The topic enrolment, survey participants and our matched pre-post student laboratories and tutorials. Gami-fication a reality in higher education. This pilot study applied game-elements to 2013). It is the choice of game elements in platforms such as Moodle that make the gap between learning platform and gaming. Gami-fication is the use of “game manner, at any time and any place. Recent technological development is bridging the Students are encouraged to access the information and learning activities in a flexible manner, at any time and any place. The project at Flinders University aimed to investigate whether game-elements in the pre-registration nursing students to complete preliminary study prior to undertaking the three-year project background. Across the three-year project a total of 845 students completed the pre-topic survey, whereas 396 completed the post-topic survey. This data provides a measurable change to explore how the first-year topic which used digital badges has affected a students’ motivation to be prepared for class.

What are digital badges?
Digital badges have a history found in physical platforms, such as those established by Baden-Powell with cub scouts. Individual cub scouts 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™, and achievement structure has been built into gaming consoles, such as the Microsoft Xbox™ (Davis and Singh 2015; Elliott, Clayton et al. 2014). These badges can be shared digitally amongst peers using social media.

Why use them? What our students say...
"The badges ensured that I at least did some of the activities and readings. It gave a sense of completion and achievement.

The badges in particular gave an incentive to complete the pre class activities and made a positive sense of completion and satisfaction each week.

They’re like medals and trophies that I can earn after hard work.

"The badges are a very good motivator.

I think the main thing they make me do is motivated.

The badges stir a desire to do more.

The badges give me a sense of completion.

The badges motivate me to do the preparation before classes and feel like I’ve concentrated for doing all these activities."

What are the learning implications?
Our findings indicate that the digital badges and connected progress bar overall have the potential to increase student motivation to complete their preliminary study prior to undertaking weekly practical classes, but different elements will appeal to different students. By increasing the diversity of tools being used, students will be motivated to meet the expectation of the staff prior to class. For students who remain undecided, by being issued the elements used in other topics or in their everyday life may improve the game-elements potential use for increasing motivation to be prepared for class.

Conclusion
The results showed that when designing a blended subject with game elements, the overall design has the potential to enhance learners’ motivation to academically prepare before attending face-to-face practical classes. Findings indicated that digital badges and progress bar/checkboxes overall have the potential to increase student motivation to complete their preliminary study prior to undertaking weekly practical classes, but ultimately different elements will appeal to different students. By increasing the diversity of tools being used, students may be more motivated to meet the expectation of the topic prior to attended face-to-face classes if they are motivated by a game element. For students who remain undecided by the value of game elements in their topic, by seeing the elements used in other topics or in their everyday life may improve the game-elements potential use for increasing student motivation to prepare for class at university.

References: