



ICT can reach further

South Africa

Project name:
MLearner

Teacher:
Kumaras Pillay

School:
Burnwood Secondary School, Durban

Learning areas:
Mathematics and Science

Objectives:
To help learners pass Mathematics and Science by helping them to better understand various sections of the syllabus in a manner that is truly novel, fun, exciting, as well as free

Outcomes:
The teaching resources are available anywhere, anytime and for free via mobile phone

“Officials from the Department of Education embraced my innovation and heralded it as a breakthrough in education.”

— Kumaras Pillay, Burnwood Secondary School

The objective of the highly innovative project made by Kumaras Pillay from Burnwood Secondary School in Durban, South Africa, was to help students pass Mathematics and Science by helping them to better understand the various sections of the syllabus in a manner that is truly novel, fun, exciting as well as affordable, using the only piece of technology available to them – the mobile phone.



Situation

Burnwood Secondary School in Durban, South Africa, turned 40 this year, and there are about 1,200 students and 37 educators on staff. Most of the students (77%) come from nearby informal settlements, and several of them come from unstable home environments and

dysfunctional families. The community is very supportive of staff and there is a very committed school governing body which always encourages educators to give off their best by helping in creating a favorable school environment. The challenges that the school faces are not viewed by the staff as obstacles, but rather as opportunities.

Objectives

The project uses the cell phone as a tool to reach digitally literate children. The objective is to help learners pass Mathematics and Science by helping them to better understand various sections of the syllabus in a manner that is truly novel, fun, exciting, as well as free. Research indicated that a significant number of individuals in rural communities have access to cell phones, while computers and Internet access are virtually non-existent. “The poorest of our

„Mlearner easily crosses the digital divide, using technology that is common across all of our people.“

— Kumaras Pillay, Burnwood Secondary School

students should not be discriminated because they lack finances, educators or resources. So, the resources must be available anywhere, anytime and free. So the Mlearner project was designed to work on the most basic of cell phones”, says Kumaras Pillay, the teacher of Burnwood Secondary School in Durban, who came up to the idea of using mobile phones as a means of transmitting the syllabus to the students.

One of the primary objectives was that the examples must be laid out in a simple, easy-to-follow manner, with no room for confusion, doubt or uncertainty. Also, the work must be taught in a new and exciting way, to reach children at their level and area of expertise. The needs of the curriculum were addressed section by section in consultation with subject advisors in the higher Education authorities in South Africa, and the chosen examples are relevant with the final examination papers that the students have to fulfill correctly in order to pass the important exams in Mathematics and Science.

Outcomes

“When presenting my Mlearner project to high ranking officials from the Department of Education, they embraced my innovation and heralded it as a breakthrough in education, stating that this was the first of its kind. My research started about two years ago, and required technological mastery and the use of cutting edge technologies. With help from Microsoft Front Page, the project achieved its goal. Mlearner project is the first of its kind, and I have not found this type of product operational in any schooling system in the world” says Kumaras Pillay.

Classes remained arranged in the traditional way when the students were in the physical classroom, but after the lessons was over, the in hand-classroom was available through the cell phone. The teachers were able to manage the project quite easily, because of the manner in which the project was designed. The main task was to present the Mlearner Web site to the learner, observe and interact where necessary.

“The sections are well laid out and easy to follow – just what our learners need. The fact that it is in full color is a bonus”, said one of the teachers who participated in the project. Many of the students appreciate the fact that the material is free of charge, as most of them cannot afford private tuition or software. “Sir, it is really cool to study from my cell phone. I actually used it late last night while studying for my test and I now understood my work better”, said one of Mr. Pillay’s students after using the benefits of this truly unique project.

“It is safe to say that Mlearner easily crosses the digital divide, using technology that is common across all of our people, and giving all learners the same opportunities”, Kumaras Pillay concludes.