Mobile post-training support for data capturers in a health environment

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The Basic Routine Health **Information System for Data** Capturers (HISDC) Project was initiated by the National Department of Health (NDOH) in 2008 to address the need for data capturers to improve data quality in public health facilities in South Africa. The so-called 3 535 project aims to train 3 535 unemployed youths as data capturers over a period of three years. The HISDC Project also supports the Expanded Public Works Programme (EPWP), a government initiative aimed at drawing a significant number of unemployed people into productive work - in this instance, young matriculants.

The NDOH awarded the tender for the 3 535 project to a collaborative team comprising the Health Information Systems Programme (HISP), the Health Systems Trust (HST) and Continuing Education at University of Pretoria (CE at UP). The training programme involved 21 days of full-time training at the Hammanskraal service centre of the University of Pretoria for groups of approximately 140 learners at a time. The training covers computer literacy, health information systems, data management, as well as the District Health Information System (DHIS) and Electronic Tuberculosis Register (ETR.net) software.

After completing their training, learners were transported back to their rural and urban health facilities to assist with data management, including data capturing, records management and any other administrative tasks relating to the monitoring and evaluation of health data at their facilities. This is done for the remainder of their oneyear internship.

Mobile post-training support

As part of the agreement between the client and the service provider, posttraining had to be provided. Initially this support was done telephonically and a share call facility was set up for this purpose. In addition, the service provider offered mobile post-training support as an 'add on' to the helpline support originally specified by the department. Mobile support was done via the Mobile Learning Engine (MLE). Linked to this was a targeted SMS service. For the project implementation, the MLE client was renamed MOBI and adapted by changing icons and adding functionality. The mobile support option was provided because South Africa has an extremely high mobile phone penetration (above 95%).

MOBI offers trainees the opportunity to access the content that has been

covered during the course, as well as frequently asked questions (FAQs), post questions, send messages to each other and create message groups.

The current state of the project

Due to a lack of funding, an estimated 900 students still need to be trained. During the past four years, the project has been monitored by the stakeholders, as well as researchers in the departments of Informatics and Information Science in the University's School of Information Technology. Several areas of interest were identified and investigated.

Telephonic vs mobile support

The telephonic helpline came into effect in January 2009 and the last call was received in May 2010. The helpline was discontinued because of its underutilisation. The line was seldom accessed, despite the fact that it provides immediate gratification as opposed to the mobile platform where answers are provided asynchronously.

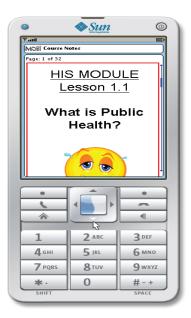
Trainees seem to prefer the mobile environment because of the mobility of the support and fear of direct contact.

When the trainees left their health facilities, they were just interns, but after a rigorous 21-day training programme, they returned as data capturing experts. The feedback received on the training course proved to be quite helpful in understanding their local situations.

In a questionnaire completed by the delegates after their return to the workplace upon conclusion of the course, about 27% of the trainees mentioned problems with resources. This included access to computers, suitable software, fax machines, printing facilities, proper furniture and buildings. Another problem related to their managers or supervisors - either the lack of mentoring or the problems







Choices offered to trainees by MOBI, typical FAQs available and the learning content.

that their 'new' job description were causing. The lack of communication with colleagues, supervisors and the department was also mentioned.

During the 21-day training, a powerful support system was established that involved the trainees and their relationships with each other, the provider and to some extent the client (NDOH). Compared to this, the local support at the clinics with their limited infrastructure and resources, of which the local telephone/landline is part, has little to offer. By contrast, each mobile device, having already been 'activated' on the MOBI network during the training, presented a powerful link to the post-training support set up by the provider. Indeed, each mobile was intrinsically personal, always available. This implied continued participation in and membership of the learning community, which was established during the training.

This is not to say that the MOBI platform does not have any flaws: it is text based, has limited interactivity, no synchronous communication and is quite difficult to use in terms of communicating via text. Yet these limitations are not enough to weaken its role in the post-training support network. Apparently, what it offers is sufficient.

Transformation of the mobile system

The mobile system was designed in a specific way. It was set up as a post-training support technology with specific aims - but the trainees use the technology in unexpected ways. For instance, the FAQ section became a forum not only for course- and trainingrelated questions, but for employment issues, issues related to working conditions and personal issues. As a result, the training provider had to adapt the interface and split the FAQ section in two. One relates to training issues and the other to general and employment-related questions.

This now has further implications. The original system did not require any input from the client (NDOH). As a result of the trainees' influence, the system has now changed to the extent that a mechanism needs to be set up to enable feedback to the client on issues that are raised on the platform that have nothing to do with the training provider's mandate and even find ways of having the client respond.

The network that has been established became more than a post-training support system with a focus on content and learning. For the trainees, it became a general information and communication tool. Trainees are

dispersed all over the country. They do not have a single unified voice, but by becoming their spokesperson, the training provider is able to present a unified voice on their behalf, indicating the value that the mobile support platform has for them.

It is clear that using mobile technology successfully in a developing learning environment has very little to do with users having high levels of technical literacy. From the research, it is quite clear that most trainees would not qualify as digital natives, yet they embraced the technology. •

References

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