TITLE: Affective Learning—Digital Badges for Online Division Learning Sustainability (Open & Distance Learning): Reaching the Unreached

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ABSTRACT: *Online division students obtain sustenance in learning through affective learning—motivation factors. Motivational factors for learning are intrinsic and extrinsic—self-confidence, positive attitude, ideal-self, etc. (Dailey, 2009). Consistent recognition is one of the intrinsic motivation factor—significant contributor for the sustainable learning in the 21st century. Further, the certification has taken a new look in the form of digital badges as it recognizes the skills and competencies. Every online learner would like to cherish their valuable time invested in learning to be productive. As a result, recognition of skills and competencies achieved through online learning embraces the self-efficacy of the learner; eventually, sustained learning. What is digital badge? "Badges are tokens [used instead of certificates] that appear as icons or logos on a webpage or other online venue" (EDUCAUSE, 2012, para. 1). Significant evidences suggest that the Digital badges are new tools, powerful to identify and validate "the rich array of peoples' skills, knowledge, accomplishments and competencies" (Grant, 2013, para.1). Apart from identification, it also guides to innovative way of learning, and increase connectivity. In current context, the digital badges are seen as commodities in the world of college credentials (Hilt, 2015). Further, Digital badges are touted to be the latest threat for college diplomas as it validates the specific skill acquired by the student; and Online education institutions should be ready to offer badges to gain self-efficacy resulting in sustainability of learning for the unreached in the society. In the same line of thought, online learners are recognized only towards the completion of their course; however, what sustains the learner to complete; should be the core of educational agenda of Online Division Learning. This theoretical/conceptual paper present the use of technology in building up the present online learning to be productive as well as directed towards sustenance of learning of the unreached.*

Keywords: Affective learning, Digital Badges, Online education, Certificates, Higher Education Institutions, Sustainable Learning.

Introduction

In the 21st century, with UNEP agenda 2030 in hand, online division learning is marching ahead to provide sustainable and equitable learning. In Agenda 2030, specifically the goal 4 recognizes "the inclusive and equitable quality education and promote lifelong learning opportunities for all" (UNEP, 2016). According to OECD (2008), "Education plays a key role in determining how you spend your adult life – a higher level of education means higher earnings, better health, and a longer life" (p. 1). In addition, the open learning system enhanced this theme of providing equitable education by reaching out to the larger communities in the form of correspondence courses. In 1892, the University of Chicago offered the first correspondence course (Miller, 2014). Further, this system continues to offer correspondence courses, eventually earning a degree for the participant. In a pivotal thought, students are marginalized within the education system as they are the major products of the same with the status as unemployable graduates. If this is the challenge for the regular system of higher education (face to face-F2F), what would be the challenge in Online Learning which is an integral part of Open and Distance Learning (ODL) of the 21st century?

The ODL role of learning dates back to 1728, when Caleb Philipps advertised his first correspondence course in Boston Gazette (Miller, 2014). This was later established as study from home in 1873. In 1922, Pennsylvania State College became the first college to have classes over the radio. In 1953, the University of Houston offered the first televised course for a credit. In 1965, the University of Wisconsin offered the first course over the telephone. In 1976, the Coastline Community College became the first virtual college with no physical campus. In 1982, around 66 universities came together to form consortium and the Smithsonian Institution. In 1985, the first doctorate degree was offered online. In 2003, there was a remarkable record of education to the mass population—6 million students, 40,000 instructors, 150,000 courses per year, 1,350 institutions, and in 55 countries. Presently, the online division of learning is catering to the larger mass; and in 2030, the world is looking forward to cater to more than 400 trillion higher education students. The number of Colleges, Institutions, and Universities cannot cater to the expected populous for higher education. Hence, the role of Online Learning is to cater to such need; however in equitable and sustainable way.

In another note, the completion or success rate of the graduates from online division of learning has maintained 45% for a greater period of time. There are extensive measures to increase it to 60% against 80% of drop-out rate (Onah, 2014). There are factors such as job related, personal, program related, and technology related for dropping out of the online class (Johnson & Willging, 2004). Further studies (Littlejohn, Hood, Milligan, & Mustain , 2016; Song, & Bonk, 2016; Zheng, Rosson, Shih, & Carroll, 2015) have identified, personal factors such as motivation leads out to be the significant factor in completion of online learning courses. In relation to this finding, there were many research done on motivational factors (Cheok, & Wong, 2015; Dörnyei, & MacIntyre, 2015; Park, Flowerday, & Brünken, 2015); however, the recognition of skills and competencies were not addresses. Digital Badges fill in the exact gap for motivation, eventually in sustainable learning and completion rate.

Digital Badges signify the accomplishments of online learners such as "completion of project, mastery of a skill, or marks of experience" (EDUCAUSE, 2012, p. 1). The Digital Media Learning (DML) by John and Catherine MacArthur Foundation has initiated this concept for lifelong learning. This paper will deal with, a) Role of affective learning—Digital Badges in Online Learning, b) Digital Badges for Sustainable and Equitable learning, and c) Digital badges as source for employable graduates—reaching the unreached.

Purpose of research

Digital Badges provides recognition for the effort of the learner. According to Diaz, Finkelstein, and Manning (2015), Digital Badges a) looks into extensive data about the assessment, experience, and other details for outcomes represented, b) consider strong evidence, c) share and display the recognition, d) bring in career development opportunities, e) identifiable and searchable, f) provides information about the uses and value. This recognition in turn establishes the motivation both internally and externally for the learner. Further, the learner is sustained in learning irrespective of the Socio-economic status, Schools of learning, etc. Hence, the purpose of this conceptual paper is to establish the role of affective learning for sustainability of learning and equitable learning by offering digital badges in online learning platform; reaching the unreached.

Role of affective learning—Digital Badges in Online Learning

Affective learning begins with change and development in attitude (Llewelyn & Cahoon, 1965). The attitude of a learner can be altered using reinforcement. Further, Festinger's cognitive dissonance theory displays the idea of positive reinforcement to discharge dissonance (Festinger, 1957). Digital badges provides reinforcement and reduce dissonance among the learner. In the online division of learning, digital badges need to trend to uplift and reshape affective learning. Briefly, this passage will credit the affective learning for sustainability of learning through Digital badges as a reinforcement tool.

Digital Badges for Sustainable and Equitable learning

Digital Badges play a significant role in providing sustainable and equitable learning. According to MacArthur Foundation (2016), the learner's interest in learning will be recognized and collected to provide further learning facility. Additionally, the holistic view on the learner's perspective will be recognized by badging. As a result of collected data, learning programs will be offered according to the need (Duncan, 2016). Further, conceptual ODL model will be further stated and discussed in this passage.

Digital badges as source for employable graduates—reaching the unreached

Digital Badges are identified to be one of the key factors in contributing both intrinsic and extrinsic motivation at the same time. However, on an additional note, they do contribute to achievements tracking, and other goals of higher education. One such report handled presently is UK's Higher Education Achievement Reports (HEAR)—offered across Universities (Anderson, 2014). On another note about the recognition of soft skills through Badges, Dr. Dough Belshaw commented "hard skills, the things you put on your CV are the things you get hired for, but the lack of soft skills, things like character, sense of humour, work ethic, if you haven't got those, they are the kind of things you get fired for" (Sheard, 2016).

Implications and Conclusion

Digital Badges are successful when it procures the basic elements such as: a) present interest for the learner, b) recognize work that extends beyond a student's typical academic ability, and c) value what that badge represents (University at Buffalo, 2015). When procured, the learners are

driven for sustenance in their learning engagement. On a different note, Digital Badges are seen as a way to "capture and communicate the skills and knowledge of individuals" (Finkelstein, Knight, & Manning, 2013). With this, it provides great advantage for the one who receives and the employer. Further, the adult learners are motivated as the understand what the badges represent (Finkelstein, Knight, & Manning, 2013).

In Conclusion, Digital badges offer greater affective learning resulting in sustainable learning. In a different note, a study portrays a negative correlation between certain badges and skills motivation (Pajares et al. 2000). However, other studies done on adult learners with varieties of badges has seen a greater contribution towards the skill development (Finkelstein, Knight, & Manning, 2013). Further, it is appropriate to consider specific badges for motivational purposes. In a larger note, Digital Badges contributes to the affective domain of learning, which is challenge in an ODL or Online Division of Learning. This study recommends for using Digital Badges as a means to reduce the marginalization in the system of education to provide employability, encouraging learners to obtain skills and competencies while sustaining to complete the courses.

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STRAND: Inclusion—Use of technology for Reaching the Unreached.