Making mobile learning highly viable in contexts with no connectivity or grid power

Location: UNESCO Headquarters, Room 7

Date and time: Wednesday 22 March 2017, 16.30 – 18.00

Presenters: Balaji Venkataraman, Commonwealth of Learning; Mohamed Ally, Athabasca University; Vanita Shinde, Mann Deshi Foundation; Mose Mose, National University of Samoa

About the workshop:

Delivery of effective mobile learning in contexts where there is no connectivity of any kind or availability of line or grid power is a felt need in many locations across the world especially in emergency and crisis situations. COL and partners have tested and deployed solutions based on Aptus, a device innovation. This is a mobile, micro-server weighing about 600 gm that has its own WiFi and can operate with a power pack used for charging cell phones. Aptus carries several thousand Open Educational Resources such as several thousand videos from the Khan Academy and versions of Wikipedia curated for schools. A full-fledged Moodle installation is deployed in Aptus. Leaders and teachers in local schools can add own materials without any restriction. Tests have been carried out with about 300 Aptus devices in 21 countries over the last 36 months. It has been tested extensively in Samoa, Kiribati, Vanuatu and Fiji in the Pacific, in Central India as well as in the northwestern region of Pakistan. There are expressions of interest for deploying Aptus as part of regular schooling in some countries such as Samoa. In this workshop, we will demonstrate the usefulness of Aptus in emergencies. We will demonstrate working of Aptus through its actual deployment in the meeting room and will organize three presentations of use cases in locations where connectivity to networks (for voice or data) is either not desired (for cultural reasons) or unviable. Participants will be able to connect their own mobile devices to Aptus to experience the "speed" and strength of its own WiFi and functionalities. They would be able to experience working with Moodle on Aptus and with open source learner-record keeping systems that operate using Aptus. COL promotes Aptus an open source hardware solution and would like to provide extensive inputs to partners that are capable of using assemblers to produce the device locally. The objectives of this workshop are to:

- Present briefly a highly viable solution for effective mobile learning that has worked successfully in conditions of limited or no connectivity or limited or non-availability of grid power;
- Briefly present three use cases from two different contexts (Pakistan, Samoa and India);
- Demonstrate in a participatory way this viable solution for effective mobile learning in emergencies;
• Discuss how this open source solution can be localized and owned by interested partners dealing with education in emergencies.

Meet the presenters:

Balaji Venkataraman serves as the director for technology and knowledge management at the Commonwealth of Learning (COL). His interest is to deploy new and highly affordable technologies to increase the availability of quality learning sources or OERs and services to learners, teachers and organizations in disadvantaged or difficult situations. His current work in offline area is with Aptus, a mobile, micro-server that has been extensively tested and is known to perform well in remote, un-connected locations in different parts of the world.

Dr. Mohamed Ally is Professor in the Centre for Distance Education at Athabasca University in Canada. He obtained his doctorate from the University of Alberta, Canada. His current areas of research include mobile learning, e-learning, distance education, problem-based learning and use of emerging learning technologies in education and training. Dr. Ally is one of the Founding Directors of the International Association of Mobile Learning (IamLearn). He is currently the Vice-President of the International Association for Blended Learning (IABL). He recently edited twelve books on the use of emerging technologies in education.

Vanita Shinde serves as the program and administrative head of Mann Deshi Foundation in the State of Maharashtra in India. Mann Deshi Foundation aims to transform rural women, who are daily wage earners into entrepreneurs. The Foundation works primarily in the highly drought-prone Deccan Plateau where data connectivity and access to power are inadequate and are not accessible to most people. The Foundation operates a large educational program covering 150,000 rural women. A number of innovations have been deployed in the remote areas successfully. Aptus is one of them.

Mose Mose is a Lecturer in the Department of Computing at the National University of Samoa. He co-led a team that carried out extensive trials of Aptus among high school students in Samoa and concluded that Aptus would be a highly viable mobile learning s