**TERMS OF REFERENCE**

**SUPPORTING THE DEVELOPMENT OF DIGITAL COMPETENCIES OF PRESCHOOL EDUCATION SYSTEM PRACTITIONERS**

**I. Background and objective of the project**

**Background Information**

The Government of Serbia and the World Bank have identified skills development and inclusion of vulnerable groups as strategic priorities for their next phase of cooperation, based on a Systematic Country Diagnostic (SCD) and Country Partnership Framework between the two partners. In particular, the SCD highlights the importance of building human capital to increase labor productivity and enhance social inclusion through closing education enrollment gaps for low-income and Roma students starting in pre-primary. Quality Early Childhood Education and Care programs play a critical role in laying the necessary foundation for skills development early on and for narrowing the equity gap in education access and performance.

The Inclusive Early Childhood Education and Care project also directly contributes to the goals outlined in the Strategy for the Development of Education in Serbia until 2020 (SED 2020) and to its related Action Plan. This strategy, which was adopted in 2012, defines mechanisms for assuring accessibility, quality, and equity in ECEC and sets clear priorities for: (i) increasing coverage; (ii) enhancing quality of the service delivery and outcomes; (iii) increasing efficiency; and (iv) attaining and maintaining relevance for the overall system. The project will directly support these priorities through its various components.

**Objective**

The objective of the project is to improve access to quality Early Childhood Education and Care, with a focus on children from socially disadvantaged backgrounds for all children ages 0 to 6.5 years. Activities for children ages 3 to 6.5 years focus on increasing access to inclusive quality preschools (i.e. child-centered and with age-appropriate learning opportunities) while also supporting their transition to the early grades of primary education. Activities for younger children, i.e. from birth onwards focus on empowering parents and families to support children’s holistic development through increased knowledge about the importance of early stimulation at home and access to relevant services in the community.

The Project is implemented by the Ministry of Education, Science and Technological Development (MoESTD) and is relying on the existing structures of the MoESTD and the Working Group. A Project Management Unit (PMU) is being formed to support the existing structures for managing the Project. The Preschool Education Unit within the MoESTD, and the PMU, would be responsible for the technical implementation of the project activities. In addition, professionals of the MoESTD (civil servants) in coordination with the Institute for Improvement of Education and the Institute for Education Quality and Evaluation, will facilitate the technical inputs for specific project implementation activities.

The overall fiduciary responsibilities of the proposed Project, procurement, financial management and disbursement issues, rest on the Central Fiduciary Unit (CFU). The CFU is housed under the Ministry of Finance (MoF) as per the agreement reached between the MoF and the MoESTD.

**II. Objective and Scope of the Assignment Required**

The ECEC Project Sub-Component 2.2.b aims at improving the system of preschool practitioners’ professional development. It focuses on various activities of evaluating, reforming and harmonizing the professional development of preschool teachers and expert associates, improving the content and the relevance of training, securing the quality training service providers and improving the criteria and methodology for career promotion in the preschool system.

In line with the Education Development Strategy in the Republic of Serbia by 2020, which recognises the importance and role of digital technology in improving the education system, as well as in accordance with the Communication 1 from the European Commission: School Development and Excellent Teaching for a Great Start in Life, from 2017, which stresses the need for developing new ways of teaching and learning in an increasingly mobile and digital world, the Ministry of Education, Science and Technological Development (MoESTD) has been involved in the activities aimed at developing digital competencies of preschool institutions’ (PI) staff.

As stipulated in the Rule Book on the standards of competencies for pre-school teachers and their professional development, digital competence is one of the key competencies of preschool teachers in improving their professional practice. The preschool system staff is expected to:

* Know how to use digital technologies;
* Apply and integrate technology in their educational activities;
* Use the advantages and control the potential dangers of digital technologies, and develop both children’s and parents’ awareness and habit of their proper use;
* Employ digital technologies in planning their day-to-day activities and developing resources, in observing, assessing and documenting;
* Work in different databases (for recording data on children, parents, evaluation);
* Apply digital technologies in exchanging information with families, colleagues, associates, local community and other stakeholders and institutions;
* Utilise digital technologies for professional development;
* Foster the culture of using digital technology for curriculum development.

For the forthcoming efforts in planning the professional development of PI staff in this area to be effective, meet the needs of practitioners, and address the relevant aspects of their work, with the view to making the baseline study, a questionnaire for practitioners (preschool teachers, expert associates and principals) was developed so they could assess their competencies for using digital contents, the frequency of using different practices, as well as the availability and application of different digital resources (computer equipment, digital resources, and tools) in PIs. At the same time, the questionnaire was used as a data collection tool on the views of PI practitioners on applying digital technologies in their work, which to a great extent determine their practical usage.

The analysis of data collected on a representative sample points to the dominantly positive attitude of staff to applying digital technologies in their work, but that the actual application of such technologies is rare. Self-assessment of digital competencies reveal that the practitioners do not feel sufficiently enabled for independent use of basic computer tools. More than a third of the subject feel they need support (training and development) in applying digital tools. Only 36.5% of PI practitioners from the sample have participated so far in some sort of training for the improvement of digital competencies, while 87% are quite willing to participate in such training.

The analysis of data on the activities of PIs, gathered by the Ministry of Education, Science and Technological Development (MoESTD) during the state of emergency caused by Covid-19 pandemic and the closure of kindergartens, indicates that the improvement of digital competencies of practitioners in the half of PIs has been recognized as the most pressing need and priority of the future professional development. Also, in the majority of PIs (83%), major topics when it comes to the professional development of staff are, in addition to supporting families in the time of crisis, the development of digital competencies.

In order to improve the professional development of preschool teachers in this area, with the support from the Inclusive Early Childhood Education and Care Project, sub-component 2.2.b (aimed at improving the system of preschool practitioners’ professional development in PIs), MoESTD is set on developing and providing a two-day online training programme for the development of digital competencies of PI staff.

**III. Detailed Tasks and Responsibilities**

The activities should enable the development and provision of the programmed two-day training for the preschool system practitioners, comprising the following provisional topics:

1. Pedagogical aspects of applying ICT in preschool education

1.1. ICT for child play, research and activities as parts of multimedia literacy in the context of modern pedagogical approach to working with children.

2. Using computer equipment

2.1. Desktop and laptop computers and computer peripherals.

2.2. Mobile appliances and connecting them to the network.

2.3. Appliances for developing digital competencies and critical thinking, and solving problems in play (bee-bots, robots and similar).

3. Digital environment

3.1. The internet and digital resources.

3.2. Criteria for assessing the quality of resources.

3.3. Ethics and safety on the internet, protecting children on the internet.

3.4. Cloud services.

4. Creating digital resources

4.1. Working with text and tables.

4.2. Developing presentations and multimedia resources.

4.3. Online tools.

5. Computer platforms for cooperation, learning and play

5.1. Platforms for cooperation, communication, and professional networking.

5.2. Platforms for supporting child play, research and learning.

It is necessary that the training aimed at developing digital competencies of PI staff be in line with the Law on the Fundamentals of the Education System, the Rule Book on the standards of competencies for preschool teachers and their professional development, the Rule Book on Preschool Curriculum Framework, and the Rule Book on Preschools Quality Standards.

The aim of the activity is also to provide support to MoESTD and the Institute for the Improvement of Education (IIE) in improving the quality of preschool education by means of professional development of practitioners in preschool institutions.

All the deliverables of the Consultant shall be verified by the IIE and approved by MoESTD.

The Consultant shall perform the following tasks:

**Task 1: Development of methodology and the work plan:**

The task includes:

* Preparing the draft methodology and the work plan;
* Consulting with all the relevant stakeholders and in line with the agreed, revise the methodology and the work plan;
* In cooperation with MoESTD and IIE, selecting and appointing members of the Referent Group tasked with offering guidelines for the improvement of the Consultant’s draft document in line with the project task description;
* Preparing the Inception Report (comprising the work plan).

**Deliverable 1:**

* The Inception Report.

Within 15 (fifteen) calendar days from the day of Contract signing, the Consultant submits to IIE and MoESTD for their approval and no objection the work plan and the methodology of work on the project.

**Task 2: Developing the contents of the training**

The consultant shall create the contents of the training after consulting the experts from the partner institutions who participate in the reforms of the preschool education system. (The contents should tentatively include the creation of five sections, with one or two lectures per section, one test per section, and one or two tasks per section.)

It includes the following activities of the Consultant:

* Developing teaching resources based on the authors’ texts in the form of lessons or pages;
* Developing the forum and tasks, and their adjustment to the instructions;
* Incorporating teaching resources in the form of the links in pages;
* Making available other (already created by authors) resources (presentation of pdf materials and similar programme files;
* Making available the mechanisms for testing knowledge in the form of quizzes according to the instructions (the provided quiz questions);
* Preparing video instructions and tutorials for using digital resources (for the use of five tools agreed by MoESTD and IIE with the consultant: for example, the appliances for developing digital competencies, critical thinking and problem solving in play, cloud services, working with texts and tables, preparing presentations and multimedia resources, online tools);
* Integrating the content in the programmed training;
* Submitting the draft material to MoESTD and IIE for review, and correcting the material based on the feedback.

**Deliverable 2:**

* The contents of the training prepared.

Within 60 (sixty) calendar days from the day of Contract signing, the Consultant submits to IIE and MoESTD for their approval and no objection the draft contents of the training.

**Task 3: Administrative tasks in the education environment**

It includes the following activities of the Consultant:

* Specifying the hierarchy of users;
* Specifying and incorporating additional user fields as needed (school inspectorate, subject, area...);
* Specifying cohorts of users;
* Preparing users’ and trainers’ course categories;
* Making available and presenting the activities and resources of certain ToT courses;
* Creating user accounts for all the trainers and registering for specific course and groups within courses, granting trainer permissions (lecturers with no editing permissions);
* Unlocking training courses to end users in all the specified categories individually;
* Making available and presenting the activities and resources of individual courses for the training of end users;
* Creating user accounts for all the trainees and their registering for courses and groups within courses (in line with the dynamics of trainings);
* Making daily backup copies of all the trainings and their digital archiving on the administrator’s local disk;
* Restoring backup copies at the request of the organizer.

**Administrative tasks in the education environment can only be performed by persons who provide external technical support to IIE[[1]](#footnote-1) as the owner of the environment.**

**Deliverable 3:**

* The training made available on the IIE’s Teachers’ Portal.

Within 80 (eighty) calendar days from the day of Contract signing, the Consultant submits to IIE and MoESTD for their approval and no objection the deliverable no. 3.

**Task 4: Providing technical support and trainers and users support**

**Task 4.1. Creating resources for providing technical support to the users:**

It includes the following activities of the Consultant:

**Technical support:**

* Preparing resources for providing asynchronous technical support to the trainees, by e-mail (or ticketing system);
* Preparing resources for providing asynchronous technical support to the trainees, via the forum on the educational portal.

**User support:**

* Preparing user guide for the proper usage of trainings on the educational portal (registering to the system, registering to a course, assessing lessons, participating in forums, completing tests and surveys, submitting separate tasks and monitoring personal development in the course of the training);
* Preparing resources for providing asynchronous user support to the trainees, by e-mail (or ticketing system);
* Preparing resources for providing asynchronous user support to the trainees, via the forum on the educational portal.

**Deliverable 4.1:**

* Prepared resources for providing technical support to the users.

Within 90 (ninety) calendar days from the day of Contract signing, the Consultant submits to IIE and MoESTD for their approval and no objection the deliverable no. 4.1.

**Task 4.2. Providing technical support in the implementation of training for 400 groups of participants:**

It includes the following activities of the Consultant:

**Technical support:**

* Providing asynchronous technical support to the trainees by e-mail (or ticketing system);
* Providing asynchronous technical support to the trainees via the forum on the educational portal.

**User support:**

* Providing asynchronous user support to the trainees by e-mail (or ticketing system);
* Providing asynchronous user support to the trainees via the forum on the educational portal.

**Deliverable 4.2:**

* Technical support provided in the implementation of training for 400 groups of participants.

Within 90 (ninety) calendar days from the day of Contract signing, until September 2022, the Consultant provides the deliverable 4.2 in line with the dynamic plan of trainings stipulated in the Contract.

**Task 5. Trainings monitoring and reporting**

It includes the following activities of the Consultant:

* Preparing the methodology for monitoring the provided trainings, as well as the forms of reporting on the provided trainings;
* Gathering and analysing data on the provided trainings and preparing the report on the trainings (including the evaluation of the trainings) for 400 groups of participants.

**Deliverable 5:**

* Reports submitted on the trainings provided for 400 groups of participants.

Within 90 (ninety) calendar days from the day of Contract signing, until September 2022, the Consultant provides the deliverable 5 in line with the dynamic plan of trainings stipulated in the Contract.

**Task 6. Mentor support to the development of digital competencies of employees through horizontal exchange at the level of a preschool institution**

In order to synergise different Project activities aimed at improving the professional development of employees, the Consultant develops methodology for and provides mentor support to learning through horizontal exchange in a PI and between PIs, based on the concept of the model professional learning community developed under the sub-component 2.1. of the ECEC Project.

It includes the following activities of the Consultant:

* Developing methodology for mentor and technical support to the participants of the online training in the process of applying the acquired knowledge in practice in PIs, and in the improvement of digital competencies through the mechanism of horizontal exchange (practical tasks, scenarios for learning through horizontal exchange, criteria and the way of selecting examples of good/inspirational usage of digital tools in practice, and similar);
* Developing methodology, proposed scenarios and tasks aimed at developing digital competencies of other PI employees (who did not attend the online training) by means of horizontal exchange and peer learning;
* Coordinating and supervising mentor support;
* Providing online mentor support and technical support to the preschool employees who went through the training in the process of applying the acquired knowledge and improving their digital competencies through horizontal exchange (for the first 100 groups of online trainees, for eight hours per group);
* Coordinating, supervising and evaluating mentor support;
* Selecting and uploading examples of good/inspirational use of digital tools in the activities in PIs on the ECEC Project’s and IIE’s web-sites.

**Deliverables 6:**

* Methodology developed for mentor and technical support to the participants of the online training in the process of applying the acquired knowledge in practice in PIs;
* Provided online mentor and technical support (for 8 hours per group) for the first 100 groups of participants of online trainings;
* Methodology developed for supporting the development of digital competencies of employees through horizontal exchange and peer learning;
* Provided online mentor and technical support (for 8 hours per group) for 100 groups of practitioners taking part in horizontal exchange;
* Examples of successful usage of digital tools selected and uploaded to the ECEC Project’s and IIE’s web-sites;

Within 120 (one hundred and twenty) calendar days from the day of Contract signing, until October 2022, the Consultant provides the deliverables 6 in line with the dynamic plan of trainings stipulated in the Contract.

**IV. Reporting obligations**

The Consultant and the PIU will organize periodic meetings within the agreed time frame, or more frequently should the need arise, in order to secure the successful cooperation. The activities will be carried out according to the quarterly Work Plan subject to the approved of the Component 2 Coordinator and PIU Director within MoESTD. The quality of work will be assessed by Component 2 Coordinator and approved by PIU Director. The Consultant shall submit periodic and annual progress reports to MoESTD and PIU.

**V. Consultant’s Qualification**

* The Consultant/Firm shall be registered as a legal entity;
* The Consultant/Firm shall have appropriate professional, organisational and logistical capacities necessary for carrying out the assignment in the territory of the Republic of Serbia;
* At least three years of experience in carrying out the activities on improving the education quality; experience gained in Serbia or the region will be considered as an advantage;
* At least three years of experience in improving digital competencies of PI employees; experience gained in Serbia or the region will be considered as an advantage;
* The Consultant/Firm shall provide the signed and sealed statement of the responsible person guaranteeing that an external associate of IIE[[2]](#footnote-2) will he hired for providing technical support;
* The Consultant/Firm shall be capable of providing 2 key experts:

K1: Team leader and senior expert associate for preschool education, with the following qualifications and experience:

* + University degree in IT or similar, pedagogy, psychology or other fields of pedagogical sciences, social sciences or the humanities;
  + At least 8 years of relevant professional experience involving education policies and practices, preferably in Serbia;
  + Experience in dealing with the issues of professional development and career promotion, especially in projects aimed at developing digital competencies;
  + Experience in creating and providing online trainings (three projects of this kind at the minimum);
  + Experience in project management will be considered an advantage;
  + Comprehensive knowledge of Preschool Curriculum Framework is preferred;
  + Comprehensive knowledge of education policy and main initiatives in preschool education is desirable;
  + Knowledge of regulatory framework in education, focusing on preschool education, is preferable;
  + Possessing a professional development certificate in the area close to the one described in ToR is a plus;
  + Experience in developing/creating/providing trainings for PI employees is preferred;
  + Excellent oral and written Serbian language skills and good command of English.

K2: Senior expert associate for preschool education, with the following qualifications and experience:

* + At least 5 years of relevant professional experience involving education policies and practices in Serbia;
  + Experience in using digital technologies in working with children in the education system;
  + Experience in using digital technologies in working with children in PIs is preferred;
  + Participation in projects aimed at developing digital competencies of education system employees will be considered as an advantage;
  + Comprehensive knowledge of Preschool Curriculum Framework is preferred;
  + Comprehensive knowledge of education policy and main initiatives in preschool education is desirable;
  + Knowledge of regulatory framework in education, focusing on preschool education, is preferable;
  + Possessing a professional development certificate in the area close to the one described in ToR is a plus;
  + Excellent oral and written Serbian language skills and good command of English.

Alongside the expression of interest, the Consultant is required to submit the key experts’ CVs.

Following the evaluation of the received expression of interest, the Consultant/Firm with the highest score in the evaluation will be asked to submit their technical and financial proposal. The Consultant/Firm is obliged to hire external associates of IIE for the provision of the actual trainings because of the access to the Teachers’ Portal.

**VII. Selection method**

The selection method is the Selection Based on the Consultants’ Qualifications (CQS) in accordance with the procedures specified in *the Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by the World Bank Borrowers*, January 2011 (revised July 2014).

**VII. Terms of Payment**

The Contract will be the Standard World Bank Lump Sum Contract for small assignments. The payment shall be based on deliverables/reports approved by the Project Component 2 Coordinator and PIU Director. The Contract costs will include remuneration and reimbursable costs referring to the assignment.

**VIII. Conflict of Interest**

The engaged Consultant must not be involved in any other activities related to this Project.

1. Persons hired for these tasks shall submit to the Consultant/Firm a certificate proving that they are engaged as external associates of IIE on the tasks. [↑](#footnote-ref-1)
2. External associates of IIE who are not civil servants. [↑](#footnote-ref-2)