Concept Note

Digital Skilling for Teachers

A National Digital Upskilling Program for In-service Teachers

Partnership between:

Ministry of Education & Sports, Uganda

Digital Skills Foundation (DSF) – Content Providers

e-Learner Uganda - Reseller & Implementation Partner

Background and Rationale

In recent year Uganda has prioritised digitalisation as a critical component of its national development strategy. However, the education sector faces challenges integrating digital technologies due to limited digital competencies among in-service teachers, lack of technological access, and limited training infrastructure. Recognising the urgent need to bridge this digital divide, this project proposes a comprehensive upskilling program to empower teachers with essential digital skills. The initiative will support teachers in adopting modern teaching methodologies that leverage technology, fostering an education system that prepares students for the digital economy.

Challenges in Uganda's Education System

REF: https://www.education.go.ug/digital-agenda/

- **Resource Constraints**: Budget limitations within the education sector make it challenging to implement large-scale technology-focused initiatives. *- the first objective of the Digital Agenda Strategy is to increase coverage and access to ICT infrastructure and connectivity*
- **Uncoordinated effort:** Several aid organisations are running smaller projects in Uganda, but the MoE needs to coordinate them. Therefore, the effort might be duplicated, whereas it could be better organised to address various challenges. *Digital Agenda: To develop and integrated direction in which ICT shall facilitate teaching, learning and management of service delivery in the Education sector.*
- **Insufficient Access to Technology**: Limited access to digital devices and internet connectivity restricts students' and teachers' exposure to digital tools.

- **Limited Digital Competencies Among Teachers**: Many teachers lack basic digital skills, hindering their ability to effectively incorporate technology into the classroom. *Digital Agenda: To increase ICT human resource capacity*

- **Lack of Continuous Professional Development**: There is a need for structured, ongoing training programs to support teachers in updating their skills to meet evolving educational standards. *Digital Agenda: Promote ICT in research and innovation*

- **Traditional Teaching Methods**: Teachers predominantly rely on conventional methods, which limit interactive and student-centred learning experiences. *Digital Agenda: Effectively use and encourage the adoption of mature and emerging digital technologies.*

- **Low Perception of Digital Transformation in Education**: Teachers and administrators may lack awareness of the benefits of digital teaching, hindering their motivation to embrace technology-driven approaches. *To effectively use and encourage the adoption of mature and emerging digital technologies.*

- **Online learning was not successful in previous projects -** teachers did not complete, navigating some of the online platforms are complicated for teachers with low digital literacy skills.

- **Access to content on online platforms is not sustainable -** The Ministry does not own a platform and therefore licensing fees apply when using 3rd party content

Project Objectives

The primary objective of this project is to empower in-service teachers across Uganda with digital skills to enhance their teaching methodologies, contribute to the digitalisation of the education system, and improve learning outcomes.

Specifically, through Blended Learning training, the project aims to:

- Equip teachers with foundational and advanced digital skills.

- Promote innovative, student-centered teaching methodologies.

- Establish a sustainable training model utilising master trainers.

- Support the Ministry of Education's digitalisation goals by embedding digital literacy within Uganda's educational framework.

Proposed Solutions

- **Motivational system:** Teachers need to know why they should participate in the training.
  - This could be done through a national communication plan or campaign that elevates teachers who complete the program. They become part of the Digital Teacher Society of Uganda.
  - Teachers can use their certificate of completion for promotional purposes
  - Teachers earn continuous professional development points, ie, a certain number of points per course/ notional hours spent online
  - It could also be done through a "stick" - which is not ideal - you complete the training, or you lose your job
  - Teachers earn badges as motivation on the system and a certificate of completion automatically activates once a teacher has passed the online exams
- **Access:** Teachers need access to the Internet and devices to complete the training
  - DSF managed in other countries to zero-rate access to the DSF URL, which implies that teachers accessing the content will not use their own data
  - Devices should be available at school for teachers to use during their lunch or tea breaks, it is even better if teachers have a specific slot in their timetable for the DST program.

- Teachers can download content on their Smartphones and use it in off-line mode through an app, and their progress will be updated as soon as they are connected again - this is not ideal, and teachers should connect regularly to the Internet.

- **Master Trainer System**: A "train-the-trainer" approach will be employed to create a sustainable training model. Selected teachers across Uganda will be trained as master trainers, equipping them with advanced digital skills and instructional strategies. These master trainers will then cascade their knowledge and support to other district teachers.
  - Their main role is to motivate and support other teachers to complete the course and implement it in their day-to-day teaching activities.
  - One master trainer should not have more than 50 people in their coaching group
  - WhatsApp groups are effective to communicate and motivate their colleagues
  - Special recognition should be given to Master Trainers who excel in their job; in other words, teachers will complete online feedback forms on a regular basis to provide feedback on the quality of their Master Trainer support
  - Master Trainer title in Uganda should be prestigious and earned
  - Master Trainers should receive a special certificate of recognition

- **Blended Training Approach**:

  The program will adopt a blended training model, combining online modules with in-person workshops. Teachers will have access to DSF's high-quality digital training content, adapted to the Ugandan context, providing flexibility in learning while fostering digital competencies.
  - Many teachers lack the skills to get started online. The success of the program, therefore, depends on at least a one-day orientation day for all teachers, in

which they are supported to access the platform and navigate through the content—it is preferred that the Master trainer observe them while they complete at least one module successfully and earn a badge.

- Teachers will also complete the baseline aptitude test during the face-to-face meeting.
- Teachers are generally unfamiliar with the online learning environment; however, it is improving, and based on its cost-effectiveness, we should continue pursuing it. DSF customised the platform's user interface to ensure easy navigation and user-friendliness.

- **Curriculum and Content Customisation**:
Digital Skills Foundation can localise its content to align with the unique needs of Ugandan teachers, such as using different names and examples. This will ensure content relevance and contextual understanding, enhancing teachers' comfort and confidence with digital tools.
  - Course/module names can be adapted to what is more familiar to teachers or aligned with the Digital Agenda.

- **Mindset Transformation and Awareness Building**:
In addition to technical skills, the program will focus on changing teachers' perspectives on digital education.
  - Through workshops and mentorship, teachers will be encouraged to view technology as a teaching tool and a way to make learning more interactive, inclusive, and adaptive.
  - The focus is on experiential learning; teachers are encouraged to implement 21st-century teaching strategies through practical examples and step-by-step instructions.

- **Implementation Support and Monitoring**:

  Elearner Uganda will oversee on-ground implementation, providing logistical support, technology distribution, and monitoring progress. Regular feedback loops will continuously improve content delivery and training effectiveness.
    - DSF will activate a Data-driven dashboard which will allow all stakeholders to follow the progress of teachers in real-time
    - In-time reporting can be done from the dashboard.
- **Sustainable access to a national platform with Uganda-specific content/ courses:** DSF offers a white box solution with capacity building, which implies that the Ministry can own the platform and training content after a mentoring and capacity-building period.
- **Local Support and Resources Mobilisation**:

  The project will collaborate with local government bodies, communities, and stakeholders to provide access to shared technology, such as community centres or libraries.

Expected Outcomes

- Confidence—Digitally enabled teachers tend to be more confident in their roles as 21st-century teachers. Through the training, they will learn strategies that will enable them to be confident in what they do and present in the classroom.
- Enhanced digital literacy among in-service teachers, enabling them to use technology effectively to enhance learning and teaching in their classrooms.
- A network of trained master trainers fostering sustainable skills development within the education sector.
- Improved teacher-student engagement through interactive and technology-driven teaching methods.

- Increased awareness and acceptance of digital tools as valuable resources in education.
- Long-term alignment with Uganda's national digitalisation strategy, positioning the education sector as a leader in digital transformation.

Project Scope and Duration

The project will run nationwide, covering all regions in Uganda. Over two years, the project aims to upskill more than 10,000 in-service teachers, focusing on rural and under-resourced areas to ensure equitable access to digital skills training.

Monitoring and Evaluation

The project will include a robust M&E framework, assessing progress against established milestones such as the number of teachers trained, adoption rates of digital teaching practices, and student engagement improvements. Regular feedback from participants and partner institutions will enable continuous content adaptation and enhanced training methodologies.

All teachers will complete a baseline aptitude assessment on digital skills. This structured evaluation measures a teacher's ability, knowledge, and readiness to use digital tools and technology effectively in educational settings. It helps determine a teacher's proficiency in digital skills relevant to modern teaching environments and capacity to integrate technology into instructional practices. The same test will be conducted at the end of the training.

The test will include the following:

- **Basic Digital Literacy**
  - Understanding of fundamental digital concepts, such as using operating systems, navigating the internet, and managing files and folders.

- Proficiency in using essential software (e.g., word processors, spreadsheets, and presentation tools).

- **Educational Technology Skills**
  - Familiarity with educational platforms, learning management systems (LMS), and online resources.
  - Ability to use digital tools specifically designed for education, such as Google Classroom, Microsoft Teams, or other collaborative platforms.
  - Knowledge of digital resources and online databases that can enhance teaching content.

- **Digital Communication and Collaboration**
  - Skills for effectively communicating with students and parents through digital means, such as email, messaging apps, and video conferencing tools.
  - Ability to collaborate with colleagues using shared documents, digital workspaces, and virtual classrooms.

- **Digital Pedagogy**
  - Understanding how to incorporate digital tools into lesson planning supports diverse learning styles and improves student engagement.
  - Familiarity with blended and flipped classroom models and the effective use of technology for these approaches.

- **Content Creation and Curation**
  - Ability to create digital content (e.g., presentations, quizzes, multimedia resources) and design engaging materials for students.
  - Skills in curating and organising digital content to enhance curriculum delivery.

- **Cybersecurity and Data Privacy Awareness**
  - Basic understanding of cybersecurity practices to protect students' data and maintain online safety.

- ○ Awareness of privacy laws and regulations, especially those applicable to handling student information.
- **Problem-Solving in Digital Contexts**
  - ○ Ability to troubleshoot common issues related to technology in the classroom (e.g., connectivity, hardware or software problems).
  - ○ Skills to adapt and find alternative digital solutions when challenges arise.

The involvement of one of the public universities can also be considered for external monitoring and evaluation.

Proposed Courses

The course proposal assumes that participating teachers will be in-service teachers with access to the Internet and a device.

Courses could include:

- There are three levels of 21st-century teaching skills—these are important to align with the vision of the Digital Agenda and nurture an appreciation for integrating technology into learning and teaching.
- Teacher Well-being: It is essential for teachers to have a work-life balance and to identify and support students with social-emotional issues.
- Inclusive teaching - this is to support teachers to identify and support students with different learning needs
- Digital Competency Passport- this focuses on the foundational digital skills that every teacher needs to use technology productively.

Budget Estimate

The project budget includes costs for content localisation, training materials, technology access, logistics, and on-ground support. A detailed budget breakdown will be provided based on further assessments of resource requirements across different regions. Budget items to consider include:

Aspect	Rationale
Content localisation	Collaboration between DSF and ELearning to determine the extent of localisation required
Content licensing	Access to the platform and course content is managed on a per-person licence. This includes uploading of participant profiles, online support and management of participants and communication from the platform
Zero rating of the URL	In other countries, this has proven to work. Teachers can then access the platform without using their own data. They will be more likely to complete their online training.
Project Management	Effective project management is key to the success of the project
Master trainer workshops (Consider travel allowances and costs)	Depending on the size of the project or POCs, Master trainers will have to be accommodated for at least 4 days in a venue for face-to-face training conducted by a DSF Senior trainer. Consider the following costs: DSF Senior Trainer - Travel and accommodation Venue Master Trainer participants - travel and accommodation
Induction (Consider stipends for travel)	Teachers will have to meet for at least a day at the start of the project. It could be close enough to their schools so they do not require accommodation, but they might need stipends for food and travel.

Conclusion

This initiative represents a transformative step towards digitalising Uganda's education system. This project aligns with Uganda's strategic goals for digital inclusion and socio-economic development by equipping in-service teachers with digital skills and fostering a forward-thinking mindset. Partnering with the Ministry of Education, Digital Skills Foundation, and Elearner Uganda, this project will build a sustainable foundation for a digitally empowered generation of educators, ultimately contributing to an improved, future-ready education system in Uganda.

Appendix