unspecified and general formulation of tasks or content of curricula (especially when cultural heritage is determined by the pronoun "ours" or when it is hidden behind the general goals and comprehensive verbalisation). National minorities in primary school programmes are generally referred to in relation to music (with the exception of Nature and Society and partially subject Geography), and generally speaking, a limited number of minorities is mentioned (the list of those appearing in the subject Musical Culture is longer, and otherwise mentioned are per one Hungarian author or someone from the former Yugoslavia). Information about national minorities in relation to music do not necessarily present a disadvantage, but the tendency towards primarily "folklore" representation of national minorities should be avoided. The educational challenge would imply the application of a balanced and thought-out approach to the identity of local "homeland" or environment and its expansion at the general social / state level. The full potential of content relevant to the issue of national minorities is underestimated. It is not contextualized in a way that supports the understanding of cultural diversity and its contribution to the development of tolerance and mutual respect in a multicultural and multi-ethnic society. Teachers are left to hold classes on certain important topics without specific guidance that teaching should lead to the development of students'

intercultural competences, their familiarity with members of different ethnic / national groups. The subject History has been recognized as one of the most important for raising awareness about different views of the past, including the position and perspective of national minorities. Analysis of curricula for the subject History shows that during the entire education, from the first to the end of the third cycle, the subjects Nature and Society, History and, to a certain extent, Geography, do not deal with the question of national minorities living in Serbia today in an appropriate and satisfactory manner. It can be concluded that the existing content of the programme lacks or has insufficiently transparent complete insight into the process of creating a modern multicultural and multi-ethnic Serbian society and state. Fostering national identity and raising awareness about the importance of cultural heritage as a key component of identity are basically expressed in provoking the feeling of patriotic awareness and belonging to the Republic of Serbia, without taking into account the special characteristics of the various national minorities living in Serbia today.

Recommendations and proposals for overcoming the identified shortcomings outlined in this report will be implemented in cooperation with the international organization ECMI -European Centre for Minority Issues, which conducts researches in public minority policies and provides advisory services in this field.

9. Education of Roma Population

For more than 15 years, the Ministry of Education, Science and Technological Development of the Republic of Serbia has been undertaking measures aimed at changing and improving this uninhibited position of Roma students in the educational system. MoESTD's efforts go towards a comprehensive approach to solving this problem, which in practice means that the measures that are in place relate to one another and form a support circle that targets all problems in the education of Roma children. A particularly vulnerable group are Roma girls and the Ministry seeks for the measures put in place to be gender specific.

Measures to increase the enrolment rate in pre-school education and primary education

Amendments to the Law on Pre-school Education149 promote the regulations regarding various forms and programmes of educational work. In this way it is more explicit and unequivocally indicated that the pre-school institution, besides the realization of the programme of educational work in the whole day duration, also develops other forms and programmes, with the aim to increase the coverage of all children in the community with a high quality short-term (four-hour) programmes, with a special accent on children from vulnerable social groups. The new Law on Financial Support to Families with Children 150 has significantly improved the support for the inclusion of children from vulnerable social groups into the system of pre-school education. The Law provides for covering of the costs of staying in a pre-school institution for the children of the beneficiaries of social welfare. Pre-school children, whose parents are beneficiaries of financial social assistance, are entitled to covering of the costs of stay in a pre-school institution with the decision of the Ministry responsible for verification education activities, in the amount of the participation of the beneficiaries in the price of the service prescribed by the decision of the local self-government unit. This law also provides for the covering of the costs of stay in pre-school institutions for children from materially deprived families. Namely, children of pre-school age from materially deprived families, depending on the material position of the family, have the right to covering of the cost of stay in a pre-school institution with the decision of the Ministry responsible for verification education activities. The manner and conditions for cost recovery is determined by the competent body of the local self-government unit.

Due to data indicating that the coverage of children in preparatory pre-school programmes is not complete, while the coverage of children from vulnerable groups is significantly lower, starting from 2015, the Ministry of Education, Science and Technological Development in cooperation with relevant partners conducts a continuous

¹⁴⁹Law on Preschool Education, Official Gazette of RS, Nos. 18/10, 101/17 and 113/17 – and other Law.

¹⁵⁰Law on Financial Support to the Family with Children, Official Gazette RS, Nos. 113/2017 and 50/2018

campaign to increase the enrolment of children in preparatory pre-school programme and first grade of primary school. The campaign involves the printing of flyers and posters in the Roma and Serbian languages, communication with pre-school institutions and other institutions involved in the care of children and families at the local level, the formation of local teams, development and implementation of action plans, the exchange of experiences between local communities in which the coverage is complete and those in which it is not. In all these activities, efforts are made to encourage pre-school institutions to promote, in their local communities, the importance of early inclusion in pre-school education, especially at the age of 3-5.5, and to increase the number of educational groups in which shorter high quality pre-school programmes are implemented in accordance with the needs of the family, as well as to find ways to support the regularity of attendance.

Owing to these activities, as well as projects aimed at increasing the coverage and improving the quality of social care for children at the local level, the data indicate that the coverage of Roma children in pre-school education is increasing, and thus is the coverage of Roma girls.

Pursuant to the Law on the Foundations of the Education System (LFES), the procedures for enrolment in primary schools were facilitated with the aim of increasing the primary education coverage of Roma students. Children from vulnerable groups can enrol in school without proof of their parents' residence and required documentation. The child's examination is only done after the child is enrolled in school and is also available in Roma language. In addition, during primary education, support measures are taken, if necessary, through the development of an individual education plan, and other institutions are involved, for example, Centre for Social Work and Health Institutions.

Measures in the field of student standard

These support measures are systematically implemented in continuity, and out of the total number of scholarships and loans granted, MoESTD allocates up to 10% for higher education students and up to 10% for students from vulnerable social groups.

Table6. Scholarships awarded to Roma students from the budget of the Republic of Serbia in the last 4 school years

School year	Number of scholarships	Requirement according to school success	Percentage of girls
2015/16	176	School success excellent	65%
2016/17	150	School success excellent	60%
2017/18	303	School success very good and excellent	63%

2018/19	54	School success very good and excellent	61%
Total	1173		

In the last four school years, 1175 scholarships for Roma students have been allocated from the budget of the Republic of Serbia. The amount of monthly scholarship is 5400 dinars. At the end of 2017, the Rulebook on Student Loans and Scholarships was amended151, with the aim of establishing milder criteria for students without parental care, students with disabilities and students belonging to the Roma national minority. This enabled the increase in the number of scholarships awarded to Roma students, including those students who did not have excellent school success. A special ranking list is set for students from vulnerable groups. In this way, MoESTD succeeded in increasing the chances of Roma students receiving scholarships, which resulted in a striking increase in the number of scholarships received by Roma students - in school year 2017/2018 (303 scholarships) and even more in school year 2018/2019 (544 scholarships). It is noticeable that a continuously higher number of scholarships are granted to girls (always over 60%). Bearing in mind that the participation of Roma female students in secondary education is significantly less than Roma boys, the granting of more scholarships to female students supports their involvement in secondary education and reduces the existing gender gap.

By announcing a competition for awarding student scholarships to students of secondary schools in the Republic of Serbia for the school year 2018/2019, in June 2018, a campaign of information on milder criteria for students of Roma nationality was strengthened. This was especially important because the planned number of scholarships for Roma students has increased from 300 to 500. Schools from the area with a larger number of Roma students were contacted and all interested parties informed about the new opportunities.

Particular emphasis should be given to the good cooperation and the great engagement of the National Council of the Roma National Minority, who has been engaged in informing the community, more recently, in issuing certificates of belonging to the Roma national minority and in helping to fill in and collect forms from students. Owing to these additional efforts, a total of 963 students from the Roma community (out of a total of 24,000 secondary school students who applied for the Competition) applied for the Competition. This number confirms the effectiveness of the enhanced information campaign.

The Commission for granting student loans and scholarships has decided to grant 544 scholarships for students of the Roma community for the school year 2018/2019. Beyond the mentioned number, a number of excellent students of the Roma community realized

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 $^{^{151}}$ Rulebook on student loans and scholarships, Official Gazette of RS, nos. 46/10, 47/11, 56/12, 75/13 and 111/17

the right to a scholarship in a regular procedure, but there is no data on this, because in this procedure data on nationality are not collected ¹⁵².

In the process of formative assessment of the fulfillment of the objectives contained in the sectoral reform agreement between the Republic of Serbia and the European Union ¹⁵³, in December 2018, a pre-evaluation was conducted. However, although the preliminary results were presented to MoESTD, the preparation of the documentation for a detailed analysis of the results in 2018 is yet to come.

In addition to these scholarships awarded through the Contest for awarding student scholarships to secondary school students, MoESTD has, in cooperation with international organizations, and through the IPA 2012 - TARI project in the school year 2015/2016 and 2016/2017 awarded a total of 1020 scholarships (510 per school year) to Roma students from the first to the fourth grade of secondary schools with an average school success of 2.5 to 3.5, of which 67% are girls. The Ministry continued to grant 500 scholarships for the school year 2017/18 together with the Roma Education Fund, after the completion of the competition for which secondary school students of Roma nationality had the right to apply, with an average of 2.5-3.5, and 67% of them were allocated to Roma girls. Mentoring support (201 mentors) was provided, during 2015/16, 2016/17, and 2017/18 school year where mentors provide direct support to Roma students and regularly monitor students' status according to all prescribed criteria. The scholarship will continue through the IPA 2014 project - "Youth Employability and Active Inclusion". 154

As regards student scholarships and loans, students from vulnerable social groups, including members of the Roma national minority, also have the right to submit a request to be ranked separately within a purposefully defined number, using milder criteria, in accordance with the law and rulebook. At the Competition for awarding student scholarships to students of higher education institutions in the Republic of Serbia for the school year 2018/2019 out of the 158 students who applied enclosing the confirmation of the National Council of the Roma National Minority, 115 students received scholarships, while 18 Roma students received student loans. The monthly amount of the scholarship, i.e. the loan is 8400 dinars.

In the case of students, measures of support also include the measures of exemption from tuition, as well as the measures based on which student centres should purposefully allocate up to 10% within their accommodation capacities. The number of students admitted to the student dormitories based on proven belonging to a vulnerable social

¹⁵²In 2019, the allocation of 700 scholarships to Roma students on the basis of the Competition is planned.

¹⁵³ Sector Reform Contract for Education Reform in Serbia – strengthening links with employment and social inclusion, available at https://ec.europa.eu/neighbourhood-enlargement/sites/near/files/ipa2016-039806.09-serbia-sector reform contract education reform in serbia.pdf

¹⁵⁴ IPA 2014 - "Youth Employment and Active Inclusion", available at http://europa.rs/files/ipa-2014/IPA%202014%20AD%20Youth%20Employability%20Active%20Inclusion%2006042016%20TC.pdf

group in school year 2017/2018 was 804 (and a total of 17064 students), out of which 65 Roma students (34 girls and 31 young man).

Affirmative measures for enrollment in secondary and higher education

The programme of affirmative measures for enrollment of Roma population students in secondary school is being introduced in 2003, and it has been systematically implemented since 2005. The importance of this measure is its systemic character. By adopting the "Rulebook on criteria and procedure for the enrollment of students - members of the Roma national minority in secondary schools under more favorable conditions to achieve full equality" in February 2016, which in 2017 became part of the "Rulebook on enrollment in secondary school" the process of systemic regulation of this kind of support has been completed.

The Rulebook on enrollment in secondary school has set forth several affirmative measures:

- The number of points that students of Roma nationality obtain on the basis of school achievement and on the basis of the final exam, is increased by 30% of the number of points that they lack to 100 points.
- As for the students living in the families who are beneficiaries of financial social assistance, their number of points obtained on the basis of school achievement and final exam, will be increased by 35% of the number of points that they lack up to 100 points.
- Primary schools, starting from the seventh grade, are obliged to notify the parents, or other legal representatives of students of the Roma national minority about the criteria and procedure for the enrollment of students in secondary schools under more favorable conditions.

Results of affirmative measures. From the systemic introduction of affirmative enrollment measures to secondary schools (from the school year 2005/06, ending with the school year 2018/19), 8,324 students were enrolled (of which 55% were girls). Through the work of school administrations, MoESTD collects data on the effects of these measures. More than 65% of those enrolled through affirmative measures, who are scholarship beneficiaries and who have mentoring support, complete secondary education. By monitoring the implementation of the Affirmative Measures Programme for the enrollment of Roma students under more favorable conditions in secondary schools, it has been established that in the school year 2017/18, 1,969 Roma students enrolled in secondary schools through this programme, while in the school year 2018/19, 2220 students of Roma nationality were enrolled through affirmative measures (56% were Roma girls).

Affirmative action for enrollment at higher education institutions dates back to 2003/2004, and so far 1623 male and female students have been enrolled (51% are girls).

In particular, through this programme, in academic year 2016/17, 182 students enrolled in the first year, (88 young men and 94 girls), while in the academic year 2017/18, 154 students were enrolled (71 young men and 83 girls).

Pedagogical assistants

The engagement of pedagogical assistants in pre-school and primary education institutions is also a systemic measure prescribed by LFES and regulated in more detail by the relevant bylaws. The implementation of this measure started in the beginning of 2000, through projects of non-governmental organizations and with the support of international organizations and the Ministry of Education, Science and Technological Development of the Republic of Serbia, and later became part of the system of LFES solutions from 2009, when the field of work of assistants began to cover all children to whom support is necessary (and not only Roma children). The new LFES from 2017 established the legal basis for the adoption of a rulebook that determines conditions for the work of the pedagogical (and andragogical) assistant.

During 2018, a Competition for the election of pedagogical assistants was conducted. The MoESTD commission has selected 50 applicants for the training, out of the 145 people who applied. The condition for starting a working relationship was to attend an introductory training. In cooperation with the University of Kragujevac - Centre for Lifelong Learning, which has accredited training for pedagogical assistants of 36 ECTS, a five-day introductory training was organized for 65 assistants (for 50 new candidates and 15 previously engaged who did not attend the training). The MoESTD's working group chose 50 primary schools, by regions, for the recruitment of new pedagogical assistants. They were deployed in schools with a large number of children from vulnerable social groups. In total, through the engagement of new pedagogical assistants, around 6000 students from Roma families, children living in sub-standard settlements and over 1,100 students who are educated according to the individual educational plan was covered.

According to the latest data, 261 pedagogical assistants are engaged in the system -221 in primary schools and 40 in pre-school institutions. Of this, the work of 229 pedagogical assistants was financed from the budget of the Republic of Serbia, and 32 from the budgets of local self-governments. The Standing conference of cities and municipalities is engaged in the inclusion of pedagogical assistants in mobile Roma inclusion teams, in those units of local self-government where they have not been involved so far.

In 2018, the position of a pedagogical assistant was included in the Regulation on the Catalogue of Job Positions in Public Services and Other Organizations in Public Sector155, so their status was institutionalized in this way also, contributing to the sustainability of this measure of education policy.

¹⁵⁵Regulation on the Catalogue of Job Positions in Public Services and Other Organizations in the Public Sector, *Official Gazette of the RS*, Nos. 81/2017, 6/2018 and 43/2018

The work of pedagogical assistants is still accompanied by various challenges, starting from their working status, opportunities for professional development, understanding of their role by other employees, participation in the work of school teams. Due to those reasons, MoESTD formed a working group to revise the current Rulebook and thereby raise the quality of their work and contributions in providing additional support to students. In this regard, the regulation of the description of the work of pedagogical assistants, as well as the preparation of a network of pedagogical assistants and instruments for measuring their results.

In addition, due to the importance of pre-school education, a special programme for pedagogical assistants for work in pre-school institutions has been accredited through cooperation with the international organization Save the Children for the Northwestern Balkans (SCNWB) and the project "Available and high quality education for Roma girls and boys" (2017-2018). Tutors who have graduated in Roma language at the Mihajlo Palov Higher Vocational School in Vršac were also included.

Elective subject/programme Roma language with elements of national culture

The Rulebook on curriculum for first and second grade of primary education 156 established the syllabus for the elective subject / programme of Roma language with elements of national culture, and thus created one of the prerequisites for the introduction of this elective subject / programme in teaching. In order to improve the professional staff for the realization of this elective subject / programme, MoESTD, in cooperation with the Centre for Continuing Education and Evaluation of the Faculty of Philology, University of Belgrade 157 and the National Council of the Roma National Minority organized a one-month course for teachers of the Roma language. In the territory of the Autonomous Province of Vojvodina, this elective subject is being studied since the 1990s. So far, 77 teachers have been certified for the realization of the elective subject / programme Roma language with elements of national culture. A significant number of these teachers are also engaged in schools. During the school year 2015/16, elective subject Roma language with elements of national culture, was attended by 1,500 students, in the school year 2016/17, 2,252 students at 72 primary schools in Serbia. In the school year 2017/18 the number was also increased, and 2,860 students attended the elective subject Roma language with elements of national culture in 79 primary schools, while data for the school year 2018/19 show that 2,463 male and female students attended this elective programme in 66 primary schools in 39 local self-government

2017-5, 12 / 2018-9

 $^{^{156}}$ Rulebook on curriculum for first and second grade of primary education, Official Gazette of the Republic of Serbia - Educational Gazette, Nos. 10 / 2004-1, 20 / 2004-1, 1 / 2005-81, 3 / 2006-1, 15 / 2006-1 (other Rulebook), 2 / 2008-24 (Other Rulebook), 2 / 2010-6, 7 / 2010-1, 3 / 2011-124 (Other Rulebook), 7 / 2011-1 (Other Rulebook), 1 / 2013-8, 4 / 2013-181, 14 / 2013-1, 5 / 2014-1, 11 / 2014-1, 11 / 2016-168 , 11 / 2016-573, 6 /

¹⁵⁷At the Faculty of Philology of the University of Belgrade in 2015, a Lectorate for Roma Language was established, and within the study program "Language, Literature, Culture" at the same faculty, students have the opportunity to study 35 foreign languages, and the Roma language is one of them.

units. At the Faculty of Philology, University of Belgrade in 2015, a Lectorate for Roma Language was established, and within the study programme "Language, Literature, Culture" at the same faculty, students have the opportunity to study 35 foreign languages, while Roma language is one of them.

For the Roma language with elements of national culture, textbooks for the first four grades of primary school were printed within the project "Introduction of Roma language into primary schools in Serbia", implemented by the NGO Centre for Education of Roma and Ethnic Communities from Belgrade, and supported by the EU Delegation to Serbia. Ministry of Education, Science and Technological Development has approved the inclusion of textbooks for the Roma language with elements of national culture in the Catalogue of textbooks in the languages of national minorities for the school year 2018/19.

MoESTD has implemented an agreement that the Higher Vocational School for pre-school teachers "Mihajlo Palov" in Vrsac, for students who gained vocation as a vocational educator (or vocational pre-school teacher for children of pre-school age), and who attended a part of their lectures in the Roma language, should issue the Certificate of Knowledge of the Roma Language. In this way, the teaching staff who can teach elective subject / programme Roma language with elements of national culture is enhanced.

MoESTD has implemented a Public Competition for participation in the use of financial resources intended for grants to non-governmental and other non-profit organizations important for education. The aim of the competition was to improve the education system through educational activities that provide support to students of primary and secondary schools. Of the total of 40 approved programmes, there were three projects targeting the Roma national minority. The proposed programmes implemented activities aimed at promotion of Roma language with elements of national culture in primary schools.