



M-SHULE

M-Shule is the first personalized mobile learning platform in Africa to connect learners with tailored tutoring, training, assessments, and data through SMS and texting. Based out of Nairobi, Kenya, and meaning “mobile school” in Swahili, M-Shule’s platform uses artificial intelligence to deliver personalized learning support in academic and 21st-century skills over SMS and chatbots, building concept mastery, skill, performance, and confidence. M-Shule analyzes data and shares insights with key stakeholders and organizations to power better support, reporting, and collaboration.

M-Shule focuses on the provision of accessible education to impact lower-income communities. The team recognized that parents and learners are not getting the right support for education due to a lack of sufficient resources and technical knowledge, as well as the lack of access to information and communication technology. They wanted to utilize existing technologies such as mobile phones, both smartphones and feature phones, to be able to reach communities without the requirement for additional resources and identified the use of SMS technologies to be the most efficient approach.

Content is produced with educators as well as content publishers to ensure both localization and relevance of content to the targeted learners. The material was produced in bite-size pieces and is capable of adapting to the different levels of the learners based on their interaction and responses with the content. The content is delivered via SMS, and M-Schule works with local telecommunications companies to push out material at no cost to the learner. Usually, the school pays for the cost of SMS technology and students can interact with the material with no additional cost. In situations where learners are accessing the technology independent of school service, the cost of accessing the technology is between 1 USD or 2 USD for three months of access.

Students can sign up through SMS and will be asked a series of questions to initially determine their level of understanding in addition to standard questions about their last grade level and the last set of formal exams that they took. Throughout the interaction with the technology, students are constantly assessed on their understanding of a particular educational concept and based on their responses. The platform can either accelerate or remediate learners through academic content.

M-Shule's goal was to provide learners with the skills and education that were relevant to their particular needs. The program started off using literacy and numeracy as the initial educational content and then developed vocational education for all parents of learners.

SOLUTION

Criteria	Category	Details
Technological Readiness	Basic phone/SMS	M-Shule makes use of existing technologies the learners have access to: both smart and feature phones. Uses SMS technology to deliver and interact with the learner.
Content availability	No	Content is developed by an internal team in line with the Kenyan national curriculum and is available in English and Swahili
Personalization	Yes	The platform uses AI and machine learning to assess a learner's progress continuously. Assessments are used to check learner's mastery and content is delivered per learner state
Interactivity	Yes	The app encourages student learning through active interaction with the platform. Students request for educational content and interact with SMS' through formative assessments. Content is then personalized for the learner based on their continuous assessment.

Mode	Synchronous	Synchronous, direct interaction with the platform via SMS/Tablet app.
Feasibility to replicate		
Time	Short	Immediate access is available to all users on a subscription basis. Alternatively, schools/organizations can purchase bulk subscriptions for their learners.
Effort	Low	Learners need to send an SMS to subscribe to the platform and can use the platform using their feature phone or a basic smartphone
Money	Medium	For an organization looking to implement M-Shule, a custom package is created based on their program, sector, number and demographics of users, and features or tools they require. For setting up the project, M-Shule may create customized content or design program-specific reporting; during implementation, they will cover all costs of each learners' engagement based on the amount of content and information going out.

FOLLOW-UP AND IMPLEMENTATION

Criteria	Category	Details
Preparedness of teachers to design and facilitate learning	Low	Teacher independent – learners can access learning resources without the need for a remote educator.
Availability and ability of parents or caregivers to facilitate effective	N/A	Parent and caregiver interaction is minimally required: need to provide their learners access to the phone.

home-based
distance learning

Monitoring and evaluation capacities

Monitor distance learning processes	Yes	The platform uses data to understand learner pace and progress to deliver appropriate content
Track the access to courses and engagement	Yes	Student progress is tracked through continuous assessment. Students interact with the platform in a series of responses to questions that determine how the learner is progressing through a learning pathway. M-Shule uses a notification system to encourage learners to return to the application.
Assess learning outcomes	Yes	
Sustain immediate distance learning responses for achieving long-term goals	Yes	M-Shule was able to continue supporting learners during the COVID-19 pandemic.

IMPLEMENTATION CHALLENGES

The COVID-19 pandemic resulted in a significant uptake in the number of users since the school closures. Before the closures, approximately 11,000 learners were using the platform, but the number of users increased to 13,000 as of June 2020.

Learners were initially using the platform as a supplementary education tool. There has been an increase in the number of learners who use it as their primary means of education. Parents of the learners have been supportive in the provision of access to phones for the learners to use. Given the increase in parental involvement, the organization has sought to help parents by providing additional resources such as timetables and schedules for the learners to help manage their days.

There has been an increase in the request for additional content as the platform currently only supports learners between grades four and eight.

TAKEAWAY LESSONS

The “mobile school” offers an alternative to the traditional education system where students receive personalized content. M-Shule has been able to support the continuation of education for many, particularly during the pandemic. The team has found that the learners have begun to start using MShule as their primary means of education; therefore, the organization recognized the need to provide additional support to the parents: such as daily learner schedules and subject support, as well as developing digital literacy resources for parents. The model can be leveraged in the case of any interruptions to learning to enhance the resilience in the education system.