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The Use of Digital Badges in Undergraduate Nursing Education: A Case Study

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Purpose:

Digital badges have a history founded in physical badges, such as those established by Baden-Powell with cub scouts. Individual cub scouts would work towards different cloth badges by performing a task or displaying a skill. The end result was that each badge would be displayed on their uniform to help communicate this success amongst peers (Scouts Australia 2017). More recently, digital badges have been integrated into mobile games and wearable fitness monitors like Apple Watch™ and FitBit™, Achievement structures have been built into gaming consoles, such as the Microsoft Xbox™ (Elliott, Clayton et al. 2014, Davis and Singh 2015).

The focus of this paper uses a first year undergraduate Bachelor of Nursing topic at an Australian university. More specifically, this paper will report on the students' interests around playing games, their digital badge history, and their self-reported attitudinal interest to use digital badges to enhance their learning (Gibson, Ostashewski et al. 2015, Foli, Karagory et al. 2016).

Methods:

Ethically approved validated pre and post surveys were developed and administered to three consecutive cohort of first year nursing student

Data was collected over three years: 2015 with 32% of students (n=67), 2016 with 16% of students (n=44) and 2017, where 22% of students (n=86), expressed an interest in using digital badges to enhance their learning. This presentation seeks to create a snapshot to explain who are interested in digital badges as a motivational reward for being prepared to attend weekly face-to-face classes using online activities and resources.

Results:

Overall the results indicate that students who earned digital badges feel more prepared and confident about entering the classroom to commence the set content. The results of this research hold relevance for nursing educators and educational designers seeking to integrate digital badges into motivational teaching practices. Further it suggests the importance of evaluating the role digital badges play as a motivational game based learning design element.

Conclusion:

This study has shown that some first year nursing students were motivated to collect digital badges at assist their weekly preparation for their science laboratory activities. The results from this study have implications for undergraduate nursing education internationally. As nurse academics worldwide strive to provide high quality programs they now have evidence that digital badges is another strategy to scaffold and motive student learning.

Title:

The Use of Digital Badges in Undergraduate Nursing Education: A Case Study

Keywords:

digital badges, motivate learning and nurse education

References:

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Abstract Summary:

Undergraduate students often do little preparation prior to attending their classes. The opportunity to collect digital badges as students complete pre- class work is an innovative strategy to increase motivation to be prepared for their weekly classes.

Content Outline:

I. Introduction

A. What are digital badges and how have they been used to motivate learning?

II. Body

A. Main Point#1 Science laboratory resources are costly and their effective use by nursing students is essential.

1. Supporting point #1 Scaffolding student learning by providing small relevant activities that attract small rewards such as a digital badge.

Each week students were required to complete a set of activities preparing them to undertake the activities in the science laboratory.

2. Supporting point #2 This study involved data collected over three years from large cohorts (> 400) of first year nursing students in a blended learning bio-science topic.

B. Main point 2# Ten weekly digital badges were able to be collected across the topic. Those students who collected all ten badges were also awarded with the final badge indicating they were super prepared for classes.

Trends in the data over the three years indicated that participation by students collecting digital badges declined as the topic progressed.

The characteristics of those students who collected all ten badges will be discussed.

Main point #3 Feedback from students across the three years was positive.

Examples of student feedback including quotes.

III. Conclusion

Digital badges are an innovative and engaging strategy to motivate undergraduate nursing students to complete preparatory work before they undertake weekly science laboratory activities.

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Professional Experience: PhD completed in 2017 2016-continuing Treasurer for PSI ETA Chapter 30 years nursing academic at Flinders University Adelaide Australia. 2002-continuing Reviewer for Nursing Education Today 2010-continuing Accreditor for the Australian Nursing and Midwifery Accreditation Council (ANMAC) 2000- continuing Fellow of College of Nursing Australia

Author Summary: Strong interest in building nursing student engagement in E-learning. Currently teaching in undergraduate and post graduate topics. Research is focused on how ICT including high fidelity simulation can be used in innovative ways to scaffold learning.

Second Author

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Professional Experience: B.App.Sci., B.Teach (Sec), M.Capt.Vert.Mgt., M.EdA research interest in using mobile devices, social media and digital tools to connect students and teachers with wildlife conservation. With an interest in conservation psychology and environmental education for teachers, current research projects are focused on exploring how digital technologies can be used in authentic-based learning opportunities for teaching scientific inquiry process around wildlife conservation

Author Summary: Timna is an educational design technologist with a major focus on encouraging others to teach actively with digital technologies. More specifically on encouraging university, in-service and pre-service teachers to explore the potential of gamification, augmented reality and creating educational short videos and interactive scenarios for enhancing learning opportunities.