Changing the role of teachers by integrating mobile technology in a rural school in Zimbabwe. A reflection in the light of UNESCO policy guidelines

Extended Abstract

Problem statement and approach

The pass rates of the 450 secondary school students in Mpumelelo in rural Zimbabwe are very low. This is, inter alia, caused by a severe lack of teaching resources (books, electronic media, technical equipment.).

To address the problem, it was decided to set up an m-learning pilot with 20 iPads, involving World Vision (WV) as a global NGO, and a Swiss University (FHNW) with experience in mobile learning in developing countries. The evaluation design included ex-ante phone interviews and a 5-day field trip with teacher/staff workshops and pilot lessons. Evaluation was based on the qualitative analysis of non-transcribed data from interviews and focus groups, and on observations.

Reflection in the light of UNESCO policy guidelines

The results of the design and pilot phase will be presented in the light of the UNESCO policy guidelines (2013) regarding two dimensions: (Figure 1)

1. **Attention**: The level of attention paid to each policy area (blue colour)
2. **Impact**: The level of (perceived) success in following the guidelines (red colour)

On a general level the policy guidelines were valuable for the development and evaluation of the pilot. Four policy areas were given a high level of attention in the design and support of the pilot (Figure 1, blue line).

The integration of the iPads focused specifically on two areas: (1) The teachers learned how to search for apps and program that can be integrated into their day-to-day teaching. The goal was to improve the teaching quality by facilitating different forms of collaborative learning and introducing multimedia (guideline 2). (2) They also planned to provide students with access to exam questions and related material via their iPads to support exam preparation (guideline 4). This includes the preparation of the questions and coaching outside of the classroom.

The requirements for the teachers to put mobile learning into practice were high. Accordingly, training the teachers to use mobile technology (guideline 2) was given very high priority – and proved to be a key influencing factor in two ways: Firstly, the teachers involved gained important media literacy skills, which then had a direct impact on the way how they used the iPads in the pilot lessons, Secondly, they acted as multipliers by introducing mobile learning to their teacher colleagues and by presenting their experiences to local and district school inspectors.

In addition to the challenges related to media literacy, the teachers also had to manage a transformation of their role: the realisation of interactive and collaborative learning in the classroom was a new experience (and challenge), changing their role as instructors to that of facilitators. The

planned coaching of students in their exam preparation will further accentuate the role change in the future.

While the first evaluation results are positive, the integration of mobile devices in a rural school remains a highly critical and sensitive endeavour. The UNESCO policy guidelines will provide valuable orientation in managing open issues such as improving connectivity at reasonable cost, sustainable maintenance of hardware and the long-term implementation of mobile technologies in teacher training.
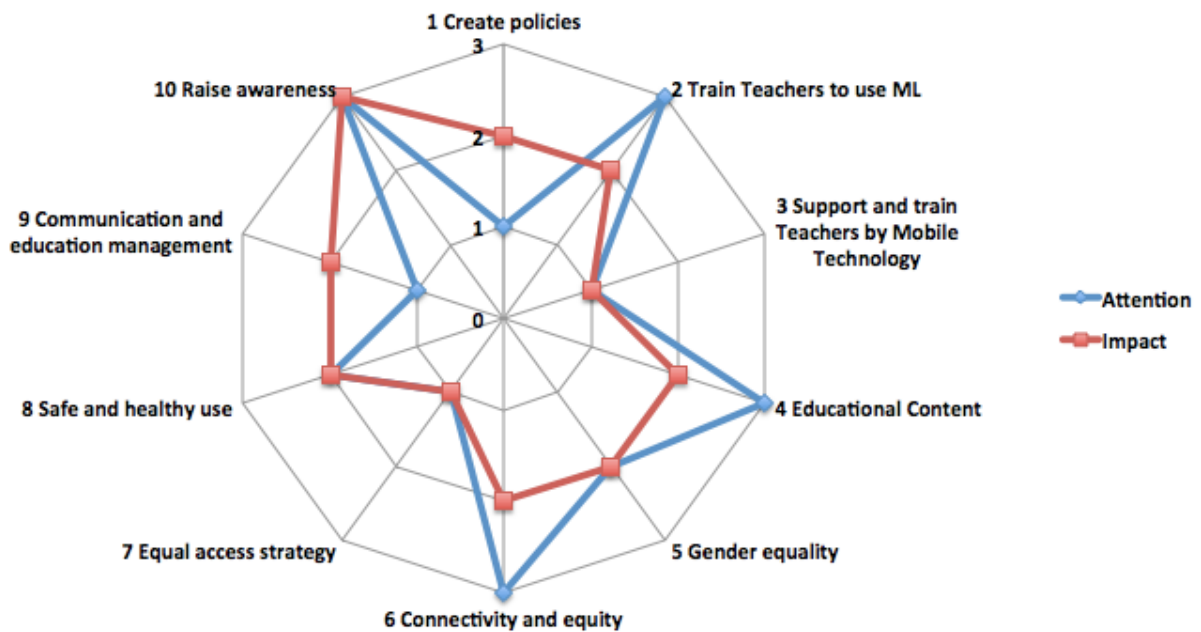

Figure 1 Attention paid to policy areas and perceived impact of pilot (0= no attention (blue) /impact (red), 3= high attention/impact)

UNESCO. (2013). Policy guidelines for mobile learning. The United Nations Educational, Scientific and Cultural Organization. Retrieved April 17, 2013 http://unesdoc.unesco.org/images/0021/002196/219641E.pdf