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Brenda McDonald

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Résumé de l'article

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66. *Appropriate Distance Education Media in the Philippines and Mongolia*

Brenda McDonald
Centre for Distance Education, Athabasca University, Alberta

Abstract

Recent educational projects in the Philippines and Mongolia have revealed effective educational delivery methods as well as necessary changes to ensure DE access for as many learners as possible. A project initiated by Canada's International Development Research Centre (IDRC) has stressed the value of DE delivery through cellular phone technology. As the cell phone becomes increasingly available in Mongolia and the Philippines, its use to deliver education promises to compensate for the relative lack of Internet access in these countries. The IDRC project illustrates how appropriate distance education methods in Asian countries will assist in economic and social development.

Keywords: Mobile learning; cell-phone; appropriate technology; Asian distance education

Current Filipino and Mongolian Initiatives

As Sir Francis Bacon wrote, "Knowledge is power." When people have knowledge, they are able to participate in the development of their countries and they cease to be bystanders on the world stage. For this purpose, countries such as Mongolia and the Philippines are motivated to offer their citizens effective, affordable, and appropriate means to access distance education (DE). These two countries have participated in recent projects to determine the best way to deliver DE to urban and rural learners who typically cannot afford it. This report discusses the results and formal evaluations of these projects and of other current initiatives designed to improve DE access. Only by examining the outcomes of such initiatives can stakeholders identify the most useful methods and move ahead with appropriate decisions.

Nonformal Distance Education in the Philippines

A recent project illustrating the context and problems of distance education in the Philippines was *Project WASH* (Water, Sanitation and Hygiene for All), initiated in 2004. Sponsored by the International Development Research Centre, the Molave Development Foundation Inc. (MDFI)

embarked on a project entitled *Technology-Supported Distance Education and Training in Water, Hygiene and Sanitation (the Philippines)* (Ramos et al., 2007). The project's purpose was to expose urban slums and rural areas in the Philippines to basic hygiene practices through informal DE, using a variety of formats including popular comic book styles. To this reviewer, a nurse, the importance of such hygiene education cannot be underestimated because even a simple, informal educational initiative can change the lives of people living in inaccessible communities.

The project was conducted in a remote community on Mindanao, one of the Philippine islands. The community is isolated, with one road connecting it to other parts of the island. The community had the necessary technological equipment, such as computers, printers, and scanners, as well as Internet access via dial-up connections, but this access was limited because the telephone service was not available consistently. For this reason, materials were provided in alternative formats – online and CD-ROM. Content was divided into six modules containing topics related to hygiene and sanitation practices that are relevant to the communities. The design was simple, and assistance was provided to first-time computer users to access the materials and to participate in the project. Technical support was also provided. Results were determined through pre- and post-testing of the community participants' levels of knowledge. In addition, focus groups were conducted (Ramos et al., 2007).

The communities reacted positively to these innovations:

> Most of the focus group discussion participants expressed the view that the modules on water, sanitation, and hygiene had a positive effect on their knowledge and attitudes in terms of personal hygiene, eating habits, drinking water, and personal protection. Most participants wanted to share the knowledge acquired from the modules with their families and neighbors, and encourage others to learn WASH through ICT. (Ramos, et al., 2007, p. 222)

The WASH project in the Philippines illustrated that simple, nonformal, media-based education is an effective way to educate people about health and hygiene practices. However, was the project realistic and sustainable? Can other communities in the Philippines and Asia mimic what was achieved, and can the program be delivered cost-effectively? These issues were discussed as the project wrapped up, and the following conclusions were reached:

(1) Up-to-date technical support is needed to ensure that these units run efficiently.
(2) With communities dispersed across 7,100 islands in the country, and with little or no advanced telecommunications infrastructure in many areas, best-laid plans can falter and appropriate technologies must be sought. (Ramos et al., 2007, p. 226)

The first conclusion raises questions about whether technical support is cost-effective for providers and whether governments can provide such assistance for this form of education. The second conclusion indicates the most serious problem identified by the project. In a later section, this report will describe an appropriate cellular technology that is emerging in the Philippines to deliver DE to widely dispersed communities.

Nonformal Distance Education in Mongolia

Although one of Asia's least developed nations, Mongolia is experiencing early success in the use of DE for urban and rural training; in fact, it has been determined that the delivery of education in Mongolia cannot be sustained without it (Amarsaikhan et al., 2009). It is imperative for Mongolia to examine effective and efficient ways to deliver education to its population and to maintain its current UNESCO Literacy Prize winning levels of literacy advancement. DE is a viable solution to the problems of educational access in Mongolia (Amarsaikhan et al., 2009).

DE methods in Mongolia urgently need development, however. Traditionally, DE has been exclusively print-based, but other methods of delivery should be explored, such as radio and television, in order to compensate for the lack of Internet access in rural areas. Amarsaikhan et al. (2009) report recent focus groups that indicated public interest in the development of TV-based learning resources. Students also recommended the use of FM radio as a DE delivery method, and wide accessibility to and usage of FM radio makes this a real possibility. Western communities have relied heavily on the radio for education and communication since the 1940's, and it makes sense to broadcast DE lectures from radio stations in countries such as Mongolia where radio is a primary medium.

The Mongolian report makes no reference to using the Internet as a means for effective DE delivery, a decision that reminds us of the Internet's perceived lack of relevance in many developing regions. Another recent study, however, emphasises that the possibility of online methods is being examined carefully. From 2005-08, the PANdora network of Asian DE researchers conducted a study to evaluate the use of online learning management systems (LMS) in Mongolia and other Asian countries. The study revealed the following:

> A clear advantage of an LMS in Asian education would be the ability to operate efficiently over low-speed Internet connections (but) even this feature is of little use to the majority of DE students in Asia who lack Internet access in any form. (In Mongolia) this is a major problem… (Batpurev & Buyandelger, 2009, p. 86-87)

Clearly, Mongolia is one of the Asian countries that must explore avenues for DE other than Internet-based systems.

Exploring New Technologies

Educators in the Philippines and Mongolia are exploring technologies for DE delivery that go beyond the online methods that are prevalent elsewhere. Both countries are interested in the opportunities of mobile education (m-learning) and the potential use of mobile devices such as the cell phone. The use of cellular technology throughout Mongolia and the Philippines indicates the commitment to mobile devices of their governments and of the public (Ramos et al., 2009). The MDFI, whose WASH project was discussed above, has led a series of IDRC-funded projects

in the two countries to explore the DE implications of Short Messaging Systems (SMS). Known as the MIND project, this initiative examined the socio-economic and gender issues that motivate or hinder cell phone subscribers in using SMS for nonformal distance education.

MIND (Mobile Technology Initiative for Nonformal Distance Education) involved establishing an SMS learning system using a GMS data terminal, SMS software, and support facilities for teachers and students. Support materials were distributed as printed text and audio CDs, following which the students used the cell phone to submit assignments and to respond to quizzes that assessed their learning levels. The results indicated that cell phone DE delivery fit well into the participants' daily schedule. Male and female participants learned the content, took the quizzes efficiently, and submitted the necessary assignments to their tutors via this innovative method (Ramos & Triñona, 2009).

Accessibility and affordability were the main perceived benefits of this project. Students felt that SMS learning was more beneficial than other costlier forms of education. "Learning through SMS has more value for money because of the added benefit of not having to travel and of being able to learn from their homes or workplaces" (Ramos & Triñona, 2009, p. 249). Access to education is a major hurdle for people in countries such as Mongolia and the Philippines; thus, accessible and cost-effective education for large numbers of people offers appealing future directions.

In each of these countries, the potential of DE using SMS methods is remarkable. SMS has the ability to overcome geographical limitations and has proved in these studies to be a cost-effective means of DE delivery. The simple cell phone can be used to deliver educational material and information to vast populations in both the developed and developing worlds, and it is important that full advantage be taken of this new educational technology by educators and governments. However, tutors must be given the necessary tools and training for such programmes to be successful. Many educators interviewed for this project expressed concerns about the level of preparation for DE delivery that they receive (Amarsaikhan et al., 2009).

Conclusions

The studies above indicated that students and teachers alike recognise the need for greater and more appropriate technological support for DE. The development of a wide range of usable course materials is the only way DE will serve an increasing number of users. New ideas are emerging in lesser developed countries such as Mongolia and the Philippines to overcome infrastructure and training challenges. The accessibility and cost effectiveness of DE delivery are issues that need to be addressed because the use of cell phone technology for the delivery of education is an exciting alternative not only for the Philippines and Mongolia but for the world. Cell phones are now available to over half the world's population; they have outstripped the number of landline telephones. Does the future of the cell phone include greater provision of educational services in vendors' packages? If the challenges of m-learning can be solved, it will become a vital force for DE in developing countries and in remote areas of developed countries.

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