



## EDITORIAL

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# Community Engagement for Meaningful and Sustainable Digital Literacy Training in Uganda

**E**lectronic Information for Libraries' Public Library Innovation Program (EIFL-PLIP; <https://eifl.net/programmes/public-library-innovation-programme>) has extensive experience running library projects in developing and transitional economy countries. Specifically, the program assists librarians with introducing innovative services to meet community needs and in reaching out to new audiences. Community needs assessment is critical to the long-term success of these projects and is also the first step in involving the community in the design of a service they want. In 2020, EIFL and partners (National Library of Uganda, Peer 2 Peer University, and the Maendeleo Foundation) received a grant from Enabel, a Belgian development agency, to support twenty-five public and community libraries in providing digital literacy training to women and youth. Within this project, we conducted an extensive community needs assessment, which included local government officials, librarians, and a wide range of community members. This first step of the project was very successful at engaging the attention and enthusiasm of the local authorities and community members. Asia Kamukama, a project partner and Executive Director of the Maendeleo Foundation, reflected upon their return from a consultation trip: "In every library we visited I saw lots of excitement from women," recalling one woman who told her "I will use every spare minute I have to try and learn something new. People judge us because we aren't educated and are without skills. This project is an opportunity for us to prove that we can learn and improve our prospects for the future."

## Project Background

Uganda has a population of 44.7 million. Women make up 50.7 percent of Uganda's population, and 49.3 percent of its population is male. Just over twenty-five percent of Uganda's population live in urban centers, while 74.4 percent live in rural areas (The World Factbook, 2020). Uganda, considered one of the poorest countries in the world, has achieved significant milestones in its fight against poverty over the past three decades, with poverty rates standing at 21.4 percent in 2016. However, while the poverty rate has fallen over time, Uganda still has a significant proportion of the population which, while not living in absolute poverty, is poor relative to the middle class and are vulnerable to falling below the poverty line in the face of a setback, such as the COVID-19 pandemic (see figure 1).

The World Bank estimates that the medium-term outlook for Uganda has worsened considerably because of the impact of the COVID-19 pandemic, and that risks are tilted heavily to the downside. If the impact of the pandemic lasts longer than three years globally, or the virus spreads more widely in Uganda,

this could heavily affect Uganda’s economy and productivity and hence slow down recovery (The World Bank, 2021).

In the midst of the COVID-19 pandemic, information and communication technologies (ICT) are playing an essential role in mitigating some negative effects of the pandemic, such as disruptions of education, job losses, and others. There are 12.16 million internet users in Uganda (26.2 percent of its population). Mobile phone use is more prevalent, with 60.3 percent of the total population owning one or fewer mobile phones (Digital 2021 Uganda). According to the Uganda Communications Commission, the main obstacles to internet use are a lack of free or affordable access to technology; a lack of computer and online literacy skills; and limited awareness about the wealth of information the internet has to offer on education, employment, communication, and other opportunities (Muyomba, 2019).

Women and unemployed youth have less access to computers and the internet when compared to other demographics, most. Women and girls have limited independent sources of income, lower literacy levels, and lack confidence with technology (Bridging the Digital Gender Gap in Uganda, 2020). Unemployed young people also struggle to afford internet access, while at the same time they need practical and marketable digital skills that are in high demand in a competitive job market (Competing in a Digital Age, 2019).

To address the digital skills gap, in 2020 EIFL-PLIP engaged three partners—Peer 2 Peer University (<https://www.p2pu.org/en/>), National Library of Uganda (<https://www.nlu.go.ug/>) and Maendeleo Foundation (<https://maendeleofoundation.org/>)—to develop a project to narrow the digital divide by enabling women and unemployed youth to participate in digital society.

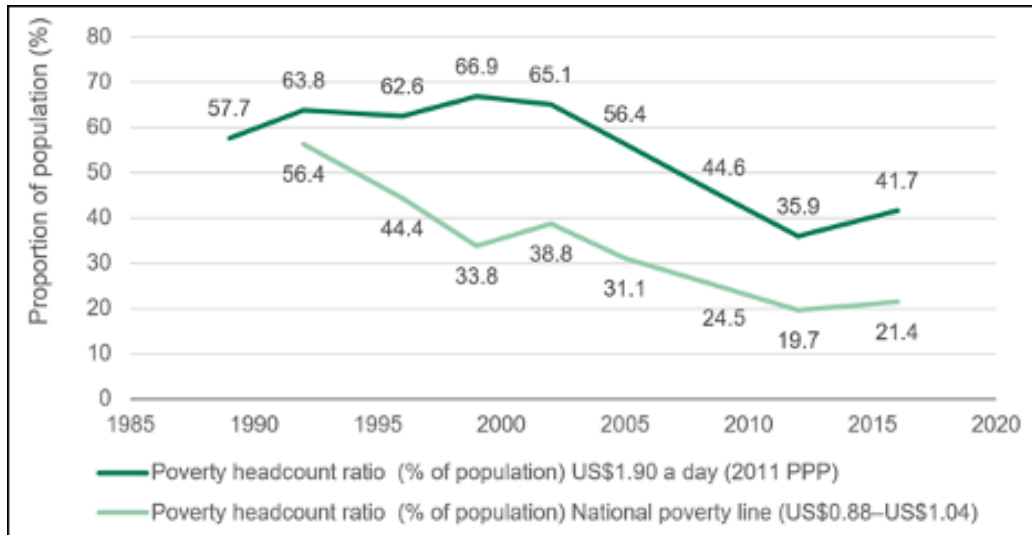


Figure 1. Level of poverty in Uganda over the last 30 years. Source: Poverty in Uganda: National and Regional Data and Trends, 2020

[maendeleofoundation.org/](https://maendeleofoundation.org/))—to develop a project to narrow the digital divide by enabling women and unemployed youth to participate in digital society. Digital Skills and Inclusion through Libraries in Uganda (‘Digital skills @ your local library,’ for short) is a two-year project that will improve the capacity of twenty five public and community libraries that already have computers and internet available for public use (see appendix 1). These libraries will offer digital skills training specifically to women and unemployed youth and connect them to free online learning opportunities. In addition, the project will reach out to remote rural communities, organizing camps at which people will learn digital skills, including using mobile phones to connect to the internet and find information and services.

It is expected that by the end of the project:

1. Up to twenty-five public and community libraries across Uganda will introduce or upgrade their digital literacy training programs.
2. At least 11,500 people will gain basic information literacy skills or improve their existing skillset.
3. At least two thousand learners will attend online courses to access knowledge and information that will be useful in their daily lives.

### **Methodology of Community Needs Assessment**

Project implementation started in 2021 and soon after we began to plan for an extensive community needs assessment study. The process included six key elements:

1. Contacting all public and community libraries, which were identified in the project-planning stage, and putting together a site visitation plan.
2. Developing questions and discussing the assessment process with partners.
3. Developing a questionnaire to be filled out by librarians in charge as well as a protocol to guide community meetings with women and youth.
4. Facilitating twenty-two community meetings and twenty interviews with librarians.
5. Compiling and analyzing data gathered through the questionnaire and community meetings.
6. Sharing the summary of findings with project stakeholders, including librarians, project partners, and project funders as well as some external stakeholders (for example Uganda Communications Commission, which is in charge of regulating the ICT sector and has been supporting ICT infrastructure in public libraries).

After initial contact with the pre-identified libraries, a team made up of representatives from both project partners based in Uganda (NLU and Maendeleo Foundation) put together a plan to visit twenty-four locations during March 2021, with the goal of achieving the following objectives:

1. Meeting with library authorities (mainly local governments that run public libraries and the NGOs in charge of community libraries) to bring them on board, present and explain project goals, and sign MOUs (memorandums of understanding) for official participation in the project.
2. Meeting with librarians in charge of selected libraries to provide them with in-depth information about the project and expectations from participating libraries, and to update information about library ICT infrastructure and any current digital training programs.
3. Running community meetings with local youth and women's groups to learn about their needs for digital skills and content for online learning.

For the first objective, we developed a draft MOU with local governments, which were sent to authorities in advance. The MOU listed the roles and responsibilities of project partners and participants. The main responsibilities of local government were to support the library's ICT infrastructure and staff. Meanwhile, the librarians committed to introducing or upgrading their digital literacy training programs by training at least five hundred people in basic digital and mobile literacy, and ensuring that at least one hundred learners will attend online courses to access knowledge and information useful in their daily lives (see table 1).

For the second objective we developed a questionnaire to be filled out during the interview with the librarian in charge. The questionnaire was meant to examine the status of ICT infrastructure in the library (number of computers and internet connectivity), the status of digital and mobile training (what digital skills trainings are currently available, how many people get training per month, does the library register trainees and issue certificates), and finally address specific community interests with regards to digital literacy and online learning (topics of interest, preferred format and duration of the training, challenges that librarians anticipate in relation to the digital skills training).

For the third objective we developed a scenario for community meetings, which aimed at answering five key questions:

1. What digital skills and online content do youth and women in your community want?
2. How do most community members usually engage with the Internet (no access, mobile only, computers only, both mobile and computers)?
3. What is the best way for youth and women to participate in digital skills training and online learning (at the library, at home, on their mobile, etc.)?
4. How should we promote digital skills training and online learning to attract youth and women?
5. What would attendee expectations or recommendations be in relation to this project?

Type of training activity	Frequency of training	Average number of training hours per month	Average number of people per training	Expected results to be reached by the end of the project
Digital literacy training (face-to-face)	Once a month	4–6 hours	10	At least two hundred and fifty people will gain basic digital literacy skills or improve their existing skills
Mobile literacy training (face-to-face)	Twice a month	2–4 hours	5	At least two hundred and fifty people will gain basic digital literacy skills or improve their existing skills
Learning circles (face-to-face, using online materials)	Once a week for 6–8 weeks	4–6 hours	12	At least one hundred learners will attend online courses to access knowledge and information useful in their daily lives

Table 1: Training targets by type of training activities for participating libraries.  
Source: Author-created table

In addition to the above-mentioned questions, we had a goal of collecting geolocation data from each library and photos of the library building, to be used for increasing their visibility.

### **Data gathering**

Trips to the Northern and Eastern regions started on March 1, 2021, with the Paidah Public Library, and ended on March 5, 2021, with the Uganda Development Community Library in Kamuli. This was followed by trips to the Western and Central regions that started on March 9 and ended on March 16. During this time the team managed to collect data from twenty libraries as well as run twenty-two community consultations with local youth and women. A total of 225 people were engaged via these meetings.

To capture information, the team used Kobotoolbox (<https://www.kobotoolbox.org/>), a free toolkit for collecting and managing data in challenging environments that is widely used in humanitarian emergencies. It was chosen because Kobotoolbox allows offline data collection, which is very handy in remote areas where internet connectivity is not always available. The tool also allowed the capture geolocation data, which was later used to produce a map of libraries participating in the “Digital literacy @your local library” project (see figure 2).

The most challenging aspect of the visits was time management, as the schedule was very time-intensive and it was not always easy to predict how much time was needed in each location because of factors like heavy traffic, bad roads, and others. This caused some alterations in the planned schedules.

### **Findings from Interviews with Librarians**

In terms of infrastructure, we found that libraries have, on average, eight computers available for users. However, some of these computers are very old, have technical issues, or use outdated software, such that in reality many libraries only have four or five functioning computers. The internet connectivity is generally sufficient for the planned activities: twelve libraries reported having internet capable of streaming high-definition video, while the remaining eight libraries have moderate internet connectivity, sufficient to stream low-bandwidth video. However, libraries also reported frequent power outages, which negatively affect computer use and training activities.

At the time of assessment, five libraries did not have any digital training skills programs, while others primarily offered training on basic computer skills, Microsoft Office, and internet searching. Very few libraries were offering more diverse ICT related topics, such as digital marketing, video and audio editing, graphic design, etc. (see figure 3).

The assessment confirmed that most libraries have one or two staff members who are in charge of all library services. In most libraries, the training is done by assistant librarians or volunteers, while four libraries reported not having anyone to do the digital skills training. We observed that for basic digital skills training, many librarians were using training materials which were developed by EIFL and Maendeleo Foundation in 2014–2015, which had not been updated.

On average, the libraries train eight people per month, although only eight libraries require registration for the training participants. In terms of the topics people want to learn, librarians most frequently mentioned interest in searching for YouTube videos on crafts and agriculture, learning how to find online courses, using government e-services, searching and applying for jobs online, applying for scholarships, typing documents, creating presentations, and using internet search and email. Some users were also interested in more advanced

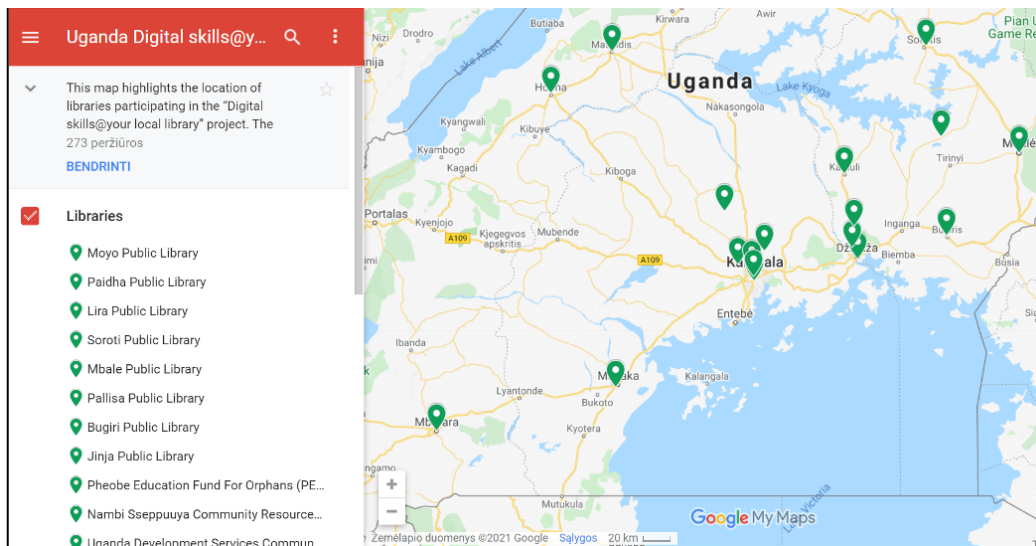


Figure 2. Map of participating public and community libraries. Source: Author-created map. URL: <https://bit.ly/3pNagxb>

computer skills such as accounting, website and graphic design, digital marketing, photo and video editing, programming, and coding.

Librarians also said that people have a strong interest in developing practical skills which would be useful in their daily lives, especially skills that could potentially bring income or other anticipated benefits. Examples of such skills include financial literacy and entrepreneurship, home management, parenting, dangers of drug abuse, sexual health, and vocational skills such as making door mats, soap, baking, fashion and design, cosmetology, communication, marketing and public speaking skills, and farming.

### Findings from community consultations

From the community consultations we learned that about half of community members only have access to the internet through a mobile phone, while the other half can access the internet both through a mobile phone and a computer. In two communities people reported having no access to the internet, except for that provided by the library. Considering their limited access to the internet and the high cost of data, most participants expressed a preference to learn digital literacy skills in the library.

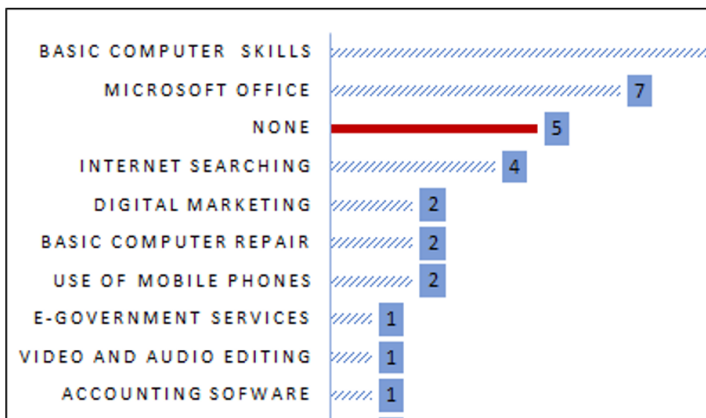


Figure 3. Current digital literacy programs in libraries. Source: Author-created figure

In terms of duration and frequency of digital literacy training, most people preferred to meet one to two times per week for up to two hours. Youth seem to have a bit more flexibility in terms of timing, while women have more responsibilities at home and therefore training for them has to be carefully coordinated with these responsibilities (see figure 4).



The best ways to promote digital learning would be community outreach, local media (TV/radio), youth and women's groups, flyers, banners, training in schools, engaging volunteers to train community members, social media, WhatsApp groups, church, and word of mouth.

In terms of topics, community responses were similar to the ones expressed by librarians. For technology-related skills, people wanted to learn basic computer skills, Microsoft Office, how to get the best use out of their mobile phone, Internet use and research, digital marketing, and how to access online learning courses. Young people expressed interest in more advanced ICT skills, such as video and audio editing, online safety, accounting, e-commerce, job seeking, web design, and programming, etc. (see figure 5).

Among other skills that are not directly related to technology, most people were interested in learning about practical skills, such as:

- Fashion design and hairdressing
- Handicrafts (beads, bags, etc.)
- Shoe making and tailoring
- Baking and cooking
- Farming (coffee, maize, poultry, rabbits, pineapples, etc.)
- Financial literacy
- Entrepreneurship
- STEM
- Reproductive health and sexual education
- English language
- Family counseling, domestic violence, parenting and motherhood
- Academic courses for students at all levels
- Leadership and public speaking
- First aid



Figure 4. Community meeting with local women in Mbarara public library. Source: Author

As for expectations related to the project, both women and youth were hoping that it will improve their employability, help them start small businesses, teach them how to market and sell produce online, and ultimately improve their livelihood and standard of living. After the meeting, Marcy Akia, a librarian from Soroti Public Library, shared her observation:

The COVID-19 lockdowns made some of the businesswomen in our community realize how important digital skills are. Without knowledge on how to access online resources they could not contact suppliers in the city, they now understand the need to learn new skills to adapt to a changing world.



Figure 5. Community meeting with youth and women in Masindi Public Library.

Source: Source: Author

### **From the assessment to the designing of a digital literacy program**

The data collected during interviews with librarians and community meetings has provided insights for the development of a digital literacy training program for librarians, ensuring they are prepared to adapt and deliver meaningful digital skills training to their communities. In addition to the feedback collected in the meetings, the team observed that while about 70 percent of librarians have sufficient ICT skills, most need to learn how to teach.

The topics of interest expressed during the meetings became the focus of the training materials developed to help librarians deploy digital and mobile literacy curricula in their libraries. We also realized that people's needs and interests were diverse, so we approached the curricula as mini modules, which could be selected in accordance with the needs of a small group of people. We are also building a strategy on how to expand the current online course offerings to include more local content focused on the development of practical skills.

The community needs assessment also helped to identify active community members who might be brought on board as libraries start promoting the training among youth and women. Some of these community members might also be interested in becoming volunteers to help librarians run and then expand the training and facilitate online learning courses.

### **Conclusions**

The community needs assessment built a strong foundation for needs-based library service development, and engaged end-users from the very beginning, giving them ownership of the service and ensuring its relevance. It is also an effective community outreach strategy, creating enthusiasm and interest in upcoming new library services. A combination of quantitative and qualitative data collection methods allowed for both obtaining factual information and addressing questions around perceptions and expectations among community



members, identifying specific issues or problems they are facing, and how they see the library contributing to resolving these problems or issues.

For this project, the community needs assessment study provided in-depth insight into the preferences and expectations of the main project targets—youth and women—from multiple rural and urban localities. This first step in the project has already engaged community members and will ensure the success of the librarians' future outreach efforts.

With relatively simple instruments and the dedicated effort of local partners, we were able to obtain a detailed picture of the situation in public and community libraries across the country related to ICT infrastructure and digital literacy training. Furthermore, we were able to identify strengths which would aid in the implementation of our project, such as a relatively large number of libraries who already have some experience in digital literacy training, sufficient internet connectivity in libraries, and interest and enthusiasm from the local community. We were also able to pin down some of the challenges which may affect project activities, such as problems with power supply and hardware, a lack of staff, and a lack of staff confidence in running digital literacy training. These findings will guide our next steps as we move forward with the implementation of this project.

## References

- Central Intelligence Agency. 2022. "Uganda." In *The World Factbook*. Central Intelligence Agency.  
<https://www.cia.gov/the-world-factbook/countries/uganda/>.
- Electronic Information for Libraries. 2022. "Digital Skills and Inclusion through Libraries in Uganda | EIFL." 2022. <https://www.eifl.net/eifl-in-action/digital-skills-and-inclusion-through-libraries-uganda>.
- Kemp, Simon. 2021. "Digital in Uganda: All the Statistics You Need in 2021." DataReportal – Global Digital Insights. February 12, 2021. <https://datareportal.com/reports/digital-2021-uganda>.
- Mercy Corp, Youth Impact Labs. 2019. "Competing in a Digital Age: The Development of IT Skills & Jobs in Kenya and Uganda."  
[https://www.mercycorps.org/sites/default/files/2020-01/Publication\\_IT\\_Skill\\_Gap\\_Report\\_April1\\_VF.pdf](https://www.mercycorps.org/sites/default/files/2020-01/Publication_IT_Skill_Gap_Report_April1_VF.pdf).
- Muyomba Emmanuel, "Internet Access at Public Libraries: Uganda model" (presentation, Dynamic Coalition on Public Access in Libraries of the Internet Governance Forum, Berlin, Germany, November 25–29, 2019).
- Owori. 2022. "Poverty in Uganda: National and Regional Data and Trends." Development Initiatives. 2022. <https://devinit.org/resources/poverty-uganda-national-and-regional-data-and-trends/>.
- The World Bank. 2022. "Uganda." World Bank. April 17, 2022.  
<https://www.worldbank.org/en/country/uganda/overview>.
- Women of Uganda Network (WOUGNET). 2020. "Bridging the Digital Gender Gap in Uganda: An Assessment of Women's Rights Online Based on the Principles of the African Declaration on Internet Rights and Freedoms | African Declaration on Internet Rights and Freedoms." <https://africaninternetrights.org/en/resource/bridging-digital-gender-gap-uganda-assessment-women%E2%80%99s-rights-online-based-principles>.

## **Appendix 1. List of participating libraries**

1. Moyo Public Library
2. Paidha Public Library
3. Lira Public Library
4. Soroti Public Library
5. Mbale Public Library
6. Pallisa Public Library
7. Bugiri Public Library
8. Jinja Public Library
9. PEFO – Community Library-Jinja
10. Nambi Sseppuuya Community Resource Centre-Jinja
11. Uganda Development Services Community Library-Kamuli
12. Nakaseke Public Library
13. Masaka Public Library
14. Center for Youth Driven Development Initiatives (CFYDDI)
15. Wakiso Community Library
16. Kawempe Youth Center
17. Mummy Foundation Community Library
18. Masindi Public Library
19. Hoima Public Library
20. Bundibugyo community Library
21. Mbarara Public Library
22. Kabale Public Library
23. Nyarushaje Community Library
24. Nyaka Blue Lupin Community Library
25. National Library of Uganda