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**The Relationship between Self-Regulated Learning
and the Use of Online Portfolios in
an Online Learning Environment**

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ABSTRACT

Self-Regulated Learning (SRL) theory provides an explanation for how learners control and direct their thoughts, feelings, and actions in relation to their learning goals and is considered to be an important requirement for successful learning. Using online portfolios is believed to enhance SRL skills. This longitudinal study conducted over one academic year examined postgraduate students' SRL skills in relation to their use of online portfolios within an online learning environment, and how they perceived the value of online portfolios. Factors that affected students' self-efficacy beliefs and perceptions of their ability to be successful in using online portfolios were also studied.

A mixed methods research design with an explanatory sequential approach involving three phases was used in the study. In the first phase, at the start of academic year, a questionnaire was used to assess students' initial SRL skills and their perceptions of the usefulness of online portfolios. Sixty-four students participated in this phase. Two SRL groups comprising students with high and low SRL scores were drawn from this sample. A three-person sub-sample of each SRL group was interviewed in the second phase in order to examine in greater depth the nature of SRL skills for those with high and low SRL scores. For the third phase, a follow-up questionnaire was used towards the end of the academic year to examine whether students' SRL skills and their perceptions of the usefulness of online portfolios changed over the period of their enrolment in the postgraduate course. For this third phase, 92 students participated.

The results revealed that SRL had a strongly positive relationship with students' perceptions of the usefulness of online portfolios and the relationship between the two variables over time was reciprocal – that is, both constructs influenced each other. The

results also showed a significant increase in students' reported SRL skills and in their positive perceptions of the value of online portfolios over the year.

Students attributed the increase in these two variables to using online portfolios to help set their own learning goals, control their own learning, and reflect on their learning. They identified a range of factors, including course support, motivation, peer support, and lecturer support, as helping them to construct and use their online portfolios. However, they identified lack of technology skills and time constraints as the main problems in constructing and using their online portfolios.

The findings of the present study indicated that students' skills across the three aspects (forethought, performance, and self-reflection) of SRL, the three stages of the use of online portfolios (collection, selection, and reflection), and the three elements of learning (personal, behavioural, and environmental) were interrelated. Such findings have important implications for students and university course coordinators to make better use of online portfolios, and for teaching and learning in a university online learning context, particularly in relation to the use of online portfolios as a tool for both storing (product) and reflecting (process) on artefacts of learning. This contribution in turn will help students to better regulate their learning behaviour.

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