

The E-Learning Shift: Post-Secondary Education Realities and Possibilities

Research Report and Recommendations

February 2022 • Haymar Hkai and Joanne Lauterjung, Researchers

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INTRODUCTION

Purpose of the Research

The global COVID-19 pandemic and subsequent events have greatly impacted post-secondary education in Myanmar. Mote Oo's partners quickly shifted to teaching online with little preparation to effectively modify and adapt existing curricula, courses and materials for this new educational reality. Despite falling COVID-19 cases in some areas, security constraints further limit the ability for schools to safely re-open for in-person learning. In an effort to support teachers, learners, and administrators during this challenging time, Mote Oo has commissioned research with these stakeholders, along with thematic experts, to identify:

- gaps in users' knowledge and skills in relation to online teaching best practices;
- which educational technology tools and platforms (if any), as well as teaching methods, are most widely used; and
- limitations or barriers to successful online learning, and/or recommendations for improvements.

This report outlines the following:

- findings from the research with identified stakeholders; and
- recommendations for support to postsecondary teachers and administrators.

The Research Team

Joanne Lauterjung received her Master of Arts in Conflict Transformation from Eastern Mennonite University's Center for Justice and Peacebuilding, specializing in engaged pedagogy using arts and culture as learning tools for peace education. She has worked in Myanmar for 10 years as a specialist, program designer, trainer and researcher. Prior to her work in Myanmar, Joanne worked with social justice non-profits and educational organizations in the U.S. and Europe on organizational development and communications.

Haymar Khaing is a Myanmar native with a Bachelor of Arts in Education from Yangon Institute of Education, and Arts and Social Sciences for four years. She has worked with Search for Common Ground as a development specialist, developing specialized training in peacebuilding and conflict transformation in Rakhine State. She recently completed a consultancy with the Myanmar Information Development Organization (MIDO) on digital citizenship, and fostering personal security for online teaching and learning.

METHODOLOGY

Literature Review

The literature review consisted of looking specifically at research on post-secondary education in low-resource and/or conflict environments. It should be noted that the available research on this topic is mostly in English, and appears to come predominantly from high-resource environments in North America and Europe, with limited data coming from low-resource or conflict-affected areas. However, online education during COVID-19 has recently provided an opportunity for further exploration of this topic, including several articles on mobile learning in emergencies. Additional topics included evaluation of online teaching and learning, student motivation, and recommended digital technologies for low-resource environments. Given time constraints, a thorough summary of the literature was not possible. Applicable data gleaned from the literature has been factored into the *Recommendations* section below. *Literature Review Notes* are available on request.

Data Collection

Three general lines of inquiry were developed for data collection:

- **Technology** access, hardware, tools and support;
- **Online teaching and learning** tools, methods, support, motivation and confidence; and
- **Issues** that could inform development of online teaching resources.

Online surveys were conducted with 34 teachers and 73 students over a period of two weeks in late-November, early-December, 2021. Age and location data were collected (see Figures 1 and 2 below), as well as data on teachers’ and students’ amount of online teaching/learning experience (see Figure 3). Due to an error in the initial survey, the first 27 students to take the survey were taken directly to the technology section, and no demographic or online teaching experience data was collected.

FIGURE 1: SURVEY DEMOGRAPHICS – AGE

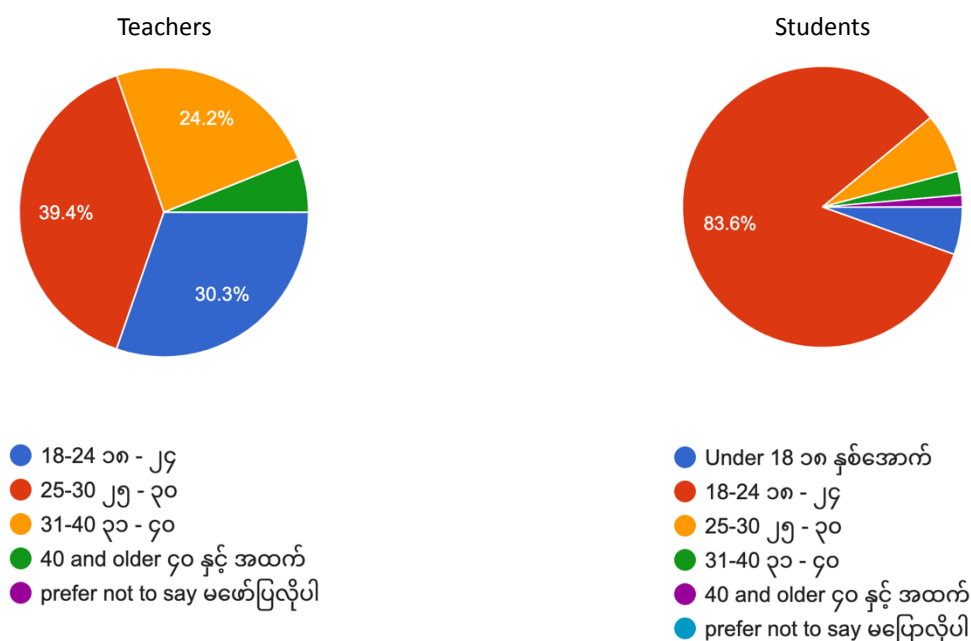


FIGURE 2: SURVEY DEMOGRAPHICS – LOCATION

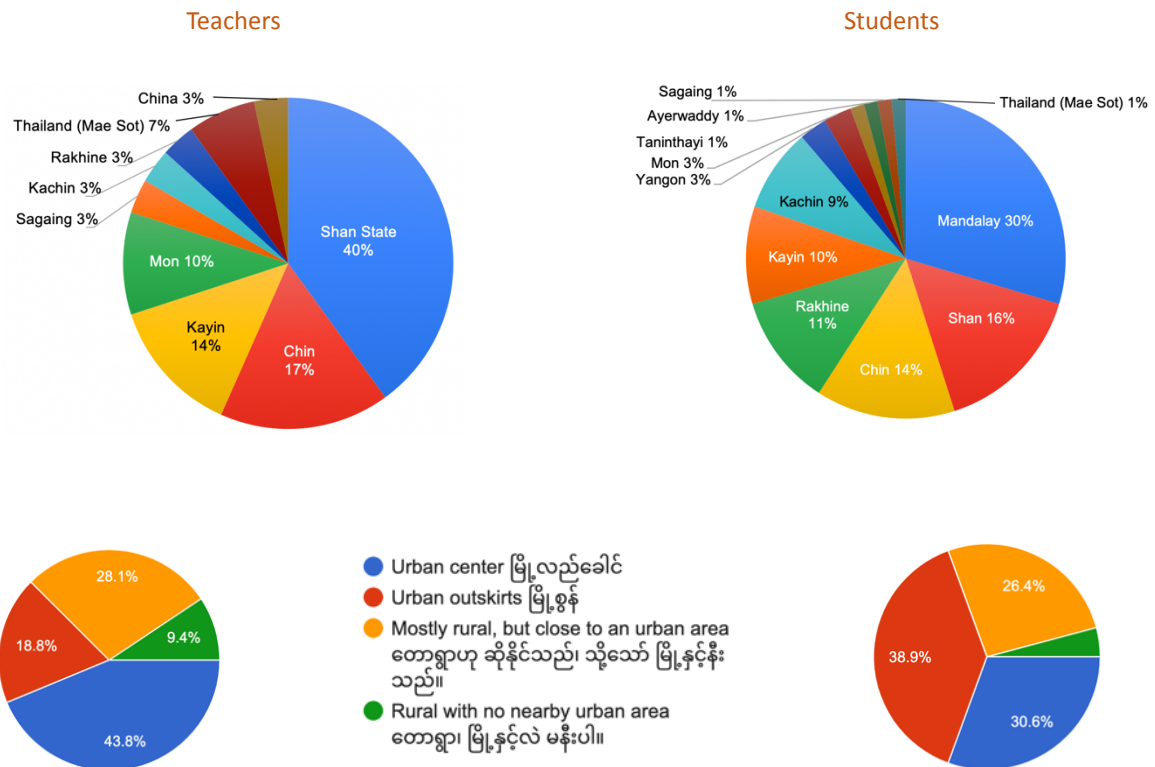


FIGURE 3: SURVEY DEMOGRAPHICS – LENGTH OF EXPERIENCE WITH ONLINE TEACHING/LEARNING



Focus group discussions (FGDs) and key informant interviews (KIIs) were conducted in December, 2021 with 36 people (18 women and 18 men) as follows:

- Teachers – 3 KIIs;
- Students – 3 FGDs;
- Principals and managers – 4 KIIs; and
- Thematic experts – 4 FGDs and 7 KIIs.

Limitations

The following limitations to the research should be taken into consideration when reviewing the findings and recommendations.

- The literature review was limited due to limited published research conducted in low-resource and conflict-affected environments.
- The survey response rate was higher than expected, but cannot be considered broadly representative of Myanmar's many different forms of post-secondary education.
- While the literature included data on appropriate online evaluation methods, the surveys and interviews did not include questions about monitoring or evaluation.
- Data collection was limited by current conditions in Myanmar – power outages, a sudden increase in mobile data rates, and limited access to the Internet.
- Data collected indicates a wide variety of needs and resources that the research team did not have adequate time to explore or factor in. The *Recommendations* section includes suggestions for further exploration and consideration.
- Since the time of data collection, data costs and associated taxes have doubled, and a potential new cybersecurity law makes the use of a VPN illegal. Some tools mentioned in the data may no longer be accessible or viable in these circumstances.

SUMMARY OF FINDINGS

A summary of the raw data is available upon request.

Technology

The data indicates that the main challenge related to technology is **access**. A majority of students interviewed mentioned data fees as a limitation to Internet access, or slow connections that impact their ability to understand the lessons. Thematic experts and teachers said the issue of students dropping off and having to log back in greatly impacts any flow or consistency in lessons, and students are often unable to access links provided. The current situation has also seen electricity cuts and doubling of data fees for foreign-run telecommunications companies, further limiting access. Another issue related to access is that of scheduling. One interviewee stated that many schools are trying to stick to a set schedule like in previous years, but would benefit from being more flexible. Difficulty in scheduling was mentioned several times across stakeholder groups, as well as a desire for more flexibility. Increased flexibility, however, will hinge on developing more content for asynchronous learning. (See *Online teaching and learning section* below for further discussion on synchronous and asynchronous learning).

The data shows that **hardware** challenges are also an issue. The majority of teachers interviewed are using laptops, while the majority of students are accessing lessons through mobile phones, sometimes borrowed, potentially limiting teacher awareness of how students are seeing lesson presentations. Students report issues with phones such as overheating, difficulty in seeing presentations on a small screen and low motivation to read lengthy material on their mobiles. Issues with certain Huawei phones made in China were mentioned, which cannot access Google products such as Classroom, Gmail or Jamboard. Some interviewees said this was not a big issue as most mobile shops can adjust the phone settings to gain access, and often Huawei issues newer versions of the phones that can again access Google. While not an issue with hardware specifically, students also reported headaches and vision problems resulting from extensive screen time.

In terms of technology **tools**, the data shows a wide variety of options currently being used. Zoom and Google Classroom were frequently mentioned, and a few respondents said they are using Moodle. The data indicates that Zoom is the easiest platform to use, and several respondents said it's best when combined with Google Classroom for classroom management, assignments and assessment. Other platforms and tools mentioned by teachers and students include LearnDash, Facebook private groups, and Padlet. Messenger platforms appear to be frequently used for ongoing communication, and include Messenger, Signal, and WhatsApp. The variety of tools mentioned would indicate an ability to learn and adapt to several different platforms, a big change in the education landscape in Myanmar from two years ago. (See *Online teaching and learning section* below for continued discussion of methods and approaches using various platforms and applications.)

In terms of **technology support**, responses were mixed. Teachers reported mixed levels of support, with some saying they learned through sharing with co-workers, or on their own looking at YouTube videos (most of which are in English). One teacher mentioned Mote Oo's support to move to a flipped classroom, while another requested more coaching and training. Principals and managers said they had shared how-to videos in Burmese, and one school spent three months preparing teachers to use an LMS. Some schools helped teachers to set up WIFI in their homes, paid their Internet bills, and provided laptops to teachers. Another school paired new teachers with teachers more experienced

with technology, and another offered skill sharing sessions and weekly teacher meetings. The approaches reported by all stakeholders appear to be ad hoc and reactive efforts, indicating potential for a longer-term strategy for teacher orientation and ongoing skill building.

Lastly, data was collected on **cyber security** measures taken (see Figures 4 and 5), survey respondents indicate that nearly 89% of teachers and 85% of students are using a virtual private network (VPN). However, it wasn't surveyed if they were using VPNs on phones, computers or both. The next most common cyber security measure indicated was the use of secure messaging apps such as Signal, Telegram and WhatsApp, used by less than half of teachers and more than a third of students. Encrypted email was not as commonly used, although a slightly higher percentage of students than teachers use this option. The use of an alias was used by less than 10% of either group.

FIGURE 4: TEACHER CYBER SECURITY MEASURES

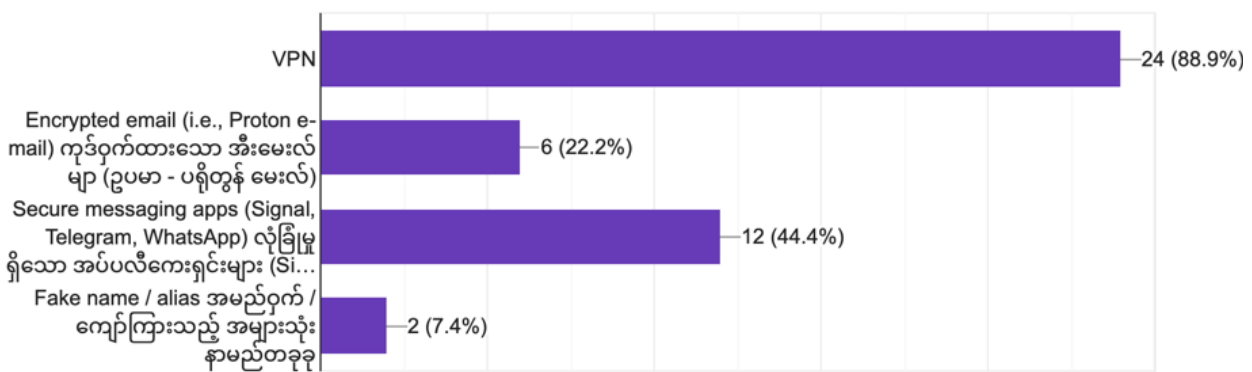
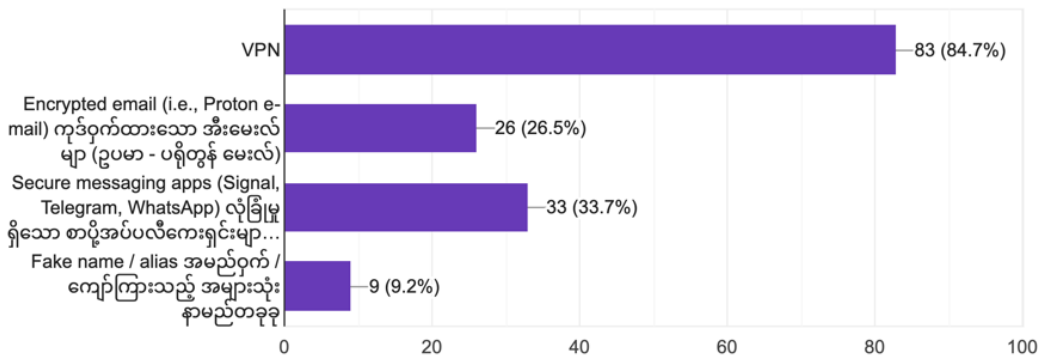


FIGURE 5: STUDENT CYBER SECURITY MEASURES



Online Teaching & Learning

A discussion of online teaching and learning should be framed around the levels of **motivation and confidence** to teach and learn online. Survey responses indicate higher levels of motivation than confidence among teachers (see Figures 6 and 7). It is noteworthy that no teachers indicated they were *not at all* confident or motivated, and a minority reported *not very* confident (12%) or motivated (9%). The greatest gap are the responses to *highly* versus *somewhat* confident and motivated, indicating high levels of motivation to continue to learn and grow.

FIGURE 6: TEACHER CONFIDENCE TO TEACH ONLINE

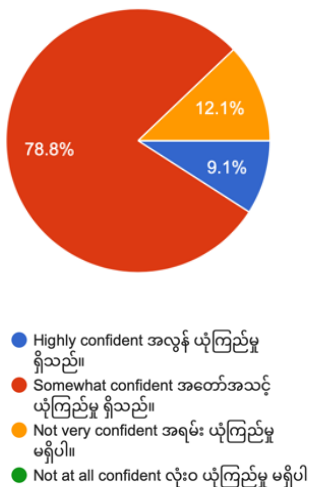
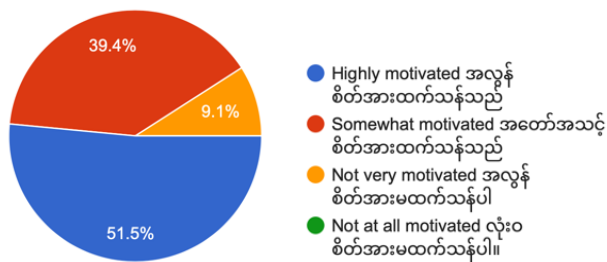


FIGURE 7: TEACHER MOTIVATION TO TEACH ONLINE



Teachers and students were less likely to express motivation for online teaching and learning in interviews. Most teachers reported low levels of motivation, feeling burdened by needing to remind students of assignments, make follow-up phone calls, and manage their own stress and anxiety. One student stated that motivation to continue in online learning can drop when students get behind with the first assignment. One respondent said one can assume students are motivated by the fact that they signed up for an online course, and that 70% of their students are Ok with asynchronous learning and motivated to self-study. Several respondents across stakeholder groups noted that motivation to learn is high due to many youth being unemployed, including those in IDP camps, and the current context driving interest to better understand topics like democracy and politics. Confidence and motivation are therefore complicated at the moment, and inter-woven into the difficulties of daily life.

Survey respondents indicate a wide variety of **tools** are used, with Zoom being the most popular by far, as reported by 97% of all teachers and students (see Figures 8 and 9). Facebook Messenger is reportedly used by nearly 60% of both teachers and students, but more likely for ongoing communication and assignment of self-study tasks. For all other tools included in the survey, responses were mixed between teachers and students, likely the result of a small sampling, and that respondents come from different partners and programs. There is significant use of Google Classroom and Google apps, as reported by teachers, as well as Microsoft products. Survey responses also show strong use of e-mail, messaging applications (Messenger, WhatsApp, Signal, Telegram) for sharing self-study content, while use of an LMS was reportedly low – 12% of teachers and 8% of students (see Figures 10 and 11).

FIGURE 8: APPLICATIONS AND ONLINE TOOLS USED FOR EDUCATION PURPOSES (TEACHERS)

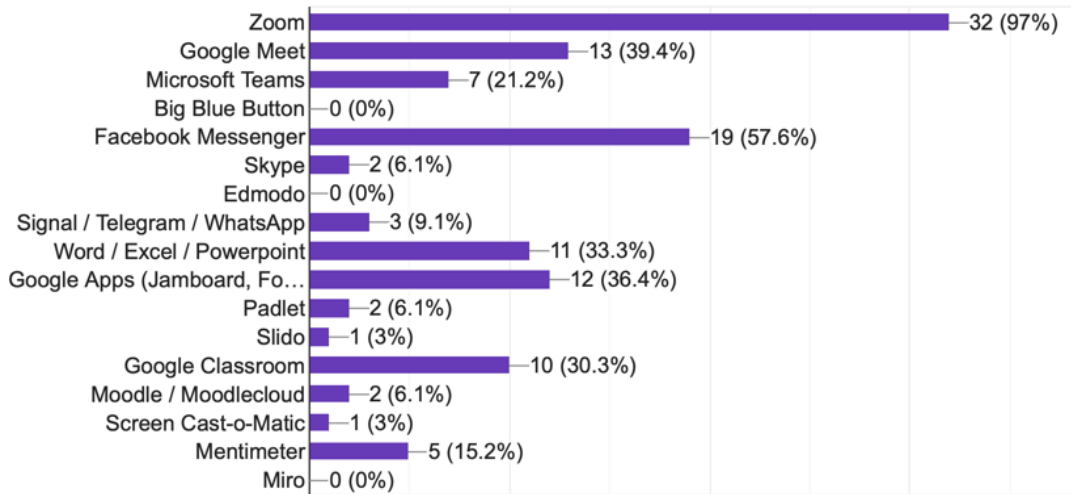


FIGURE 9: APPLICATIONS AND ONLINE TOOLS USED FOR EDUCATION PURPOSES (STUDENTS)

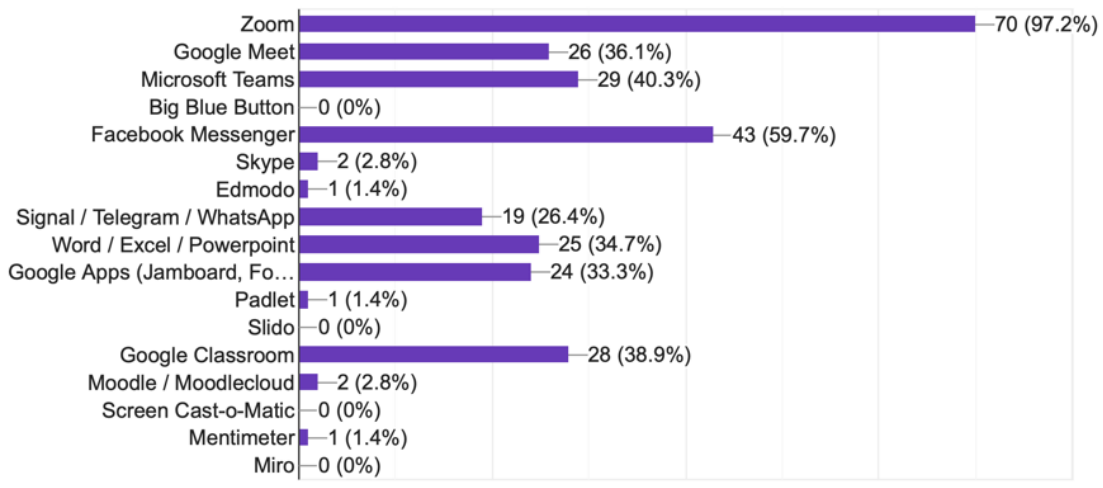


FIGURE 10: METHODS OF SHARING SELF-STUDY ITEMS (TEACHERS)

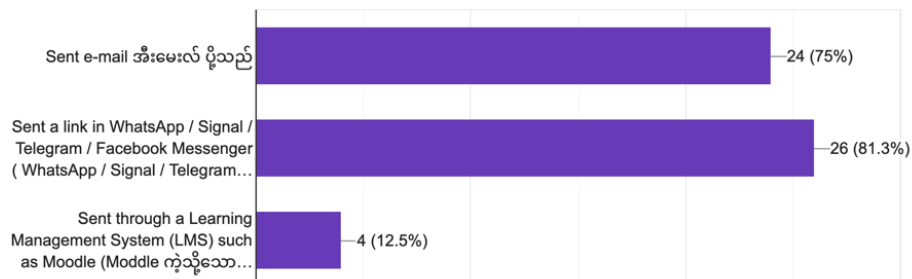
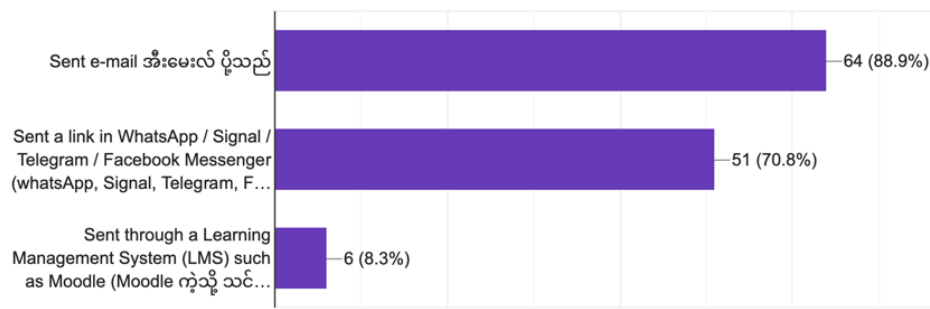


FIGURE 11: METHODS OF SHARING SELF-STUDY ITEMS (STUDENTS)



In interviews, teachers spoke less about platforms and tools, and more about frustrations related to the amount of time needed to prepare content, too much screen time, and difficulties in fostering student interaction in online spaces. One thematic expert stressed the need for integration with social media, stating, “Unless it can connect and integrate with commonly used social media platforms, I don't think it [platform or tools] will be used. There are a host of organizations providing online content, but I found that the most effective ones leverage existing social media.”

While some teachers reported feeling that their tech skills were still weak, which was also seen as an issue by principals and managers, other teachers and principals stated that most of their students have no computer or technology skills, and that they must first be trained for online learning. The interview data indicates a correlation between rural and urban areas, with students in rural areas lacking previous exposure to computers and technology.

Responses also indicate that participation in synchronous activities is low, with many students having their videos off, or not voluntarily participating in class discussions. One interviewee mentioned the need for more structure, such as calling on students by name rather than waiting for volunteers to unmute. Some student interviewees question whether classmates are keeping the video off to save data costs, or because they lack motivation and/or want to work on other tasks but still appear to attend class. Several students expressed pressure to study while also working full-time, a reality reflective of the current situation.

While not included in the original lines of inquiry, several responses related to **curriculum development** (which in some instances may actually mean course design), merit comment. The data indicates a plethora of materials are being created in an ad hoc manner, and not necessarily with regard to existing materials that could be translated and/or adapted to the Myanmar context (i.e., video clips on a particular subject that could be subtitled). One thematic expert expressed the importance of collaboration among organizations, stating, “More than anything, I think students need consistency right now.” Respondents also expressed confusion as to roles and responsibilities for development and/or adaptation of materials for online learning, with some teachers saying this is beyond their skillset. Most interviewees acknowledge the needs are great, and should be broken down into realistic steps, involving teachers to come up with manageable steps to creating both curricula and content. A few respondents suggested a certain amount of experimentation is needed, and that some trial and error will help schools come up with solutions that work for their specific target groups.

The data indicates a variety of **methods** are being used by teachers for online learning (see Figures 12 and 13). Teacher survey responses show that most (90%) report using blended learning, with just under half (48%) report using self-assessment items (quizzes, polls or surveys) and encouragement of student-to-student engagement outside of class. Teacher survey responses show that 85% of student tasks are completed *most or all of the time* by students, with a very small percentage not completing tasks at all (see Figures 15 and 16).

FIGURE 12: ONLINE TEACHING METHODS USED (TEACHERS)

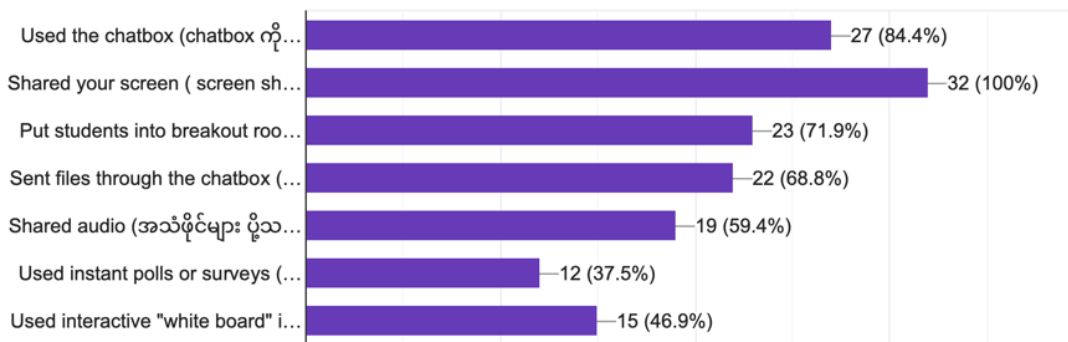


FIGURE 13: ONLINE TEACHING METHODS USED (TEACHERS) (continued)

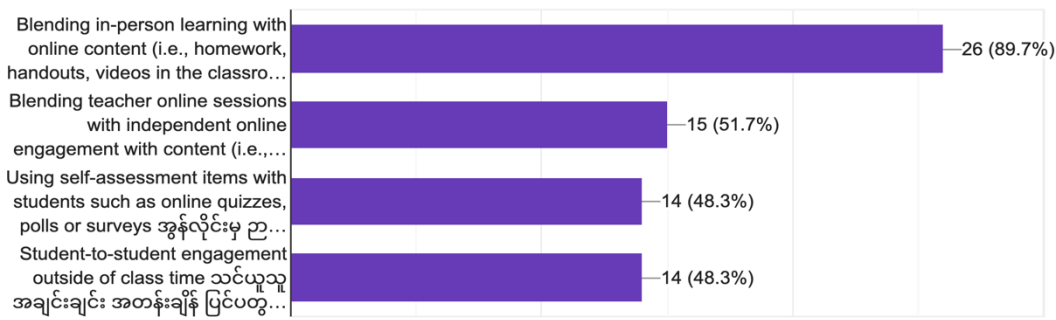


FIGURE 14: ONLINE TEACHING METHODS USED (STUDENTS)

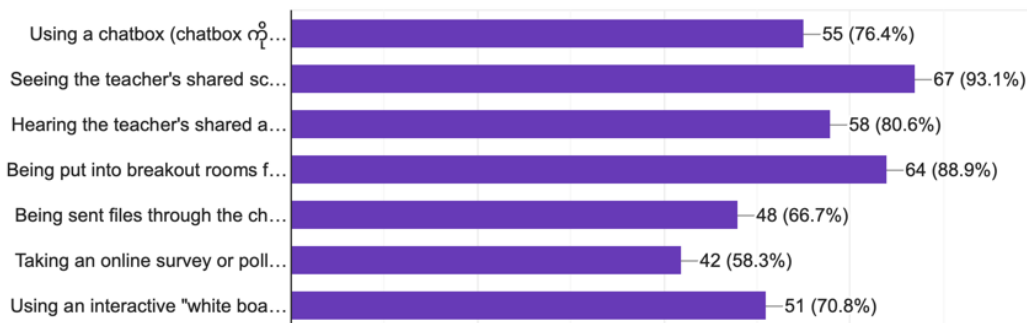


FIGURE 15: SELF-STUDY TASKS ASSIGNED

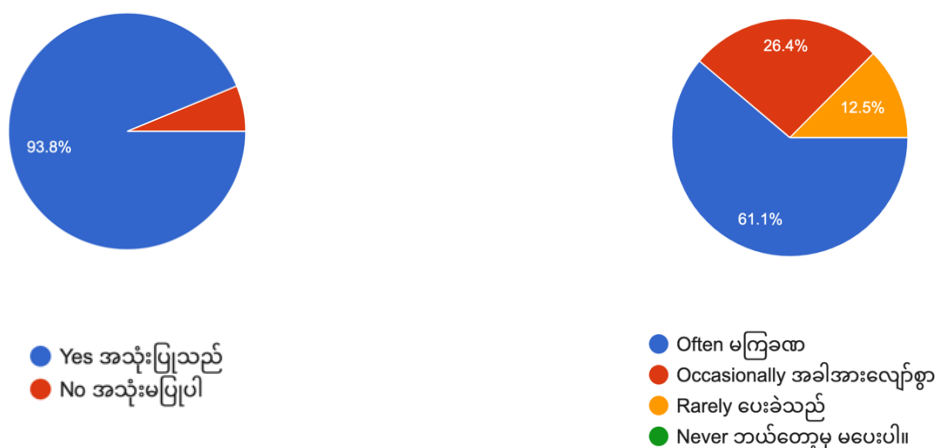
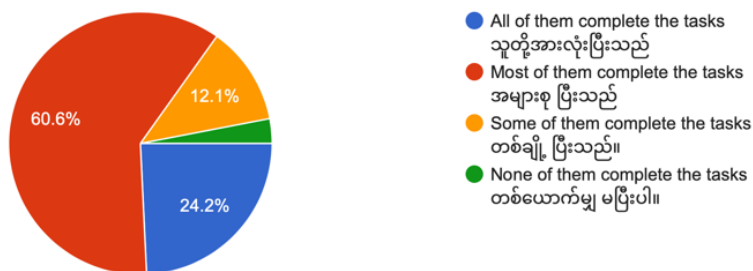


FIGURE 16: TEACHER PERCEPTIONS OF TASK COMPLETION BY STUDENTS



Interview data shows less discussion of ‘blended’ or ‘flipped’ learning, with few teachers mentioning this approach specifically. Interestingly, these terms came up much more frequently in interviews with principals/managers and thematic experts who were also far more likely to use the terms, ‘synchronous’ and ‘asynchronous’. Student responses indicate low awareness or understanding of the value, or purpose, of asynchronous learning. Nearly all students said there is too much homework, and that outside assignments are seen as an added burden. One stated, “Sometimes we feel like we have classes even on the weekends, besides having projects for every course. There is no rest time for us, and there are many pressures.” Students did list several interactive elements that they appreciate such as group projects, games, energizers, and in-service learning. One respondent said they appreciate working on group presentations, researching a topic and sharing with the rest of the class, and another expressed dissatisfaction with lecture and Q&A styles of teaching. Some students commented on the lack of celebrations in online classrooms, such as birthdays or milestone achievements. One student expressed empathy for teachers saying, “If I were a teacher, I might feel I’m the only one when students don’t respond.” Lastly, one student said it’s difficult for teachers to address conflicts between students – not only responding to conflicts, but recognizing that there are conflicts due to the inability to read body language or student interactions online.

The data indicates that teachers are using a variety of activities to drive student engagement such as use of breakout rooms for group discussions, photo homework assignments, assigning pre-reading and videos. However, it’s not clear to what extent these choices are strategic and used in service of learning objectives, or which activities are used in an effort to simply recreate an in-person classroom

experience. For assessment, teachers are using methods such as questions sent through Messenger and post-reading quizzes. One teacher stated, “I can only lecture in a video chat,” indicating a low awareness of online tools to make online learning engaging, and for assessment and evaluation.

Interview data on **teaching and learning support** presents a nuanced picture of support given, as well as support desired. Some teachers feel overwhelmed with the amount of time needed to not only prepare content for online teaching, but to also support students by providing technical skills in addition to their regular course content. Principals and managers offered several examples of ways in which teachers have been supported such as assigning advisors to teachers who are struggling, allowing additional preparation and coordination time, sharing sessions among teachers, creating self-study videos for technology tools, and giving time for coordination and sharing among teachers. They also acknowledged that they lack the resources to support the teachers more. One principal said they have developed their own guide for online teaching. Some schools support students by housing them in hostels and providing Internet access and a more conducive learning environment. There are likely trade-offs related to funding as to who to support, and how. One teacher mentioned the lack of resources in Burmese, indicating a need for existing content and resources from other countries with similar contexts to be translated and/or subtitled. Several students expressed appreciation for school housing, while also acknowledging efforts their teachers made in making online learning effective, including activities like monthly meetings with students who need extra help keeping up with assignments.

One teacher said that they had not received support for teaching design, and expressed confusion about their responsibilities related to curriculum adaptation. This is seen as a specialized skill, and not part of a teacher’s mandate. Teachers are equipped to adapt in-person learning, but this is much more difficult to do when the platform has changed to online. It was acknowledged that different schools have different structures and cultures, with varying degrees of communication between teachers and administration. This indicates a need for greater clarity on roles and responsibilities in post-secondary education, and collective problem-solving to address gaps created by trying to replicate the in-person learning experience in an online environment. As well, a more thorough understanding of asynchronous approaches involving student-to-content or student-to-student engagement is needed.

Both teachers and students report significant **challenges** in online teaching and learning. Survey respondents indicated that their environment was not always conducive for online teaching and learning (see Figures 17 and 18). Difficulties mentioned in interviews included interruptions from children or parents, loud construction noise and nearby loudspeakers resulting in a noisy and chaotic environment in which it is difficult to focus. These responses were supported by interview data, with Mote Oo trainers offering their own observations of the ways in which teachers are interrupted during training.

FIGURE 17: TEACHER ACCESS TO APPROPRIATE TEACHING ENVIRONMENT

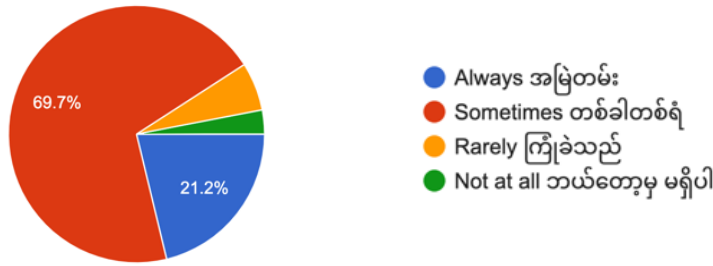
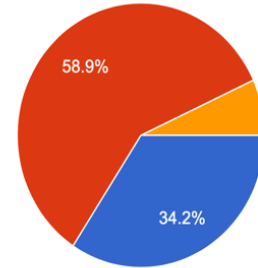


FIGURE 18: STUDENT ACCESS TO APPROPRIATE LEARNING ENVIRONMENT



In interviews, teachers stated that they struggled with knowing how to structure online teaching time, how to prepare content, and how to fit the same amount of content from in-person teaching into an online format. Assessing students was also mentioned, with one teacher stating, “I thought that students were understanding the content, but later learned that they didn’t get it.” One thematic expert acknowledged this same issue stating, “It’s easy for students to sit back and not participate. We need to require interaction.”

Interviewees acknowledged the pressure many teachers have had to adapt quickly, rushing to adapt curriculum without knowing how, or being given the time or support to do properly. As one interviewee stated, “Rushing reduces quality, and there is enormous pressure on teachers who don’t necessarily know about curriculum development.” This respondent went on to say that moving to online education has de-centered teachers in a way that has been disorienting, particularly given Myanmar’s traditional emphasis on rote memorization and teacher-centered education. “There is a huge need for content, techniques, and approaches, and teachers try to cram everything into shorter online sessions. But the more content they get, the more they need to improve their technology skills to deliver that content.” Much of the interview data reflects an acknowledgement of the paradigm shift that this has created for Myanmar. One respondent asks, “How can teachers adapt materials for online teaching when they themselves are not familiar with [have not experienced] effective online learning?” Additionally, thematic experts spoke of the challenges involved in the online teaching of topics that are largely relational and involving communication skills.

Student-Specific Issues

Students reported high levels of appreciation for their teachers in making the shift to online teaching, while at the same time expressing dissatisfaction with having to learn online. While some students reported advantages to online learning, especially when delivered in an interactive way, others reported more difficulties and downsides than upsides. One student mentioned the difficulty of time management, commenting that most students complete assignments at the last minute, or don’t finish at all. Another student said that teachers need to enforce a grade point system to encourage students to complete tasks, and they need to be prepared to follow-up and stay in touch with students who are falling behind. Students mentioned frustration in knowing that other students cheat or do the bare minimum to get by, that students don’t respect teachers online like they do in the classroom, and that some refuse to do assignments or participate in peer-to-peer learning. It should be noted that this data was collected during a time of high anxiety and isolation in many areas, and would indicate a need for teachers to have greater psycho-social awareness at this time in order to better manage student trauma and lack of intrinsic motivation.

Principals and managers stated this is a more stressful time for students, which impacts their ability to work outside of the online session. One school said they lost 10 out of 34 students in one class after switching to online learning, and acknowledged major challenges in keeping students motivated. One stated, “We can observe and support mentally/physically/good learning environment in the classroom, and provide direct support on the spot. But online it’s invisible, we don’t know about tensions among students, and connection challenges are time-consuming.”

Best Practices from Respondents

Each stakeholder group offered ideas for best practices. This list below represents an overview of best practices collected in the interview data, and opinions in this section are those of the interview respondents. **For recommendations from the research team, see the *Recommendations* section below.**

ACCESS

- Schools with the means should set up student hostels in order to provide WiFi and consistent electricity, as well as a more conducive environment for learning; and
- Work with local communities to find solutions to housing students and providing them with a conducive learning environment.

TOOLS

- Use Google Classroom for teaching, and supplement with Facebook to develop sharing and interaction among students;
- Teach using a laptop, and allow teachers to take laptops home when needed;
- Use only tools students can comfortably use on their mobile devices; and
- Include a technology orientation for both teachers and students.

APPROACHES

- Limit online teaching time to 2 hours per day, if possible (another respondent said to limit teaching time to 1.5 hours);
- Limit online participants to 20-25 (another respondent said to allow teachers to teach in teams for higher student-to-teacher ratios);
- Limit videos used for assignments to 5 minutes to preserve bandwidth;
- Invite guest speakers to create variety;
- Engage students in topics they want to learn about to increase motivation for online learning;
- Provide feedback on how many students (“x out of x”) have completed assignments, and reward those who do complete all assignments to increase engagement;
- Offer clear and consistent timing of assignments – i.e., weekly assignments sent on Monday, and must be submitted by Wednesday;
- Use storytelling to allow students to contextualize their experiences to foster greater understanding across ethnic groups of their history and values;
- Use simple tools and sharing in breakout rooms;
- Allow students adequate time (ideally at least 48 hours) to review materials before engaging with content;
- Use a Knowledge/Skills/Values framework for online teaching as a tool for driving behavior change, vocational competency and reflection;
- Provide opportunities for students to use their phones such as taking photos and recording audio for homework submission;

- Foster teacher/student connection by fostering engagement, and learning and using students' names;
- When possible, recreate virtual activities such as school assemblies, debate clubs, essay competitions, and webinars;
- Use quizzes, games or puzzles to assess evaluate student performance;
- Include assignment completion in evaluation criteria;
- Implement grade point system to encourage assignment completion, and acknowledge and celebrate the students that consistently complete tasks; and
- Teachers need to be aware of the student's situation and surroundings, and be empathetic and sensitive to how lessons or materials may be received.

SUPPORT

- Provide opportunities for teachers to share their knowledge and experiences, help each other, and build communities of practice;
- Provide opportunities for teachers to be observed and receive feedback on lesson plans;
- Prioritize building capacity for teachers to develop fundamental "micro" skills that they can have ready when/if the situation returns to normal – classroom management, learning new applications and tools, eliciting responses from students online, soliciting and receiving feedback, and monitoring student progress;
- Support classroom management in online classroom, then visit teachers in those spaces to mentor them;
- Teachers should develop relationships with students by following up with phone calls if there are signs of low student motivation (incomplete tasks, non-attendance, etc.);
- Teachers can create a coaching plan in anticipation of needing to motivate students to engage fully online;
- Provide online opportunities for developing communities of practice for both teachers and students; and
- Teachers can help students overcome challenges in their learning environments, and increase motivation, by being aware of their circumstances and showing empathy towards them.

RECOMMENDATIONS AND CONSIDERATIONS

Principals and Managers

- Promote online safety and digital security for all stakeholders in all programs and activities.
- Create and/or maintain ongoing communication channels with teachers, students and parents to ensure decisions are informed by current conditions, available resources and abilities. Several messaging platforms (Messenger, Viber, WhatsApp, Signal, Telegram) enable easy access and responses to be sent as time allows. This would also foster increased coordination among schools to share resources and best practice, and provide time and online space for teachers to develop communities of practice.
- Consider adding technical staff to support teachers with online teaching, including support during real-time teaching by dealing with people dropping off and logging back in, putting students into breakout rooms, storage and maintenance of online resource files, and support for development and storage of online content such as video subtitling, interactive tools (i.e., PowerPoint slides, Padlet pages, Jamboard, etc.) Teachers need support in creating online content, most of whom were never trained in developing these kinds of resources. Schools may want to consider work placement students or interns, utilizing a younger generation that is technologically savvy.
- Given the amount of existing, useful technology and teaching resources online, include a budget line item for ongoing translation and/or subtitling of existing materials into local languages to be used as teacher resources.
- Create and/or expand new teacher/staff orientation to include technology skills and understanding of online pedagogy and approaches, as well as considerations for online learning and ways to support student learning skills.
- Support teachers in building their capacity to create and/or manage online resources such as organizing, naming and backing up digital files for easy retrieval later on, saving time in the long-run by being able to re-use materials.
- Map out and analyze where curricula are coming from in order to clarify roles and responsibilities between curriculum development and teaching so that teachers are not tasked with duties beyond their skill set.
- For development of any new online curriculum, consider holding an extended workshop that involves teachers to develop appropriate content and methods.
- Work with teachers to create and/or modify monitoring and evaluation systems that include issues specific to online learning (i.e., understanding of self-study methods, technical support, etc.), and that are fully integrated into teaching in ways that save time and/or take advantage of technology tools (i.e., Google Forms and Zoom polling).
- Consider developing parent-specific support systems, and/or resources for teachers to share with parents so they are informed about best practices for online education, and can therefore help support a conducive learning environment for their children.
- Build psycho-social understanding with teachers in order to ensure trauma-informed teaching methods, as well as fostering self-care among teachers to address both the psychological effects of the current context, and the physical effects of online teaching (i.e., eye strain, body tension, etc.)
- Clarify and promote school values and standards in an effort to combat the private sector disruption to the field (i.e., fake certificates, buying and selling diplomas) and to educate potential students on the long-term benefits of known and respected schools.

Teachers

- Expand understanding of existing models of teaching (for in-person teaching this means a full day of student-to-teacher interaction) to include online learning models that also include student-to-content, as well as student-to-student, interactions.
- Continually work to manage student understanding and expectations about real-time (synchronous) versus self-study (asynchronous) learning to reduce student perceptions of homework or self-study as burdensome. This requires breaking away from traditional norms of teacher-centered education, and supporting students to learn self-study skills to increase uptake of new content, and increase motivation to engage in self-study methods.
- Build capacity to teach subjects online that require relational skills (i.e., psychology, communications, journalism, management) by promoting appreciative inquiry (focusing on what's working well) in addition to critical thinking, and encouraging thoughtful and supportive student-to-student interaction in breakout room sessions and assigning study partners and/or groups outside of class time.
- Take a proactive approach in developing the ability to create and manage online resources. This requires organizing, naming and backing up digital files for easy retrieval later on, saving time in the long-run by being able to re-use materials.
- Advocate with principals and managers for time and money to subtitle and/or translate existing online teaching materials, leveraging existing, high-quality online content.
- Help to develop and/or participate in communities of practice with other teachers to share best practices and resources, as well as get support.

Post-secondary Education Support Organizations

- Prioritize what is immediately feasible, and start with only the most in-demand materials requested for online learning. Recognize the multiple ways teachers are being asked to grow and learn (i.e., myriad online platform possibilities, class size, methods of delivery). Start small and go step-by-step.
- Hire technology support for staff to help organizations respond to the demands of putting existing resources into online formats, and introduce any new technology tools to partner organizations and/or teachers.
- Create and/or expand new staff orientation to include technology skills.
- Promote online safety and digital security for all stakeholders in all programs and activities.
- Identify organizational strengths and set boundaries to ensure the best use of your staff resources and expertise, while at the same time maintaining a list of referral organizations for requests that go beyond those strengths and expertise. Greater collaboration and communication in the field is needed to support the survival and appropriate development of post-secondary education in Myanmar.
- Evaluate existing organizational structures to factor in staffing and resources needed to support online education, including staff self-care and realistic workloads. Extra effort is needed to maintain communication and support to keep staff engaged, motivated and taking care of themselves in the current context.
- Develop and use consistent language to establish common vocabulary (i.e., LMS, synchronous/asynchronous, home-based learning).
- Recognize and support teachers for skills beyond teaching such as lesson planning, adaptation and localization of materials, creating and maintaining digital resource libraries. This may

include collaborating with teachers and/or principals and managers to come up with customized systems and solutions that would allow them to work more efficiently and, in the long run, focus more on teaching because they will be able to better leverage existing materials.

- Support research that seeks to better understand low-resource environments and ways of overcoming technology and access challenges.
- Create and maintain a “hotline” for teachers and/or partner staff who are trained in order to systematize feedback loops. This can also help to efficiently organize support to address commonly-asked questions and/or inform programming decisions of current needs. Several messaging platforms (Messenger, Viber, WhatsApp, Signal, Telegram) enable easy access, and responses to be sent as time allows.
- Clarify and promote organizational values and standards in an effort to combat the private sector disruption to the field (i.e., fake certificates, buying and selling diplomas) and to educate potential students on the long-term benefits of known and respected schools.
- Foster communities of practice by offering guidance for teachers and partner organizations to set up and maintain online forums for sharing and support. Encourage teachers and principals/managers to offer the same for student communities of learning.
- Consider linkages with other educational efforts (including private schools with more ample resources) who have well-developed technology tools, and tech-savvy alumni eager for internship and volunteer opportunities. This could present a win-win for them to gain valuable experience accompanying experienced trainers, while offering much-needed technical support.

Donors

- Fund and support post-secondary online education for support efforts such as translation and subtitling of supplemental materials (articles, videos, etc.), additional technology training for staff, subscriptions to various online tools, financial support for rising data costs, and/or creation/maintenance of student housing.
- Work with local organizations to define, clarify and create appropriate and manageable ongoing monitoring and evaluation mechanisms that are culturally appropriate and realistic in the current low-resource (i.e., limited access to Internet and technology hardware) and high-risk context.
- Recognize that curriculum development and teaching require different skill sets. Post-secondary curricula for online learning that is accessible and contextually appropriate is needed, and falls outside the scope of what teachers have been trained to do.
- Support capacity building of teachers who need to run their own programs by funding things such as organizational development, curriculum adaptation and localization, and development and maintenance of digital tools, files and platforms.
- Support research initiatives that seek to understand low-resource environments and ways of overcoming technology and access challenges.