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Open Call for Expressions of Interest

Research Network on New Digital Learning Modes and Practices in Asia

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The Foundation for Information Technology Education and Development (Philippines), as part of the Information Networks in Asia and Sub-Saharan Africa (INASSA) program[1], seeks to develop a *Research Network on New Digital Learning Modes and Practices in Asia*. The goal of the research network is to examine how new digital learning modes and practices could be used in emerging and developing countries in Asia to address issues of equity, quality and efficiency at all educational levels, from early childhood to higher education and continuing education, in formal, non-formal and informal settings. The network aims to address the following general research questions:

1. How and to what extent are equity, quality and efficiency goals being met through the use of new digital learning modes and practices?
2. How and to what extent have teaching and learning processes and education systems changed with the introduction of these new modes and practices?
3. What are the conditions or factors that promote and/or constrain the successful adoption of these new digital learning modes and practices?
4. What are the requirements for localization and customization of modes and practices given the diversity of emerging and developing country contexts?
5. What are the prospects for sustainability of use?
6. What are the possibilities and limitations for upscaling?

Five priority research areas have been identified for funding through this research network:

1. MOOCs. A Massive Open Online Course is "*massive*, with theoretically no limit to enrollment; *open*, allowing anyone to participate, usually at no cost; *online*, with learning activities typically taking place over the web; and a *course*, structured around a set of learning goals in a defined area of study" (Educause, 2013, p.1). The combination of openness and technology-enabled scale that are inherent features of the MOOC make it a uniquely promising mode of learning for addressing equity, quality and efficiency issues in education.

2. Gamification and Game-Based Learning: Games are activities with a set of rules that govern the game's players, spaces, and pieces (Shell, 2008). Games use elements of fantasy, challenge, curiosity, competition and completion to engage and motivate players. Gamification refers to the use of game play elements, such as achievement badges, leader boards, progress bars and the like,

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in non-game contexts (Hunter, 2011). A learning activity may be "gamified" to engage and sustain the interest of the learner in the learning task. Game-based learning, on the other hand, refers simply to learning through games. Whether the games used are designed primarily for entertainment or expressly for education and training purposes, game-based learning promotes and enhances knowledge and skills acquisition.

3. <u>Intelligent Tutoring Systems</u> refer to technology-based learning environments that make use of artificial intelligence to provide learners with finely tuned learning experiences that cater to individual needs (Woolf, 2010). Built into intelligent tutors may be a representation of expert knowledge of the domain of interest, a model of the learner's knowledge that is updated with every learner transaction, a pedagogical model that determines what teaching approach to use under different circumstances, and a user interface with which the learner interacts (Beck et al., 1996; Woolf, 2010). Ideally, when a learner reaches an impasse, the system should be able to provide alternative explanations, learning paths, and resource materials that will help the learner achieve the learning goal. Its pedagogical affordances aside, the use of intelligent tutoring systems has also been motivated by a desire to increase instructional efficiency by reducing the reliance on human teachers.

4. <u>Mobile Learning</u> refers to the use of mobile devices (cellular phones, laptops, tablets, etc.) to enable learning at any time and in any place (Vosloo, 2012). A wide variety of learning platforms and resources may be accessed using mobile devices, including MOOCs and other forms of online learning, educational games, and intelligent tutoring systems. Like MOOCs, mobile learning affords flexibility and learner control; mobile learners can choose not only what to learn but also where and when to learn. With mobile broadband penetration rates growing fastest in developing countries, home to more than 75% of the world's mobile phone subscribers (ITU, 2014), interest continues to grow in how mobile technologies can be harnessed by the developing world to make learning more accessible and effective, especially in communities where traditional educational opportunities are limited.

5. <u>Learning Analytics</u> refers to the collection, analysis and reporting of data about learners and their contexts to inform and support educators and learners in making decisions that would enhance learner engagement, improve learning outcomes, and increase institutional efficiency (Aliohani & Davis, 2012; Choi et al., 2014; Baker & Yacef, 2009).

All eligible parties are invited to submit an expression of interest in one or more of the priority research areas. Your expression of interest will help us gauge the range and geographic scope of research interests within each area as well as the funding needed to support the research network.

Eligibilities and Prescriptions

1. All registered institutions in Asia with the capability to undertake research are eligible to apply for this funding. Institutions from developed Asian countries (Brunei, China, Japan, Singapore, South Korea and Taiwan) must have at least one institutional partner from an emerging or developing country in Asia.
2. Proposed research studies that involve more than one institution are encouraged as such collaborations are consistent with the underlying philosophy of the research network.
3. The proposed research study must be conducted in an emerging or developing Asian country or countries.

4. The proposed research study must fall under at least one of the priority research areas that have been identified.
5. The proposed research study may be conducted at any educational level (early childhood, K-12, TVET, higher education, continuing education) and setting (formal, non-formal, informal).
6. The proposed research study must be completed within twelve months or less.
7. Funding must be used primarily for research activities and not for developing a digital learning solution or resource. A small portion of the grant may be applied to enhancing or modifying an existing solution or resource if necessary.

Guidelines for Submitting the Expression of Interest

1. **Submission Package**

The submission package consists of a completed Expression of Interest Form and the credentials of the principal investigators. Credentials include a curriculum vitae and samples of related work.

2. **Language of Submission**

Submissions must be written in English.

3. **Closing Date**

Expressions of interest must be submitted via email to newdigitallearning@fit-ed.org on or before 5:00 pm, 8 July 2015 Philippine Time (UTC/GMT+8 hours).

4. **Further Information**

All inquiries regarding this Call for Expressions of Interest should be directed to vltinio@fit-ed.org.

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