REPUBLIC OF KENYA

**COUNTRY:** KENYA

**PROJECT:** KENYA DIGITAL ECONOMIC ACCELERATION PROJECT (KDEAP)

**IMPLEMENTING AGENCY:** INFORMATION AND COMMUNICATIONS TECHNOLOGY AUTHORITY (ICTA)

**PROJECT ID: P170941; Credit Numbers 7289-KE and 7290-KE**

**TERMS OF REFERENCE FOR:**

**REQUEST FOR EXPRESSION OF INTEREST**

**FOR**

# TECHNICAL ASSISTANCE FOR DESIGN AND IMPLEMENTATION OF TRANSFORMATIVE DIGITAL PEDAGOGY IN HIGHER EDUCATION INSTITUTIONS IN KENYA

**Contract No: KE-ICTA-459498-CS-QCBS**

**Issue Date: 18th March 2025**

**Closing Date: 3rd April 2025 at 1000Hrs EAT**

**Client:**

The CEO,
ICT Authority
Teleposta Towers 12th Floor, Kenyatta Avenue
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## 1. Background

The Government of the Republic of Kenya's (GoK) has obtained credit financing totalling US$390 million from the World Bank for the initial phase of the Kenya Digital Economy Acceleration Project (referred to as the "Project"). It plans to allocate a portion of the funds to cover expenses related to the procurement of goods, works, non-consulting services, and consulting services as part of the Project.

The project includes the following components.

- **Component 1: Digital Infrastructure and Services**. The aim of this component is to increase access to high-speed internet for individuals, industry, and the government and strengthen Kenya's role as regional digital leader, while leveraging investments from the private sector.
- **Component 2. Digital Government and Services**. This component will invest in the foundational digital services, platforms, architectures, and policies needed to transform the way the government communicates and conducts its internal operations.
- **Component 3. Digital Skills and Markets**. This component aims to (i) equip young Kenyans with digital skills and strengthen their abilities to access and compete in domestic and regional markets, (ii) study mechanisms to improve access to affordable devices and (iii) enhance the enabling environment for e-commerce to support Kenya's role as a regional digital hub.
- **Component 4. Project Management**. This component will support project implementation and coordination, led by the Project Implementation Unit (PIU) within Information and Communication Technologies Authority (ICTA) as well as capacity building for key project beneficiaries.
- **Component 5: Contingent Emergency Response Components.** This component will be activated in the event of an eligible emergency.

Under component three (3), sub-component 3.2, the GoK, through the Ministry of Education, State Department for Higher Education & Research, proposes to develop and implement a digital pedagogy programme that will enhance the skills, competencies, knowledge and capacities of educators in universities to effectively utilise new and emerging technologies in their teaching and learning endeavours. This will contribute to the GoK's strategic objectives of enhancing access, equity and quality of higher education, as reflected in the various educational policy and legal documents, including (i) the Educational Sessional papers of 2005, 2012, 2019 and 2024; (ii) National Education Sector Strategic Plan (NESSP) 2018-2022 and 2023-2027; (iii) Kenya Vision 2030-Medium Term IV; and (iv) the recommendations of the Presidential Working Party on Educational Reforms (PWPER), as focused on the need of equipping educators at all levels with requisite digital competencies that will facilitate their teaching and learning in the current digitalized ecosystems.

## 2. Objectives of the Assignment

The Kenyan education system is undergoing significant transformation with increasing emphasis on integrating new and emerging technologies into the teaching and learning processes. This assignment aims to develop and pilot a transformative digital pedagogy framework for effective curriculum delivery in Higher Education Institutions (HEIs) across Kenya.

A transformative digital pedagogy framework may be considered as a structured approach to teaching and learning that goes beyond simply using computers in the classroom. By leveraging the power of digital technologies, it aims to fundamentally shift the learning paradigm, fostering deep learning through critical thinking, problem-solving, creativity, and real-world application. This framework empowers learners by creating inclusive and equitable environments where students actively participate in their education, develop 21st century skills, and even contribute to social change through technology-enabled solutions to societal challenges. Key characteristics include a student-centered focus, meaningful technology integration, collaborative learning experiences, critical and reflective thinking, and an inclusive environment that supports diverse learning needs. Examples of transformative digital pedagogy practices include blended learning, project-based learning, game-based learning, social learning, and personalized learning approaches, all designed to create dynamic and engaging learning experiences.

The specific objectives of the services sought include:

a. To develop a Kenyan-contextualised transformative digital pedagogy framework for HEIs.
b. To develop a comprehensive digital curriculum using the transformative digital pedagogy framework in diverse disciplines in collaboration with lecturers in the selected universities.
c. To enhance lecturer capacity for digital curriculum development using the HEIs transformative digital pedagogy framework.
d. To pilot the developed framework, curriculum and training programs in selected Universities.

## 3.0 Scope of Services and Specific Tasks of the Assignment

The scope of services will encompass the development and piloting of a transformative digital pedagogy framework. The framework will be piloted in the following 15 universities:

1. University of Nairobi (UoN)
2. Moi University (MU)
3. Kenyatta University (KU)
4. Egerton University (EU)
5. Maseno University
6. Masinde Muliro University of Science and Technology (MMUST)
7. Meru University of Science and Technology (MUST)
8. Pwani University
9. Garissa University
10. The Open University of Kenya (OUK)

11. Catholic University of Eastern Africa (CUEA)
12. Kenya Highlands University (KHU)
13. Daystar University (DU)
14. Kenya Methodist University (KeMU)
15. African Nazarene University (ANU)

As of 2024, there are 43 public universities in Kenya and 25 chartered private universities according to the Commission of University Education (CUE) records. A ratio of 2:1 was used to sample public universities versus chartered private universities to be included in the pilot phase. The 10 public universities were chosen based on their diverse geographic locations (Kenyan eight official regions, with Rift Valley getting one extra slot due to its expansiveness), wide range of academic programs offered (including for postgraduates), status of existing technological infrastructure, and mode of teaching and learning (with OUK being included as the only fully online university in the country). The five (5) chartered private universities included were also selected based on similar criteria as the public, plus evidence of on boarding government sponsored students as well as having established e-learning programs. The aim was to ensure a representative sample that can inform subsequent scaling of the project:

### 3.1 The specific tasks in this assignment include:

#### a) Develop a digital pedagogy curriculum framework:

i. Conduct a needs assessment, which should include:

- Identify and review existing plans, strategies and policies from universities in Kenya on the use of digital technologies for teaching and learning
- Gathering input and views from lecturers, students, and university leaders to understand their specific needs, challenges, and preferences regarding digital tools in teaching and learning.
- Identifying the existing digital literacy levels of lecturers and any gaps that need to be addressed.
- Assessing the institutional infrastructure, resources, and support available for implementing digital tools in universities.

ii. Design a comprehensive digital curriculum framework outlining the principles, practices, and resources required for implementing transformative digital pedagogy.

iii. Undertake a validation exercise for the framework with relevant stakeholders.

#### b) Develop digital pedagogy curriculum aligned to the framework:

The digital pedagogy curriculum should have clear learning objectives and should outline the specific skills, knowledge, and competencies that lecturers or educators should develop through the course.

The learning objectives should align with the framework developed including institutional goals, pedagogical principles, and best practices in digital education. In addition, the curriculum should be engaging and interactive and:

i. Balance theoretical concepts with hands-on activities, practical exercises, and opportunities for experimentation.

ii. Incorporate active learning strategies, such as discussions, problem-solving scenarios, and peer-to-peer learning.

iii. Leverage multimedia elements, such as videos, simulations, and interactive tutorials, to cater to different learning styles

iv. Focus on how digital tools can enhance pedagogical practices, rather than merely introducing tools without a clear instructional purpose

v. Identify suitable digital tools, resources and learning platforms aligned with the curriculum and learning objectives.

vi. Validate the curriculum with relevant stakeholders.

**c) Develop training programs based on the digital pedagogy curriculum developed:**

i. **Create training modules for educators in universities** on curriculum development using the digital curriculum framework and on effectively using technology for teaching and learning based on the digital pedagogy curriculum developed. Specific attention should be paid to the requirements to make the training modules engaging and interactive.

ii. **Develop a training strategy** to specify the delivery modalities of training (online, face to face), the technologies to be used in the delivery of the training, and the incentives for educators to take the training among others.

iii. **Develop a strategy for scaling up the training** to all lecturers and educators in higher education institutions in Kenya. The strategy should include any policy recommendations for the Ministry to consider as well as include lessons learned from the pilots. The scaling strategy should also cover recommendations on how best to provide ongoing support and community-building which should include recommendations on how to establish a support system for lecturers, including technical assistance, troubleshooting, and opportunities for collaboration and sharing best practices.

**d) Pilot the developed framework, curriculum and training programs in the 15 selected HEIs.**

i. Pilot the training modules for educators.
ii. Undertake a pilot on the development of curriculum using the digital pedagogy curriculum framework.
iii. Deliver a pilot course using the digital pedagogy curriculum.

**e) Dissemination of findings**

Share the project's findings and best practices through:
i. Forums such as conferences, workshops, seminars etc
ii. Publications such as peer reviewed journal papers, guidelines, books, policy briefs etc
iii. Online knowledge-sharing platforms such as websites, social media, blogs etc

## 4.0 Duration and location of Assignment

The duration of the consulting services shall be within 18 months from the contract commencement date.

The location of the assignment is in the Ministry of Education, State Department for Higher Education and Research offices located in the address given below:

State Department for Higher Education and Research
Jogoo House “B” Taifa Road
P.O. Box 300400-00100 Nairobi Kenya
Tel: +254(0) 3318581
Email: psecretaryuer@gmail.com
Website: https://www.education.go.ke

## 5.0 Reporting requirements and timelines for deliverables/reports

Table 1 shows the reporting requirements and timelines for the project deliverables.

1) **Table 1: Reporting requirements and timelines for deliverables/reports**

| No. | Deliverables | Description of deliverables | Timelines after Contract Commencement date |
|---|---|---|---|
| 1. | Inception Report | A comprehensive report detailing the project's understanding of the current state of digital pedagogy in Kenyan HEIs. | Month 1 |
| 2. | Transformative Digital Pedagogy Framework | A detailed framework document outlining the guiding principles, strategies, and recommendations for | Month 5 |

| No. | Deliverables | Description of deliverables | Timelines after Contract Commencement date |
|---|---|---|---|
| | | implementing transformative digital pedagogy in Kenyan HEIs. | |
| 3. | Digital Pedagogy Curriculum | Fully developed digital learning curriculum for selected courses, | Month 9 |
| 4. | Training Program | A comprehensive plan inclusive of modules, approach and training program designed to enhance the capacity of educators in Kenyan HEIs for developing and implementing digital learning curriculum. | Month 10 |
| 5. | Pilot Report | A detailed report summarising the findings and outcomes of the pilot in the 15 universities. | Month 15 |
| 6. | Scaling Strategy | A detailed plan for scaling the transformative digital pedagogy project to other Kenyan universities beyond the initial pilot phase. | Month 16 |
| 7. | Final Report | A comprehensive report summarising the project's overall activities and findings. | Month 18 |

The consulting firm is obligated to submit three (3) hard copies along with a digital copy of each prescribed deliverable to the designated address mentioned below:

The Chief Executive Officer,
ICT Authority
Telposta Towers 12th Floor, Kenyatta Ave
PO Box 27150 – 00100
Nairobi Kenya
Tel: +254 20 2089061/ 2211960 Fax: +254 20 2211960
Email: procurement@ict.go.ke , info@icta.go.ke
Website: www.icta.go.ke

**Attention:**
The Project Coordinator
KDEAP

And additional one (1) hard copy and a digital copy of each required deliverable to the address below:

**The Principal Secretary**,
State Department for Higher Education & Research
Jogoo House "B" Taifa Road
P.O. Box 300400-00100 Nairobi Kenya
Tel: +254(0) 3318581
Email: psecretaryuer@gmail.com
Website: https://www.education.go.ke

Upon submission of every report, the consultant is expected to make a presentation of the submitted report to the Client in a scheduled meeting. The acceptance of the report shall be recorded in the minutes of the meeting.

## 6.0 Payment Schedule

The proposed payment schedules based on satisfactory performance of the contract which will be negotiated with the successful consultant will be as presented in Table 2 below.

**Table 2: Proposed payment schedule:**

| No. | Deliverables | Timeline for submission of report from date of contract commencement | Percentage payment of the contract amount |
|---|---|---|---|
| 1. | Submission and Acceptance of Inception Report | Month 1 | 20% |
| 2. | Submission and Acceptance of Transformative Digital Pedagogy Framework | Month 5 | |
| 3. | Digital Pedagogy Curriculum | Month 9 | 30% |
| 4. | Training Program | Month 10 | |
| 5. | Pilot Report | Month 15 | 20% |
| 6. | Scaling Strategy | Month 16 | |
| 7. | Submission and Acceptance of Final Report | Month 18 | 30% |

## 7.0 Minimum requirements for Consultant's qualifications and experience

The minimum requirements for the Consultant's qualifications and experience are as follows:

**7.1 Core business and years in business:** The firm shall be registered/incorporated as a consulting firm with core business in the field of education technology, digital learning solutions, or related fields for a period of a minimum of five (5) years.

**7.2 Relevant experience:** The firm shall demonstrate as having successfully executed and completed at least two (2) assignments of similar nature, complexity and in a similar operating environment in the last 5 years. Details of similar assignments- Name and address of the client, scope, value, and period should be provided.

**7.3 Technical and managerial capability of the firm:** The firm shall demonstrate as having the requisite technical capacity and managerial capacity to undertake the assignment in the submitted company profile(s). **Key Experts will not be evaluated at the shortlisting stage.**

## 8.0 Team composition and minimum qualification and experience requirements for key experts

The consultant shall demonstrate having well qualified and experienced experts as required and appropriate for the execution of the assignment. The consultant should possess necessary resources to undertake works of such nature, including equipment and software required. The key experts shall personally carry out (with any assistance of other experts/staff deemed appropriate) the services as described in this TOR.

**Table 2: Team composition and minimum qualification and experience requirements for key experts**

1. **Team Leader (1)**
   - **Academic Qualifications** - Holds a PhD degree in Education, Information Technology, or a relevant field.
   - **General Experience** – Proven experience in teaching and research within a higher education setting for at least 10 years.
   - **E-learning Experience -** At least 5 years' experience in the development and establishment of e-learning/digital/online learning programs in higher education or industry.
   - Membership of a relevant professional body
2. **Curriculum and Content Developers (2)**
   - **Academic Qualifications** - A master's degree in education, Information Technology, or a relevant field.
   - **General Experience -** Proven track record of at least 5 years in teaching and research within higher education or industry.
   - **Curriculum Development Experience -** At least 3 years' experience in

curriculum design for e-learning/digital/online learning programs.
- Membership of a relevant professional body

3. **Instructional Designers (2)**
   - **Academic Qualifications** - A bachelor's degree in education, Information Technology or a relevant field.
   - **General Experience -** Proven track record of at least 5 years in instructional design within higher education or industry.
   - **Instructional Design Experience -** At least 3 years' experience in instructional design (including multimedia).
   - Membership of a relevant professional body
4. **Training Coordinator (1)**
   - **Academic Qualifications** - A bachelor's degree in education, Information Technology or a relevant field.
   - **General Experience -** Proven track record of at least 5 years in delivering professional and academic training programs within higher education or industry.
   - **E-Learning capacity building and training -** At least 3 years' experience in capacity building in e-learning in higher education or industry.
   - Membership of a relevant professional body

## 7.0 Estimated Time Input for Key Experts

The number of key experts and the estimated time input for each key expert for the assignment are presented in Table 3.

| S/No | Expert | No | Estimated Time Input (Months) |
|---|---|---|---|
| 1. | Team Leader | 1 | 18 |
| 2. | Curriculum and Content Developers | 1 | 16 |
| 3. | Instructional Designers | 2 | 24 |
| 4. | Training Coordinator | 1 | 16 |
| | **Total** | **6** | **74** |

## 8.0 Management and Accountability of the Assignment

The Consulting firm will report to the Project Coordinator, KDEAP, and eventually to the Principal Secretary, State Department for Higher Education and Research as the Client and the principal contact for the consultancy.

## 9.0 Responsibilities of the Client

ICTA will engage the consultant on behalf of Ministry of Education (State Departments for Higher Education & Research), requiring the consulting firm to carry out the identified tasks with a focus on achieving the expected outputs and outcomes outlined in this TOR. The firm is encouraged to leverage local expertise.

The State Department for Higher Education will endeavour to do the following:

1) Supplying available data, studies, and relevant literature necessary for completing the identified tasks.
2) Granting access to required officials, relevant Agencies and SAGAS, as well as key education and industry players as applicable.
3) Facilitating stakeholder engagement meetings to allow the consultant to gather pertinent information relevant to the tasks at hand.
4) Offering timely feedback on reports and deliverables.

## 10.0 Responsibilities of the consultant

The Consultant bears the responsibility of providing all essential resources for rendering the services, including market surveys and any other necessary requirements. The consultant is tasked with undertaking activities to ensure that the outputs align with professional and legal standards. It is also required that the data is generated through a consultative process that guarantees authenticity and ownership. It is imperative that a consultative approach is employed when carrying out the tasks. Furthermore, the consultant is accountable for delivering all pertinent resources, including curricula, Learning Management System (LMS), source code for plugin integration and any other required resource to MOE upon the conclusion of the project.

## 13. Ownership rights for reports and records

Any software tools, except proprietary ones, developed under this contract will be released under an open-source licence such as the Creative Commons and GNU General Public License.