

Collections for reflection

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Impact paragraph

Research

Through four studies grounded in socio-cultural learning theories, this research presents the evolution of medical students' perceptions and interactions with self-assessment, evidence collection, reflection, and mentor meetings. The findings in this thesis present how portfolios can support the phases of self-regulated learning (SRL) - performance, reflection, and planning during the transition into medicine. The research reinforces the importance of peer relationships, early academic successes, and clinical encounters in the early stage of medical school and highlights the significance of professional identity development (PID) for goal orientation and ISA. The types and scaffolding of evidence in portfolio collections determine the outcome of students' reflection. Students need guided autonomy to build a meaningful collection that is relevant to their learning. Photographic self-portraits within portfolios offer a unique and contemporary method for documenting PID and social learning in the context of medicine and other areas of higher education.

The research also presents theoretical and empirical support for mentors in guiding informed self-assessment and goal setting. To support mentoring and to foster new perspectives on identity and professional goals, portfolio collections should include evidence of challenging experiences. To maximise the benefits of mentor-student interactions, the research shows the importance of anticipating and managing students' apprehensions about portfolios and self-disclosure. The findings reinforce the recommendation for mentor training, support, and supervision to ensure reflective dialogue during meetings, effective SRL skills teaching, and an educational alliance between student and mentor.

Relevance

This PhD research proposes a conceptual model based on socio-cultural theories and the research findings, to explain how individual and collective portfolio tasks can support SRL when principles of transformative learning are included. This bridges the gap between socio-cultural learning theories and practical application in medical training. The model presents a basis for curriculum design in higher education fields where portfolios are used to support PID and competency. It also forms the basis for future educational research to test interventions into each SRL phase or portfolio task.

Target group

The findings are relevant to students, academics who design and study portfolios, and patients. The broader impact of improved portfolio curriculum design is improved student support for student learning and PID. This in turn could improve student well-being and produce more

competent and reflective medical practitioners. By contributing to the training of more insightful and adaptive medical professionals, this research indirectly supports the enhancement of healthcare quality and patient outcomes. Informed self-assessment has a role in maintaining competency.¹⁶ Medical practitioners need to be able to adapt their skills in novel and challenging contexts.¹⁷ Moreover, patients need to be supported to choose between options, balance risks, benefits and uncertainties associated with new therapeutic options.¹⁸ To support patient decision-making, medical practitioners need to have developed their own skills in critical reflection. Portfolios have a role in supporting these skills.

The use of qualitative longitudinal research with a social constructionist lens provides insight into students' experience through the analysis of students oral and written reflections. This creates a basis for student-centred curriculum reform that recognises and manages the influence of students' self-efficacy, professional identity, self-presentation and outcome expectations. The findings also supply supporting evidence for the elements within medical curriculum that could foster transformative learning and critical reflection. These elements include novelty in terms of teaching format and cultural context, peer interaction, early clinical encounters, formative assessments and mentoring.

Activities

The findings in this research have already been used to refine the portfolio curriculum at Western Sydney. For example, when explaining what types of artefacts to collect the four types of artefacts found in **Chapter 3** are presented. During Advisor briefings for portfolio meetings reflection prompts are provided based on TL theory^{14,19} and the findings in this thesis. For example, in relation to evidence of an orientation activity, Advisors are guided to remark "That looks like an important landmark as a medical student. How did that experience change your approach to study/study goals?"

The findings in this thesis have been presented to colleagues at Western Sydney in team meetings with other portfolio leads at medical schools within Australia. The studies in **Chapters 2, 3, 4** and **5** have been published, or are being considered for publication in international medical education journals, so that these new insights are shared with the higher education academic community. The study in Chapter 2 was presented at an Australian health professional conference, and the study in Chapter 3 was presented at an international medical education conference.

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