

## Investigating Student Behavior in Adopting Online Formative Assessment Feedback

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**Abstract :** In this paper we describe one critical research program within a complex, ongoing multi-year project (2010 to 2014 inclusive) with the overall goal to improve the learning outcomes for first year undergraduate commerce/business students within an Information Systems (IS) subject with very large enrolment. The single research program described in this paper is the analysis of student attitudes and decision making in relation to the availability of formative assessment feedback via Web-based real time conferencing and document exchange software (Adobe Connect). The formative assessment feedback between teaching staff and students is in respect of an authentic problem-based, team-completed assignment. The analysis of student attitudes and decision making is investigated via both qualitative (firstly) and quantitative (secondly) application of the Theory of Planned Behavior (TPB) with a two statistically-significant and separate trial samples of the enrolled students. The initial qualitative TPB investigation revealed that perceived self-efficacy, improved time-management, and lecturer-student relationship building were the major factors in shaping an overall favorable student attitude to online feedback, whilst some students expressed valid concerns with perceived control limitations identified within the online feedback protocols. The subsequent quantitative TPB investigation then confirmed that attitude towards usage, subjective norms surrounding usage, and perceived behavioral control of usage were all significant in shaping student intention to use the online feedback protocol, with these three variables explaining 63 percent of the variance in the behavioral intention to use the online feedback protocol. The identification in this research of perceived behavioral control as a significant determinant in student usage of a specific technology component within a virtual learning environment (VLE) suggests that VLEs could now be viewed not as a single, atomic entity, but as a spectrum of technology offerings ranging from the mature and simple (e.g., email, Web downloads) to the cutting-edge and challenging (e.g., Web conferencing and real-time document exchange). That is, that all VLEs should not be considered the same. The results of this research suggest that tertiary students have the technological sophistication to assess a VLE in this more selective manner.

**Keywords :** formative assessment feedback, virtual learning environment, theory of planned behavior, perceived behavioral control

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