Background

In recognition of the scarcity of the skilled teaching workforce as well as the need to improve the quality of learning resources, UNESCO is implementing the EU-funded project: "Strengthening Competency-Based and ICT-Enabled STEM (Science, Technology, Engineering and Mathematics) and VET (Vocational Education and Training) Education and Teacher- Training in Tajikistan". The project benefits from financial support from the European Union under the Action Document "Quality Education Support Programme II".

In order to support Tajikistan in making progress towards the achievement of SDG 4 and implementing its recently adopted National Strategy for Education Development for the period until 2030, the project aims: 1) to develop STEM textbooks (chemistry, biology and physics), 2) develop gender-responsive teaching and learning materials (TLMs) for these selected subjects based on competency-based curricula at the secondary education and VET levels, 3) train teachers, 4) equip the teacher training institutes with ICT and STEM equipment.

This project supports the Ministry of Education and Science (MoES) and the Ministry of Labour, Migration and Employment of Population (MoLMEP) of the Republic of Tajikistan to strengthen the quality of education and competency-based education in STEM fields with the use of ICTs.

UNESCO is seeking for consultancy on open educational resources (OER) to provide ongoing assistance to the Task Force members who are representing the affiliated agencies under the MoES Republic of Tajikistan and the working groups for STEM subjects of biology, chemistry and physics for grades 7 (8)-11 in line with the competency-based curriculum framework of Tajikistan, and to assist in designing STEM textbooks and teaching and learning materials developed as openly sourced resources.

Description of Assignment:

The Contractor shall perform the following work assignment under the overall authority of the Director of the UNESCO Almaty Regional Office, and the direct supervision of Education Programme Specialist and Project coordinator.

It is expected that the work will be done with other key **international and national** project experts to ensure there is a consistent approach to development of textbooks and teaching and learning materials as OERs. It is required to facilitate *in-person capacity-building workshop(s) and online guiding sessions (number of online sessions to be identified)* for the working groups and the Task Force members[1] on open educational resources related to the development of open textbooks on STEM subjects. They will involve a blend of plenary sessions and exclusive expert-led, break-out sessions for the working groups.

The key objectives of this assignment are:

1. To build the capacity of the MoES, its affiliated agencies and textbook writers on the main principles of developing textbooks and teaching and learning materials as OER;

2. To provide technical assistance in mainstreaming the approach to development of textbooks and teaching and learning materials as OERs within the framework of other components of the project, implementation of ICT competency framework (ICT CFT), and introduction of blended learning for teacher professional development.

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[1] Task Force – the team of experts from the affiliated agencies under the MoES RT.

Key specific tasks of consultancy will be:

1. To increase the capacity of the task force and national team of textbook developers on the concept of OER, regulations and rules for using and producing OERs, potential benefits of using OERs, challenges of OER, characteristics of open textbooks;
2. To strengthen understanding of open licenses;
3. To guide the national teams on approaches to Open Textbook development;
4. To identify the platforms for developing OER and provide an extensive list of platforms with available OER-based STEM textbooks and teacher guides on biology, chemistry and physics for grades 7 (8)-11 that can be beneficial for Tajikistan;
5. To explain and provide guidance on open textbook platforms; and how the OER are developed from perspective of content management systems (CMS) and learning management systems (LMS);
6. To guide on creating a Curriculum Taxonomy for an Open Textbook and connection to subject standards by applying competency-based education approach;
7. To provide overview and guidance on open repositories;
8. To provide overview and guidance on copyright issues and related OER Commons rights or conditions (types of licensees); guidance should be on how to mount and share completed via the OER Commons platform and to advise on copyright and other issues related to using OER Commons as a global repository for sharing content;
9. To make overview of Creative Commons (CC) licensing system;
10. To conduct workshop(s) and online sessions for national stakeholders and national teams of textbook and teaching and learning materials developers on OER;
11. To guide national teams on integrating textbooks and TLMs into open source LMS.

Deliverables:

- **Design (concept note and agenda**) of the textbook development workshop (planned for July 2024) with the STEM international experts on textbook development **by 15 June, 2024;**
- **Exhaustive list of OER STEM resources** (STEM textbook and TLMs) presented to the working groups before the workshop **by 1 July 2024;**

- **First progress report** on the workshop and finalized step-by-step guidelines for the process of developing open textbooks and teaching and learning materials as OER by **31 July 2024;**

- **Second (final) report**, including the process of developing OER textbooks, and OER textbook chapters for biology, chemistry, physics 7(8)-11 grades for school quarters 1 and 2 developed by national teams of authors with the provided feedback/technical comments to ensure quality check and control **by 30 November 2024**

Location of assignment:

Remote home-based online work with several trips to Tajikistan.

Required qualifications:

Education

- Advanced university degree in the field of education, with focus on OER, curriculum design, instructional technology, instructional design, e-learning.

Work experience

- At least 10 years of work experience in a relevant field, with focus on OER, STEM, curriculum development and education support in the area of ICT. Experience in development of curriculum standards, textbooks and teaching and learning materials as open-source materials, including capacity development of national partners;
- Prior work experience in developing of OER materials that involved incorporating of videos, lesson plans and mapping of OER resources;
- Track record of successful involvement in issues related to OERs licensing, policies, development and practices;
- Experience in promoting OERs and in training in the use of OERs ;
- Sample links of successfully completed similar OER materials and resources;

- Prior experience in mentoring curriculum writing groups.

- Experience working with international non-profit organizations, preferably in education development projects with the focus on Central Asia.

Skills and competencies

- Strong analytical and conceptual thinking;

- Excellent knowledge of ICT applications, ICT skills;

- Knowledge in instructional design;
- Excellent writing, communication and presentation skills with stakeholders.
- Ability to work under pressure and commitment to work to tight timeframe.
- Strong facilitation skills for workshops in developing textbooks and TLMs.
- Strong sensitivity and adaptability (cultural, gender, religion, race and nationality).
- Ability to summarize and provide concise and comprehensible feedback.
- Demonstrable design and layout capabilities;
- Demonstrable technical proficiency in relation to emerging Internet Trends, Technology, and Tools;
- Proficient in using office productivity tools- MS Office, and video conferencing tools like Skype, Zoom and MS Teams, etc.

Languages

- An excellent knowledge (written and spoken) of English.

  We invite interested organizations to submit Expression of interest with indication of daily fee to the

  email: l.pisaridzheva@unesco.org with by 10 June 2024