A course design approach that encourages reflective practice habits

Lyn Daff [a],[*], Cathy Tame [b], John Sands [c]

[a] School of Business, University of Southern Queensland, Springfield Central, Queensland, 4300, Australia
[b] Academic Affairs, University of Southern Queensland, Toowoomba, Queensland, 4350, Australia
[c] School of Business, University of Southern Queensland, Toowoomba, Queensland, 4350, Australia

A B S T R A C T

Reflective practice is a valuable workplace skill for graduates, enhancing learning, improving performance and advancing professional development. Concerns that graduates often lack the competencies required for critical and deep reflection on their abilities and knowledge are seen in diverse countries. There has been little growth in comprehending how students transition their application of reflection to the fostering of life-long habits of reflective practice. Additionally, the question of how to foster learning that carries through to the workplace needs further attention. This project addresses the challenge of studying students' responses to reflective practice in different courses. It examines an approach to developing reflective practice skills and habits in a capstone accounting course. The research explains the process of fostering and assessing reflective practice and evaluates the effectiveness of the approach. The findings identify that students produced reflections with various elements that contribute to quality reflections. Incorporating self-identified goal-setting and review assisted in the development of habits of reflection. Students gained confidence in reflective practice and articulated their commitment to using reflective practice in the future. This research will interest educators across disciplines in their teaching and assessment of reflective practice.

1. Introduction

Developing a habit of reflective practice is an essential component for success across many professions: architecture (Tans 2021) sports management (de Schepper & Sotiriadou 2018), nursing (de Vries & Timmins 2016), education (Seitova 2019) and accountancy (Murphy & Hassall, 2019). Both professional bodies and educational organisations promote the importance of competency in reflective practice. For example, the International Accounting Education Standards Board (2019, p. 46) include in the learning outcomes for professional skills that graduates require, "Set high personal standards of delivery and monitor personal performance, through feedback from others and through reflection." Accounting professional bodies express similar sentiments, noting that self-management includes reflecting on feedback to identify and pursue learning for self-improvement (CPA and CAANZ, 2021; Hancock et al., 2016). Reflection is a generic term that describes the action of pondering over events to make sense of them and includes the capacities, abilities and skills used in reflection (Chan & Lee, 2021). Reflective practice is a habit that goes beyond isolated times of reflection. Reflective practice has been correlated to the development of capable, self-aware and engaged practitioners and is central to

---

professional development (Gallagher et al., 2017; Paisey & Paisey, 2020).

Studies across the globe have raised concerns about reflective practice competency and related skills. A Greek study found there was a wide disparity between what human resource managers required of graduates and the skills they believed graduates possessed concerning emotional intelligence and self-awareness (Matsouka & Mihail, 2016). Employers in a Malaysian study (Yong & Ling, 2023) ranked the need for self-awareness significantly higher than graduates. Research in the USA into graduates' perceptions of essential factors for their employability concluded that universities can enhance graduates' employability by developing reflective learners. The study found that self-responsibility factors, such as internship experience and self-managed career behaviour, led to high self-esteem (Qenani et al., 2014). A UK study (Osmani et al., 2019) combined a review of job advertisements in accounting and finance and ICT with a systematic literature review and revealed the necessity of self-management skills. Similar recommendations arose from these studies: universities have a very important role in guiding students towards developing self-managing behaviour and educators should continuously engage with all stakeholders to better fit graduates for the workplace. Reflective activities and assessments, considered as emergent forms of work-integrated learning activities, may help ensure positive employability outcomes (Jackson & Meek, 2021). Developing employable or work-ready graduates and designing relevant programs and courses continue to be a driving agenda within the Higher Education Sector (Jackson, 2019; Wong & Hoskins, 2022).

Reflective practice has been identified as "a challenging method of teaching and learning for both students and educators" (Eaton, 2016, p. 159). Challenges for students undertaking reflections include a lack of reflective skills, the time required for reflections and the repetitious nature of the process (Kis & Kartal, 2019). In fact, practising critical reflection "is by no means easy or straightforward" (Thompson & Thompson, 2023, p. 164). A study of undergraduates enrolled in an English writing course in Qatar identified challenges associated with using reflective journals. These included the need for (1) initial help through educators providing scaffolding and facilitating the reflections, (2) a choice of either structured or unstructured reflective journals whichever was a convenient channel for students, (3) a variation in the reflective journal questions to avoid boredom, and (4) a bi-monthly reflective journal per semester culminating in a final reflection paper (Ahmed, 2020). It is challenging for educators to encourage students to move beyond superficial reflections and an overreliance on using models of reflection in a rote manner to complete assessments. Additionally, educators need to foster reflective practice against the backdrop of meeting the demands of outcome-led and time-limited programs (Eaton, 2016). For educators, striking the balance between teaching the reflective process and developing structures that do not limit the reflective practice is not easy (Brooman & Darwent, 2012). Teaching reflection, the importance of reflection and the use of reflection have not been adequately addressed by prior literature (Cathro et al., 2017; Thompson & Thompson, 2023).

Researchers have emphasised the need for higher education institutions to review their pedagogical focus on reflective practice (Mainga et al., 2022; Prikshat et al., 2019; Sudhakar et al., 2020). Often reflective activities are not aimed at developing habits of reflection but rather to gauge the extent of learning in particular courses (Gunarathne et al., 2021; Dellaportas et al., 2022). While there is value in using reflection to assess learning, fostering habits of reflection will benefit students in other areas of their studies and the workplace. Wilkin's (2022) study of reflective practice in a postgraduate accounting course, addressed the development of students' skills and ability to reflect. It was suggested that more research is needed to study students' responses to reflective practice in different courses. Wilkin's course incorporated oral and written reflection concerning selecting a research article, participating in a group presentation, receiving feedback on a presentation and evaluating another group's presentation. Wilkin used a questionnaire to gather students' responses to the learning tasks and reflective practice activities. Findings highlighted the value of an integrated and interactive approach, which aided the shifting of students' viewpoints and the development of critical reflection.

This study is unique, as it considers the extent of students' appreciation of the benefits of reflection, their development of habits of reflection and their commitment to ongoing reflection for future professional competence, which is critical for accountants (Hancock et al., 2016; Murphy & Hassall, 2019). The research also addresses Wilkin's (2022) challenge to study reflective practice in university courses. The study takes a qualitative approach to analyse undergraduate accounting students' reflective journals, in an accounting capstone course, to identify themes relating to the effectiveness of the course in developing their competencies and habits in reflective practice. Ono and Ichii (2019) observed that qualitative studies have not often been used to study reflective practice in business courses. This research sets out to answer three research questions.

1. To what extent, if any, did the design of course resources and assessment enhance the students' reflective practice skills and/or their habits of reflective practice?
2. What benefits, if any, did students believe they gained from regular reflections and feedback?
3. What, if any, were students' plans for using reflective practice in the future?

The study used Greenaway's (2023) active reviewing cycle as a theoretical lens to analyse the students' reflective responses and this dovetailed well with the research questions. Models for reflection have been used as theoretical lenses in educational research (Ng et al., 2015). Greenaway (2023) developed the 4 F's of reflecting, identifying four zones: facts (recalling the event); findings (learnings from the event); feelings (emotions evoked by the event); and futures (plans to apply learnings in the future). The analysis of the students' reflective responses, benefits gained, their plans and course experiences, provided insight into the depth, breadth and habits of student reflective practice.

Two key contributions result from the study's findings. Firstly, for educators, the study offers insights and practical advice for designing reflective questions and teaching approaches that encourage students to improve their reflective practice skills and develop habits of reflection. Secondly, the study supports the literature that has previously identified the challenges and benefits of reflection. Incidentally, the study demonstrates that using Greenaway's (2023) four zones to analyse students' reflections proved to be a valuable research tool to ascertain the degree of competency in generating meaningful insights from reflection, which is essential for

professional development (Paisey & Paisey, 2020).

The paper proceeds following a traditional format. After the literature review, the background of the course design is outlined, followed by the research methods. The findings outline the themes which are analysed using Greenaway's four zones. The discussion answers the research questions drawing on the themes and interpreting them in light of the literature. The conclusion provides a summary of the key findings, limitations of the research and directions for future research.

2. Literature

The literature begins by defining reflection and reflective practice. It then explains the choice of Greenaway's model as the theoretical lens for the study. The benefits and challenges inherent in reflective practice are then explored. Some prior research on approaches to foster reflective practice is presented. Studies focusing on demonstrating habits of reflective practice are evaluated revealing the research gap. The section concludes with how the study addresses the research gap.

2.1. Defining reflection and reflective practice

Reflection is an active and considered way of thinking, to explore as well as test experiences and ideas, to make meaning out of the situation (Dewey, 1910; Kolb, 2014). It is a considered thinking process that examines one's experiences during an activity or after an activity, to learn from the experience (Amulya, 2004). Rogers (2001, p. 41) highlights the difficulties in defining reflection and therefore, he considers many definitions to provide one summation of the purpose of reflection, "to integrate the understanding gained into one's experience to enable better choices or actions in the future as well [as] to enhance one's overall effectiveness". He also argues that the challenges in clarifying and defining the concept make it demanding to teach and learn.

Reflective practice is creating a habit or system for an ongoing process of reflecting on experiences. It can be structured, or unstructured, occurring daily, monthly or at any time (Amulya, 2004). Reflective practice has been defined as "a form of systematic inquiry that is rigorous and disciplined" (Farrell, 2012, p. 14). It is driven by dialogue, questions and stories to comprehend problems to gain answers (Schon, 1986). Using appropriate questions can aid reflection (Kiersch & Gullekson, 2021). Reflective practice goes beyond occasional times of reflection to reflection becoming a habit. While such habits will vary from individual to individual, what is necessary is clarifying the purposes of reflection and "identifying opportunities to locate reflection … that are realistic and yet occur at the right intervals and with sufficient depth to be meaningful". (Amulya, 2004, p. 2).

The timing of reflective practice has been discussed by various authors. Reflection-on-action occurs after the event, it is retrospective, whereas reflection-in-action occurs during the event (Schon, 1986). Reflection and reflective activities occur in learning design and assessment, both as solitary or collaborative/group activities within a classroom or professional context. Thompson and Pascal (2012, p. 317) add a third process to Schon's work: *reflection-for-action* which they define as "the process of planning, thinking ahead about what is to come" to draw on one's experiences and professional knowledge to make the best use of the available time. Edwards (2017) expresses similar sentiments in her description of reflection before action.

2.2. Greenaway's active reviewing cycle

A variety of models have been used not only to guide responses to reflective practice activities but also to evaluate students' reflections (Jung & Wise, 2020; Zhang et al., 2023). Gibbs' (1988) reflective cycle consists of six stages: description, feelings, evaluation, analysis, conclusion and action plan. Kolb's (2014) learning cycle is based on the idea that learning is a continuous process that involves four stages: concrete experience, reflective observation, abstract conceptualisation and active experimentation. Boyd's OODA is an alternative to Kolb and has several feedback loops within its four stages: Observe, Orient, Decide and Action (Ryder & Downs, 2022). It should be noted that models provide a useful frame of reference to enable focused reflection, however, such focus may obscure complex realities as some aspects of experiences are emphasised while others may be overlooked (Greenaway & Knapp, 2016). Greenaway (2002; 2008) encourages learning from experiences. His active reviewing cycle (2023) consists of four zones: *facts* which are recalling prior events; *feelings* which are the emotions provoked by an event; *findings* which are the learnings from an event; and *futures* which are about applying the learnings in the future.[1]

Greenaway's (2023) active reviewing cycle encourages individuals to reflect on their experiences from multiple perspectives and consider the practical implications for future action. For educators, identifying these four zones in students' reflections provides insights into students' engagement and understanding of the material, as well as their ability to apply what they have learned in real-world scenarios. Additionally, it promotes a systematic and organised approach to reflective practice, ensuring that all important aspects of the experience are considered and reflected upon. Of the reflective models presented above, only Gibbs and Greenaway pay attention to emotions. After considering various models outlined in The University of Edinburgh's Reflection Toolkit (2022), the researchers settled on using Greenaway's model to evaluate the student reflections due to its links with the research questions and the links between learning and emotion (Tyng et al., 2017). Boud et al. (1985) have asserted that the consideration of emotion is an important aspect of effective reflection. Applying Greenaway's model to the student reflections enabled the evaluation of the effectiveness of the reflective questions to encourage students to address all zones required for the holistic reflections. When students

---

[1] In the findings we refer to the four zones using *italics* and square brackets [] for reading ease.

address all four zones throughout their reflections this provides evidence of them producing reflections with distinctive elements that are characteristic of quality reflections (Jung & Wise, 2020). Gaining meaningful insights from reflection is the hallmark of a reflective practitioner and an integral part of relevant professional development (Paisey & Paisey, 2020).

2.3. Benefits of reflection

Research on the use of reflection and reflective practice activities in higher education has highlighted various benefits. Reflective thinking plays a fundamental role in learning and knowledge construction (Şener & Mede, 2022). An iterative cognitive process of reflection enables the student to make sense of problems and reconstruct and transfer contexts (Boud, 2009; Rodgers, 2002; Schon, 1986). Ongoing reflective writing promotes deep transferred learning (Ono & Ichii, 2019) and develops students' knowledge base (Smith & Trede, 2013). Reflective practice aids students in thinking critically about their performance (Kis & Kartal, 2019), enhances self-awareness and self-efficacy (Brewer & Devnew, 2022), and influences their responsibilities, approaches and attitudes toward peers (Marden & Herrington, 2022). Reflective practice also helps students optimise work-based learning opportunities (Helyer, 2015).

The application of reflective practice in a collaborative context encourages students to develop critical awareness in group situations and initiate attitude changes that result in the development of strategies to deal with group issues and concerns (Marden & Herrington, 2022). McGuigan and Kern (2009, p. 64) found that reflective journaling promotes "the development of a student's 'personal attributes', 'self-direction and self-assessment'" and helps to ensure "the learning in the course is of 'relevance'".

2.4. Challenges of the reflective approach

Challenges exist that may require rethinking the approach to the teaching and use of reflective tools. Writing reflections may be uncomfortable and difficult (Griggs et al., 2016). Students need to develop confidence in the writing process to overcome feelings of awkwardness or uncertainty in engaging in the process (Marden & Herrington, 2022). Although writing is a desired skill to engage in the reflective process and to articulate thoughts and ideas, not all students consider writing to be their preferred method of practising reflection (Brooman & Darwent, 2012; Smith & Trede, 2013).

Students' limited conceptual understanding and lack of reflection skills impact their engagement in the reflective process and may contribute to their reluctance to apply reflective practices (Kis & Kartal, 2019; Smith & Trede, 2013). The approach to reflective assessment is not a traditional university assessment type and the scarcity of this assessment type across courses also contributes to student inexperience, limiting the opportunities for reflection on what has been taught and reflection on oneself as a future practitioner (Ono & Ichii, 2019).

Reflective abilities may also differ between students in different disciplines and cultures. A Norwegian study found engineers reported lower levels of reflective learning outcomes than nurses and teachers (Caspersen et al., 2014). Early studies of accounting students have revealed that reflective ability, influenced by learning styles, may differ between cultures. Auyeung and Sands (1996) found that students from Hong Kong had a greater reflective orientation relative to Australian students. The argument that styles of learning may vary from culture to culture has been demonstrated by various researchers (Budeva et al., 2015; Joy & Kolb, 2009; Pratt, 1992). Differences between Chinese and Western conceptions of 'self' offer possible explanations for the impact of Chinese collectivistic society cultures on learning styles (Pratt, 1991; Triandis, 1989). These cultural influences are demonstrated when reviewing Hong Kong and Taiwan and the still observable Confucian traditional *Chung-yung* or *Doctrine of the Mean*. This cultural influence encourages learning and reflecting through listening to and observing the elders who have embodied the collective wisdom of age and experience (Auyeung & Sands, 1996). In an individualistic society, such as Australia, the emphasis is on the individual to learn. Teachers act as guides rather than experts, so reflection may not be part of a student's learning style. Recently, a USA study found that accounting students appear to favour a style of learning that is sensory and orderly (Chen et al., 2018) but this approach may limit their capacity for broad and abstract thinking (Goosen & Steenkamp, 2023), skills needed for reflective practice. Moreover, accounting students' reflective skills have been assessed as underdeveloped in meeting workplace needs (Wolcott & Sargent, 2021).

2.5. Promoting reflective practice

Educators need to select the appropriate reflective tools, apply scaffolding and integrate reflective activities early to support students in seeing the benefits (Brooman & Darwent, 2012). Ensuring safe public environments are constructed to encourage students to engage and express personal thoughts, particularly of a sensitive nature, requires consideration and support (Smith & Trede, 2013). Smith and Trede (2013) recommend that academics rethink reflective assessments to provide a range of authentic opportunities for students to reflect on practical undertakings rather than introspective reflections. Rodríguez Gómez & Ibarra Sáiz (2015) propose three principles supporting the design of authentic assessment, which are challenge, reflection and transferability.

Students need to be able to build on their prior experiences and have opportunities to practice their skills (Wolcott & Sargent, 2021). The development of students' reflective practice takes time, encouragement and clear information to foster engagement within the reflective process (Marden & Herrington, 2022; Smith & Trede, 2013). By addressing these issues, academics can assist students in overcoming discomfort and they encourage deeper and more meaningful learning (Kis & Kartal, 2019).

2.6. Evaluating habits of reflective practice

While course learning objectives may include developing habits of reflective practice, educational researchers rarely evaluate their

courses for evidence of habits of reflective practice that will carry on into the future (Allen & Altepeter, 2023; Awad et al., 2023; Botchwey & Umemoto, 2018; Fletcher & Hordvik, 2022). A few studies have attempted to determine if habits of reflection have been developed. The methods to determine the extent to which habits of reflection developed, varied across the studies. A final-year course with management students (Nicolini & Korica, 2024) introduced concepts of reflection before shadowing senior managers. Students observed and discussed the reflection practices of the managers during their shadowing experience and dialogued with them about their own reflections. Later, the students were required to undertake a 15-min creative presentation that reflected on an incident from the shadowing and write reflective essays (Nicolini & Korica, 2024). In this workplace shadowing study, interviews were conducted with the students (Nicolini & Korica, 2024). A first-year design course (Thomas et al., 2023a) utilised an eportfolio, however, no information was provided on how often the students' reflections were added to the eportfolio. The design students were required to complete reflections as part of their weekly laboratory reports in a subsequent course. These subsequent reflections were reviewed and it was found those students who had completed the eportfolio produced reflections that were more comprehensive and varied than students who had not participated in the eportfolio assessment (Thomas et al., 2023b).

Two other studies required regular reflections. For the first study, bank employees were asked to write two reflections per week for eight weeks and researchers examined the frequency and content of participants' reflections (Rigolizzo & Zhu, 2020). Unless participants' reflections mention their intended use of reflections in the future, evaluating their reflections does not provide evidence that they may continue reflective practice habits. The second study involved post-course follow-up for a transition to university course. The course ran for one week and students were asked to write daily reflections (Pretorius & Ford, 2016). To evaluate the transition to university course, the reflections students wrote at facilitated sessions at the end of the week-long course, were collected. Thematic analysis of these revealed that students were reflecting, albeit at a novice level. Several factors were considered to contribute to the development of reflective practice habits. Students were provided with a reflective journal template with reflective prompt questions rather than being required to use a specific reflection framework. Facilitated discussions each morning provided an opportunity for students to share their reflections from the previous day. To ascertain if the students continued to use reflection, a questionnaire was administered at the end of the first semester (Pretorius & Ford, 2016).

Of the two studies, the transition to university course appears to have a more reliable approach to investigating the establishment of reflective practice habits. The data collection occurred several months after the initial course and asked students about their current reflective practice habits (Pretorius & Ford, 2016). While the design students' study demonstrated they wrote richer reflections, these reflections were a course requirement and it is not known if they were reflective outside the course (Thomas et al., 2023b).

2.7. Identifying and addressing the research gap

The current study addresses several issues. Concerns regarding reflective practice and associated skills have been identified in various countries (Ahmed, 2020; Matsouka & Mihail, 2016; Osmani et al., 2019; Qenani et al., 2014; Yong & Ling, 2023). Studies with accounting students have also noted gaps in their reflective practice skills (Wolcott & Sargent, 2021). Investigating an accounting course at an Australian university, predominantly attended by Australian students, helps to limit the potential for research results to be influenced by variations in reflective capacities that can arise from cultural or disciplinary differences (Auyeung & Sands, 2003). Qualitative studies have not often been used to study reflective practice in business courses (Ono & Ichii, 2019).

Studies attempting to determine if habits of reflection have developed after educational interventions generally have not determined whether professionals or students carry on with reflective practice after completing these programs. As reflections are often linked to course requirements, an intervention may demonstrate improvements in reflective writing, however, this may not reflect voluntary or habitual reflection post-course completion. This study takes a qualitative approach to research reflective practice in a business course. It also attempts to discern evidence of students' development of habits of reflective practice and their commitment to future reflection, albeit at the end of the course rather than post-course completion.

3. Background of the course design

This section outlines, the course aims and resources, along with the design of the assessment and feedback.

3.1. Course aims

In 2020, an *Accounting Major Capstone* course was developed informed by the *Accounting Learning Standards* (Hancock et al., 2016). The course employed an inquiry-based learning approach (Tawfik et al., 2020), designed to enhance accounting students' graduate capabilities. The course was developed in the first semester of 2020 and delivered online from the second semester of 2020. The course design had some commonalities with Wilkin's (2022) integrated and interactive approach, where reflective practice occurred at regular intervals and feedback aimed to encourage students to grow their skills in reflection. The course was compulsory for students undertaking an accounting major within a Bachelor of Business and Commerce and was required to be taken at the end of a student's program. The program had a substantial proportion of non-school leavers who were studying part-time alongside their employment. The university has a city and a regional campus.

The purpose of the capstone was to prepare students for the workplace and encourage independent learning. An online mode was deemed to constitute a suitable approach. It is acknowledged that online learners may face challenges, such as a reduced likelihood of collaborative learning and fewer student-staff interactions, relative to their more traditional classroom counterparts (Dumford & Miller, 2018). However, a meta-analysis of online learning research revealed it achieves similar efficacy to classroom teaching (Castro

& Tumibay, 2021). Furthermore, the teamwork component of the course required online collaboration. Students were given the opportunity to attend a weekly Zoom drop-in session with the course coordinator. The course had five learning objectives.

1. Apply accounting knowledge to address real-world scenarios.
2. Collaborate effectively to solve accounting problems.
3. Make evidence-based decisions and apply critical thinking to client-related issues.
4. Maintain knowledge of professional accounting trends.
5. Develop reflective practice and self-management in professional accounting contexts.

Regarding reflective practice, the course aimed to familiarise students with its benefits, its professional applications and develop habits of reflective practice. Regular, structured reflection is recommended to aid the development of habits of reflection (Rigolizzo & Zhu, 2020; Rivera et al., 2020; Wald et al., 2015). The course provided opportunities for students to actively engage in reflective practice to enable the fostering of a habitual approach through regular activities throughout the semester.

3.2. Resources

Across the course offerings, various resources were provided to encourage students to reflect deeply and create habits of reflection. One recording outlined the benefits of, and approaches to reflection. A second recording was produced: "What does a good reflection look like?" It explained that there is no such thing as a "good reflection" as reflections are an individual's thoughts. Reflections may range from perfunctory and superficial to deeper insight and self-awareness along with suggestions for future actions. A career-focused example was used to contrast superficial and deep reflections incorporating emotions, learnings and future plans.

Other resources included recorded interviews with three accountants discussing their careers. These interviews provided a springboard for reflective questions requiring the students to identify aspects of the accountants' roles that they found appealing and those that might discourage them from taking up such roles. Additionally, the students were required to identify one skill that they wanted to build on that would help them in their future careers and outline steps they could take to develop the skill.

In 2022, two interview recording resources were created, one with a public accountant and one with an educator. They outlined the benefits gained from reflective practice and how the interviewees incorporated reflective practice into their regular routines and workplace benefits. In the second half of 2022, the course coordinator produced several recordings modelling and unpacking deep reflective responses to some of the questions. To further demonstrate the benefits of reflection, additional references to research and comments from students from the prior semester about the benefits they had gained from reflection were included in the assessment documentation introduction.

3.3. Reflective practice journal assessment design

The assessment strategy consisted of three assessment items - reflective practice journal assessment (25%), individual assignment (35%) and teamwork assignment (40%).[2] The reflective practice journal assessment design considered the relevance of reflective practice questions and the provision of effective feedback to students to enhance their reflections and address student issues in writing reflections. The students were not required to follow a reflective model for writing their reflections. A reflective template was provided consisting of eight sets of reflective practice questions. Each set of reflective practice questions aided students in creating a singular reflective response to the question set, for submission at a designated date during the semester. The students completed eight reflective responses over the 14-week semester.

The topics across the reflective question sets were discussed and agreed upon by the course development team. Reflections submitted by students addressed the following four topics.

- Current career information, employability skills and attitudes, career goals and plans to enhance skills.
- Insights about self and developing habits that will aid career success and plans to reinforce these habits.
- Undertaking assessments (individual and team), reviewing and acting on feedback, teamwork dynamics and building on team members' strengths, gathering and evaluating evidence, forming judgments and drawing on existing and new learning.
- Using reflective practice to adjust processes, evaluate career goals and recognise changes in self and how these learnings will be applied in future careers.

The assessment scaffolded the reflective question sets to encourage deeper reflection. In the earlier set of reflective questions, the students outlined their plans for the development of professional skills and in the last set of reflective questions they reviewed their progress in skill development. The first reflective response asked students to outline their previous experiences in reflection, what they

---

[2] The individual assignment incorporated a company case study that included segment analysis over three years, graphs and a critique of the limitations of segment information. The teamwork assignment extended the company case study to consider overall financial performance and the extent to which the prior performance might be a constraint on the future short-term performance of the company, share price charting, announcements to the Australian Stock Exchange, analysis of modern slavery statements, analysis of environmental, social and governance reporting, analysis of key audit matters and peer review.

believed they could gain from regular reflective practice during the semester and what they might do to help ensure that they completed the reflections regularly.[3] Gathering reflections regularly is similar to the method adopted by Mohamad and Tasir (2023). Reflective questions were developed (rather than just providing broad topics for reflection) as such cues have been found to encourage reflection (e.g. Dellaportas et al., 2022; Wilkin, 2022). The reflective practice question sets were developed by the course coordinator in consultation with the educational designer.

The final reflection included the following five direct questions on reflective practice.

a. In what ways did the use of reflection lead you to make changes in the way you approached your studies in this course?
b. To what extent did answering the reflective practice questions become easier over the semester?
c. To what extent can you recognise changes in your thinking from the start of the semester?
d. After completing a semester of reflective practice, comment on the benefits of reflection.
e. In what ways could you introduce reflective practice into your career and what might you do to ensure it becomes a regular habit?

Other questions in the final reflective question set asked students to comment on the course: what they liked, what they found challenging and their suggestions for improvement.

3.4. Feedback and marking

Students were required to submit eight reflective responses over the semester for marking. Students were provided with individual forums to post their reflective responses. The course coordinator provided feedback through the forums. Feedback included prompts to encourage deep reflection, greater detail of experiences and exploration of learnings, emotions and plans. Students were able to respond to feedback to enhance their marks. This approach effectively transformed summative assessment into formative assessment and followed Wilkin's (2022) approach to designing reflective exercises which included formative assessment. It also motivated students to undertake the reflective process early and authentically.

Over the course's reiterations, student numbers increased and consequentially the number of reflective responses exponentially grew impacting the marker. It became clear that the marking and providing feedback of these responses needed to be streamlined for sustainability. The first offering of the course in 2020 had 12 students increasing to 40 in the second semester of 2022. Previously all reflective responses had been provided with detailed feedback. In 2022, it was initially proposed that some reflective responses be chosen at random for marking and feedback. Acknowledging the effort students put into their reflective responses, it was decided that all responses would be read and marked, however, only selected responses would receive detailed feedback.

The following feedback strategy was applied.

a) The first (1) and last (8) reflective responses were marked out of 20. For the first response, students received detailed feedback, providing the opportunity for the student to enhance their original reflective response and resubmit to improve their marks.
b) The remaining six reflective responses were grouped into pairs (2 and 3, 4 and 5, 6 and 7), and each pair was marked out of 20.

Within the pair, one set of reflective responses was randomly chosen, marked out of 15 and given detailed feedback, for student enhancement and resubmission. The remaining set of responses in the pair were marked out of five. The mark for this set was based on the overall reflection and the depth of insight. Brief feedback was provided. Students were not required to respond to the brief feedback or to resubmit to improve their marks.

4. Method

This section explains the choice of a qualitative research design, the selection of participants, the process of carrying out the research ethically and the approach to data analysis.

4.1. Research design

A qualitative approach for collecting the data was deemed appropriate due to the exploratory nature of the study (Bernard et al., 2016). Such an investigative approach is used to understand how people or groups view and interpret social issues. It involves collecting data within the natural setting of the participants, using inductive analysis to identify themes from specific details and interpreting the data to ascertain its meaning (Creswell & Creswell, 2023). Data were collected from the students' reflective journals and through a questionnaire. The analysis of students' reflective responses centred on comparing the initial responses about reflective practice at the start of the semester and their final responses at the end of the semester.

---

[3] The semester comprised 13 teaching weeks plus two non-teaching weeks. The eight reflections occurred over 14 weeks.

4.2. Participants

All 40 students who were enrolled in the capstone course in semester two of 2022, were invited to participate in the research project. In week 10 the course coordinator met online with groups of students.[4] In the meeting, the students were provided with an electronic consent form to participate in the project and for their de-identified reflective practice journals to be analysed for research. After indicating consent, they completed a brief questionnaire that included questions on their prior experience in reflective practice. The students were invited to participate in the research project later in the semester after the completion of some reflections so that they were fully aware of the requirements of the reflective questions. A $100 gift voucher draw was offered as an incentive to participate in the study. Students were encouraged to participate regardless of whether their views about reflection were positive or negative so that their voices could be heard. Students had the opportunity to withdraw from the project after they had submitted their final reflection, however, no students withdrew. Thirty-one (77.5%) students agreed for their reflections to be used for the research project.

4.3. Data analysis

An inductive approach was taken to analyse the data. Students were provided with a reflective template to write reflective responses to each set of questions. One researcher undertook the initial coding using the students' reflective responses in the reflective template to generate codes in NVivo. Both broad and narrow coding[5] was used. The generated codes were reviewed and refined by two of the co-authors to develop and confirm the themes. Within these themes, the lens of Greenaway's (2023) active reviewing cycle was used to analyse students' depth of responses, identifying where the four zones were apparent in their reflections. This identification of zones contributed to answering research questions one and three.

5. Findings

From the analysis of the data, eight themes were identified.

1. Varying degrees of students' prior experiences in reflective practice.
2. Expected benefits to be gained from reflective practice.
3. Positive responses to resources.
4. Plans to regularly reflect during the semester.
5. Writing reflections became easier over the semester.
6. Feedback had a positive effect on students' reflection.
7. Actual benefits gained from reflective practice.
8. Reflective practice going forward.

Presented below are samples of data (the codes S1 through S31 are designated to each student and their responses)[6] related to the themes with the results of Greenaway's four zones analysis identified, in *italics* and square brackets []. A diagram showing the themes and identified subthemes groupings appears in Appendix One.

5.1. Varying degree of students' prior experiences in reflective practice

The students' questionnaire responses to prior experience in written reflective practice at the start of the semester indicated that nine had no experience, nine had limited experience and 13 had some experience. No students described themselves as very experienced in reflective practice. Students were also asked where they used written reflective practice: 14 used it at their workplaces and seven students used it outside the workplace.

Varying degrees of experience were identified from the first reflection where students outlined their reflection experiences and commented on both written reflection and reflective thinking. Greenaway's *facts* and *findings* zones were identified from the students' shared past experiences and current understanding. Some students never reflected, while others rarely reflected. S17 acknowledged "My personal experience with reflective practice in the past is quite limited. To be perfectly honest I very rarely participate in the exercise." [*facts*].

S28 described insightful yet unstructured reflective practices, "[I] like to gain insight and understanding on the 'why' of whatever is relevant", however, they had "never practised a structured or consistent approach to reflective practice" [*findings*]. In contrast, S22 realised a structured reflective practice in the workplace:

---

[4] The Head of School authorised the project before the University's ethics committee approved the project.

[5] Broad coding occurred when the whole response/paragraph to a particular question was coded to one code. Narrow coding occurred when one or two sentences within a response/paragraph were coded.

[6] S represents the participant as a student and the number represents the responses related to the specific student. The codes do not distinguish cohort characteristics. The codes also enable the reader to see a spread of quotes from students.

> I hadn't realised that I had been carrying out reflective practice until now. As a manager, I carry out a monthly review of my department through recording on the department's success, questions relating around the month's activities, challenges and improvements. This is in a form of a written document which I then review and plan improvements and changes to follow through into the following month. [*findings*]

S13 and S20 expressed recognition and surprise [*feelings*] as they connected existing practices [*facts*] with reflection. Additionally, they identified learnings [*findings*]:

> While watching the video where [the Educational Designer] talks about reflective practice, I realised a lot of the things she spoke of in the video I already did, just not to the extent where I write things down. S13

> I don't think I have ever consciously utilised a reflective practice. When I listened to [the Educational Designer] describe how she uses reflective practice, I recognised that I too use reflective practices, but I have never attached a term to my practices. S20

While *facts*, *findings* and *feelings* were identified in the students' recollections of prior experiences in reflection it was not expected that the *futures* zone would come into play here as they were focused on recalling experiences.

5.2. Expected benefits to be gained from reflective practice

The four reflection zones were seen when students considered the benefits they may gain from reflective practice. Some students recounted prior experiences [*facts*] and they connected emotions [*feelings*] of uncertainty, to what they hoped to gain. S6 commented that they "never liked to reflect" about themselves, while they understood the benefits, they declared, "At this point, I am not sure what I would get from weekly practice." [*feelings*]. S29 had "some exposure to it in a professional capacity" but was "not entirely sure what a weekly reflection would add to their academic experience" but was "open to see how it could enhance [it]" [*facts/feelings*].

Self-learning surfaced as a benefit of reflection [*findings*]:

> Using weekly reflection in this course I think I could develop my skills in writing about personal experience and also writing with more emotion. I also think that it will be a beneficial learning technique as it forces me to think and answer questions from a different perspective. S10

S29 believed "reflecting weekly would teach me to achieve a set goal step by step and teach me to acknowledge and appreciate the best of my work."

The *futures* zone was embodied in reflections identifying self-improvement and goals benefits:

> I can gain an understanding of how I can arrange and align my life goals with a continuous method [reflective practice] to achieve these. As I do have a very busy weekly schedule, this time will help me shut off, re-group and reflect on ways to deal with any overwhelming and stressful situations that may occur. I am able to assess the situation, see it as a learning opportunity and find an improvement technique. S16

> [It] will benefit me greatly as I think there are many areas of my life that need improvement. Such as my ability to focus, my motivation levels and my ability to self-regulate in uncertain and challenging situations … [It] will allow me to find important focus points to enhance and grow my knowledge and skillsets. S24

5.3. Positive responses to resources

Although the reflection questions did not ask students about the resources provided, nevertheless, several students referred to the materials and their learnings [*findings*]. The recordings on reflective practice not only helped students understand approaches to reflective practice but also to appreciate the benefits. Both S13 and S20 referred to the video recordings (Educational Designer talk). S7 stated: "After watching the videos posted on the study desk regarding other people's experiences with reflective practice, I believe I would benefit from implementing it into my weekly routine."

The reflective template with reflection questions helped to make writing reflections easier:

> I believe the reflections became easier to write each week … there were always some guides or solid reflection questions that made me take time to self-analyse my past week's note-taking and really made me decompartmentalise each part of the questions. S2 [*facts/feelings*]

While *facts*, *findings* and *feelings* were identified in the students' responses to resources it was not expected that the *futures* zone would come into play here as they were focused on recalling experiences.

5.4. Plans to regularly reflect during the semester

Students were required to submit eight reflections over the semester; therefore, it was important for the students to develop a plan. Students were asked to discuss the following question: What might you do to ensure you complete the reflections on a regular/weekly basis? The students' planning for regular reflection exhibited Greenaway's four reflection zones. Students mentioned prior experiences and course materials, realising benefits [*facts/feelings*]. They derived insights from structured questions [*findings*] and planning

strategies [*futures*].

Many students wrote about scheduling and motivation strategies [*futures*]:

I have planned ahead and blocked time in my calendar. S10.

I will set the timeline for my tasks so I can complete all the tasks timely. S14.

The deadlines for each reflection have been added to my calendar, encouraging me to complete them weekly. S17.

Some expressed different approaches to scheduling. For S31, "enjoyment of self-improvement" [*feelings*] was the motivator, "reaching my professional and personal goals incrementally will ensure that I will do the weekly reflective process." [*futures*]. S3 had a wholistic approach:

> Get in early. Study during the week. Manage my stress. Eat well. Exercise. Go to sleep on time. Deactivate social media. Romanticise my study so it's more enjoyable – add music, candles and snacks! [*feelings*]

5.5. Writing reflections became easier over the course of the semester

Students expressed a range of views regarding the extent to which reflective practice became easier over the semester. Some found it challenging due to complexity [*facts/feelings*]. S27 stated it did not get easier as "reflecting is hard" [*feelings*]. For S1 reflections did not get easier as they wanted to "put a lot of effort" into their reflections "taking the time to fully analyse questions to gain the most learning" [*facts/feelings*]. Several students commented on the challenge of the number of reflections [*facts/feelings*]. S28 declared "as much as I have enjoyed the reflective practise, there is a lot of work involved in them for the weight that they are given".

For others, reflection became easier as insights grew [*findings*]. For S13 it "only became slightly easier" as it "is a very complex task and it will take much longer to become a natural instinct". S6's views also changed:

> At first, I was resistant and had the strong feeling that this was an entirely fluffy waste of my otherwise precious time. However, throughout the semester it has become easier to self-reflect.

Many of the students observed gradual ease tied to familiarity, benefits realisation and developing better techniques [*facts/findings/feelings*]:

> Answering the reflective practice got noticeably easier over the semester as I improved upon my understanding and ability to perform reflective practice in an effective manner and employed more reflective practice techniques, i.e., starting a journal. S28

> The reflective practice became easier after the first two … because I was starting to understand the benefits of reflecting in general and going through the thought processes surrounding the different questions. S5

Conversely, some found writing reflections persistently difficult. They expressed emotional challenges [*feelings*] that it was a difficult part of the course:

> I found the reflections most difficult as it is not something I like doing or had done previously. S26

> For me, the reflective practices were difficult/challenging. S27.

5.6. Feedback had a positive effect on students' reflecting

Students expressed appreciation [*feelings*] for the feedback on the first reflection: "Thank you for your valuable feedback" S31; "Thank you again for your comments and feedback. It is greatly appreciated" S7. S24 stated:

> When I realised the benefits of reflective practice and received positive feedback on my previous submissions, that inspired me to dig deeper which I gained more comfort with over the semester.

Students commented on how the feedback on the first reflections helped them to become more familiar with what was required [*facts/findings*]:

> The first two reflection practices were challenging for me because I was simply uncomfortable and unfamiliar with the process. Expressing my thoughts and feelings through words is not a process I normally partake in and I found it relatively difficult at first. Although the feedback received and small conversations surrounding the reflections gave me confidence each reflection and helped me understand the importance of the process. S8

S29 also expressed feelings of confidence [*feelings*].

> I think with the first couple of reflections I maybe wasn't as confident with knowing what to write and if I was doing the right thing. Over the semester, particularly with the feedback I became more confident in what I was writing plus I think I became more willing to open up about things.

F*acts*, *findings* and *feelings* are easy to see in the students' comments about feedback. *Futures* are also present but not so easily discerned as the feedback helped the students to dig deeper and have confidence for future reflections.

5.7. Actual benefits gained from reflective practice

All students spoke of the benefits they gained from a semester of regular reflection [*findings*]. Students' comments exhibited enhanced self-efficacy : objectivity, self-confidence and control [*feelings*], self-learning and knowledge [*findings*], critical thinking [*facts*], personal growth [*facts/findings*], development of empathy [*facts/findings*] and goal-setting [*futures*].

Examples of awareness of objectivity for self-improvement [*findings*]:

> After doing more reflection I have been able to see the benefits of reflection. It allows an objective view of what has happened rather than the subjective view I often got stuck in during whatever activity I faced. S6

> I also benefited from learning more about myself and knowing how to tackle mind-over-matter issues … but doing the reflective practice made me realise that I was not putting it into action. It made me see myself objectively which helped me clearly see areas that I can improve. S21

> It has highlighted areas that I need to work on. I don't know that I otherwise would have become aware of these areas that I need to work on. S29.

Emotional shifts in confidence and positivity were evident [*feelings*]:

> I have noticed a very big shift in my way of thinking. The biggest change I have noticed is that I am definitely a lot more positive and feeling a lot more confident in myself and my own abilities. S4

> This reflection has also greatly helped improve my positive thinking and has made me become more relaxed about things I would normally stress over. S13

A change in thinking led to increased control and influence [*facts*]:

> I have noticed a massive change in my thinking compared to where I started at the start of the semester … now I just feel more in control of what is happening that I have influence over. S22

Students expressed the benefits of reflection for self-improvement and knowledge enhancement [*findings/feelings*], as well as applications for future growth [*futures/findings*]:

> [T]he ability to analyse daily situations whether they are good or bad situations there is something you can always learn from and enhance your knowledge on. S9,

> [L]earnings to help me in the future. S22

> [T]o achieve at least one small goal within a small period and to constantly trying to achieve. S31

Students also expressed improvements in their critical thinking [*findings/futures*]:

> l though each reflection made me think very critically, I believe it is a crucial skill to learn. S7

> I used the reflection as a tool to critically think, highlight and expressively write my personal and studies-related thoughts week to week. S2

S24 acknowledged personal growth, shifting thought patterns [*findings*] and thankfulness [*feelings*]:

> [T]here has been a dramatic change in my thinking compared to the beginning of the semester. I went into this course with a fixed mindset and very uncertain feelings about reflective practice. However, I sit here today, thankful for the opportunity to be a part of something that fosters so much personal growth and challenges my perspectives and thought patterns.

Students commented on an increase in self-awareness. S14 developed patience and empathy [*futures/feelings*]: I have become more patient with myself and others. I will be more likely to think from others' perspectives. While S18 employed a third-person perspective for self-assessment [*futures*]:

> [My thinking has changed] to a very large extent … I believe that I can view myself from a third person perspective in some regard and have developed a greater sense of empathy … I constantly ask myself where do I want to be, who do I want to be, etc and view myself from this third-person view to look at how I'm progressing. S18

Other students spoke about reflection and goal-setting [*futures*] and highlighted positive insights and benefits [*findings*]:

> I think continuing with reflective practice on a regular basis will help me to achieve my career goals because of these positive insights. S24

> Reflection allows you a place to set goals, review practices, analyse progress towards goals and acknowledge achievements. It is really a valuable skill to learn and I am hoping to be able to continue this practice and learn how to be more effective at it. S17

The presence of the four zones in the students' discussions of the benefits of reflective practice revealed that reflecting was not just a mental exercise to be done and forgotten. As the students realised the benefits [*facts/findings*] there were emotional responses [*feelings*]

and a desire to plan [*futures*].

5.8. *Reflective practice going forward*

The four reflection zones were present in the students' descriptions of developing habits and plans. Most students commented on the usefulness of reflective practice in their career and implementing a regular habit. Only one student did not think they could introduce reflection into their career, however, they practised reflection in their everyday life: "I already sort of reflect on my day when I get home, talk to my husband, relax before bed, I don't think there is much other need other than that" S26 [*facts*].

Regular reflections had become habit-forming, deepening self-awareness [*futures/findings*] as well as positive emotions [*feelings*]:

> [It] became much easier over the semester as it was at the forefront of my mind … [it] gave me the ability to find out more about myself that I often don't think about, so it got easier as I was also eager to see what my response to the next questions would be. As I became more practiced, I found myself wanting to spend longer working on my reflections and began to see the increased benefits. S23

> I think that I found it easier to check in with myself and really dig deeper. I found the first few reflections challenging as I hadn't really thought too hard about different aspects of my life and career. After completing the first few, I set some goals and it changed my mind frame so that I started working towards those goals. This made the reflections easier as I already had been thinking about certain aspects of the reflections. S15

Some students revealed that they had already developed a habit of reflecting [*facts*] and this entwined with their plans [*futures*]:

> I have begun setting myself goals for the week … My journaling and goal-setting is really becoming a useful tool for my work, study, family and home life. S8 [*findings*]

> "I knew I have been doing reflections in my thoughts … I can see the importance of writing it down. I can see my progress much better and I can clearly see the difference. S21[findings]

S22 implemented regular reflection through "a daily review of what challenges were faced and how I went about actioning them. I then considered how I [can] best address specific issues, so they don't continue in the future" [*futures*].

Students detailed a variety of strategies to develop a habit of regular reflection:

> Setting a time for reflection at the end of the day would definitely help to reflect regularly. A calendar reminder could help with the situation until it becomes a good habit. S31 [*futures*]

> I believe getting in the habit of reflecting on the day while driving home from work would be the most sustainable way to complete reflections. S9 [*futures*]

> I think it is important to set time for myself to journal and reflect. I'd like to set aside 10 minutes a day to form part of a routine. S4 [futures]

> Schedule a specific time each week to do the reflection to develop this habit. For example, on Friday afternoon every week. S14 [*futures*]

> Set up reminders [to] .. make sure I start to make it a core part of my weekly routine in my life. S18 [*futures*]

I could schedule dedicated focus time as part of my workday, instead of feeling like I need to do it afterwards and increase my stress of never having enough time. It could be worked into my daily routine rather than something I will try to do. S6 [*feelings/futures*].

In summary, at the start of the course, students' reflection experiences ranged from nil to some experience, although some students were reflecting without realising they were doing it. Some students were unsure about the benefits to be gained from reflection and others hoped to develop skills or set goals. While writing reflections became easier for some of the students, others continued to find it challenging. Those who found writing became easier linked this to understanding the benefits, employing more reflective techniques and becoming more comfortable with expressing thoughts. The students outlined their plans to ensure they regularly reflected during the semester, both with scheduling reminders and plans to make reflecting enjoyable.

Students responded positively to the resources provided noting that they assisted them in writing their reflections, in understanding approaches to reflection and in understanding the benefits of reflective practice. Feedback was seen as positive and encouraged increased openness and understanding as to how to write reflections. A variety of benefits were gained from reflecting including increased objectivity, enhanced self-learning and knowledge and developing empathy. By the end of the semester, some students commented that they developed habits of reflection. Motivations for reflective practice going forward included seeing the benefits of reflective practice and its usefulness in achieving goals. The four zones were present in most of the themes. The *futures* zone was not identified in two themes: *varying degrees of prior experiences in reflection* and *positive responses to the resources*. When these themes were analysed against Greenaway's (2023) four zones, students recalled prior experiences, key moments, they expressed emotions and learnings; these aligned with *facts*, *feelings* and *findings* zones but not the *futures* zone. Identifying the four zones indicated that students are moving beyond recalling events [*facts*], they are considering their emotional responses [*feelings*], and their learnings [*findings*] and applying these insights to future situations [*futures*].

6. Discussion

This section draws on the findings to answer the research questions. Simultaneously, it juxtaposes these findings with the prevailing literature to examine how they align with and diverge from scholarly conversation on developing habits of reflective practice.

It was critical that students not only appreciated the benefits of reflection but that they established sustainable habits for ongoing reflection. Analysing the students' reflections through the lens of Greenaway (2023), it was apparent that they exhibited the full active reviewing cycle (the four zones), through the application of reflective practice. The students described both current and prior experiences [*facts*] and how those experiences influenced their current approaches [*findings*]. They also observed the emotions associated with their experiences [*feelings*]. At the start of the semester, the students expressed mixed responses about undertaking reflections [*feelings*]. However, as the semester progressed students gained a deeper understanding of the practice of reflection [*findings*] and the mixed responses turned to positive responses resulting in increased confidence in writing reflections [*feelings*]. Students expressed their plans and strategies for personal development and their intentions to continue with reflective practice [*futures*].

6.1. To what extent, if any, did the design of course resources and assessment enhance the students' reflective practice skills and/or develop habits of reflective practice?

The timely provision of video resources and integrated assessment reflective activities encouraged students (Smith & Trede, 2013) and assisted them in appreciating the value of reflection (Brooman & Darwent, 2012). Providing clear expectations through feedback and video modelling reflective answers, fostered student engagement in the reflection activities (Choi et al., 2022). These strategies might also be seen as prompting the students to consider how they might approach future reflections [*futures*], which aligned with Edward's (2017) reflection before action. The students' understanding of what reflection entailed (Thompson & Thompson, 2023) and experiencing the benefits helped with the writing of their reflections.

The use of a reflection template with carefully selected prompts, without reliance on a specific reflection framework, may have enabled the students to "explore reflection through a method of self-discovery" similar to Pretorius and Ford (2016, p. 241). The assessment design also followed the suggestion of Jackson and Meek (2021, p. 76) that "reflective activities and assessments should explicitly encourage students to consider how their experience enhanced different aspects of their employability". Similarly, Choi et al. (2022) had students link their course learnings to their careers. In the capstone course the use of reflective incremental assessment, the spread of reflections over the semester and opportunities to respond to feedback, supported deep learning (Ono & Ichii, 2019). The questions were purposely positioned to foster habits of reflective practice. The first reflective questions included asking students how they might benefit from a semester of reflective practice and their plans for regular reflections. Several reflections provided opportunities for students to identify skills they wanted to develop. At the end of the semester, they reflected on the progress they had made in enhancing these identified employability skills. Regular reflections fostered reflective practice habits (Şener & Mede, 2022) as learning reflective practice skills takes time (Smith & Trede, 2013). Students' reflective competencies were enhanced as they noted they were not only reflecting-on-action, but also reflecting-in-action (Schon, 1986) and for-action (Edwards, 2017; Thompson & Pascal, 2012) as they had become more mindful of reflecting.

The topics of the reflective questions provided authentic opportunities for both practical and introspective reflections (Kiersch & Gullekson, 2021; Smith & Trede, 2013). While Smith and Trede (2013) argue for an emphasis on practical reflection, the students in the current study identified how they appreciated the opportunities for introspective reflection and what they had learned about themselves. They also provided examples of how they tackled things differently after undertaking the reflections (Greenaway, 2023). Requiring students to revisit prior reflections, where they set goals, appeared to have aided in creating habits of reflection (Rigolizzo & Zhu, 2020). The topics also followed the principles of authentic assessment, challenge, reflection and transferability, as suggested by Rodríguez Gómez & Ibarra Sáiz (2015).

Additionally, providing a safe environment and encouragement through feedback and selective resources changed student perceptions and enhanced their reflective practice. Establishing individual forums and ensuring that all feedback contained some positive elements created a safe environment. Students initially expressed uncertainty about reflection requirements and commented that the early feedback on initial reflections aided in writing later reflections. Additionally, assuring students that their reflections were their opinions, that there were no right or wrong opinions and that reflections were graded on the depth of insight, helped create a safe environment for reflecting (Smith & Trede, 2013). Over the semester, students became more open and willing to examine themselves and their actions (Greenaway, 2008). The course coordinator observed that these strategies led to the students requiring less feedback on their later reflections. Students expressed that their confidence in writing reflections grew over the semester (Kis & Kartal, 2019) and their discomfort with the process diminished (Marden & Herrington, 2022). They recognised that their thinking had changed and that they were thinking more deeply about issues.

6.2. What benefits, if any, did students believe they gained from regular reflections and feedback?

Students recognised that it was useful to pause and reflect and through reflecting they were able to learn and advance their knowledge (Şener & Mede, 2022). Reflecting provided the student with additional perspectives in reviewing and planning events that the students had not previously considered and viewing situations objectively rather than continuing to do the same things unconsciously. They expressed a greater willingness to be more introspective. It helped students identify areas of their lives they could work on to make improvements. It was acknowledged that without reflection, students would not have identified areas to make improvements and have continued with sub-optimal processes (Murphy & Hassall, 2019).

Students revealed that they benefited from setting goals and working towards those goals (Greenaway, 2023; Karakas et al., 2015). They noted improvements in their employability skills (Jackson & Meek, 2021). Enhancements in their critical thinking were another advantage of reflecting (Karakas et al., 2015). Regular reflective practice created habits (McGuigan & Kern, 2009), aided in students' confidence (Brewer & Devnew, 2022; Griggs et al., 2016) and their perceptions of agency. Reflection was seen to foster personal growth and challenge thought patterns (Choi et al., 2022). Similar to Ahmed (2020), students' initial reluctance to engage in reflective activities diminished over the semester. Students acknowledged that reflecting became easier with regular practice and their mindset changed to be more attuned to recognising opportunities to reflect. Students found reflection challenging (Griggs et al., 2016) and many students who were sceptical about the benefits of reflection at the start of the semester had changed their opinions by the end.

6.3. What, if any, were students' plans for using reflective practice in the future?

Involvement with regular reflective practice assisted students in enhancing their competencies in reflection, it also aided in their appreciation of the benefits of reflection. The positive experiences of reflective practice were a contributing factor in students' motivations to pursue regular reflective practice in the future. Some students articulated that their thinking patterns had changed and they were attuned to reflecting regularly, on-action, in-action (Schon, 1986) and before action (Edwards, 2017; Thompson & Pascal, 2012). Goal-setting and achieving goals were motivations to continue to undertake regular reflective practice in the future.

Pressure is a common characteristic of workplaces and employees may adopt a "heads down get on with it" approach that does not include time for reflective practice (Thompson & Thompson, 2023, p. 1). Hence, it was essential for students to consider how they could incorporate reflective practice into their routines. Students started to explore multiple ways of approaching their future reflective habits through predicting changes and differences, imagining possibilities and making choices, creating rehearsal situations, stepping closer to attainable plans and dreaming of what could be done (Greenaway, 2002, 2023). Students commented on both daily and weekly reflection routines they planned to implement. They spoke about setting aside regular times to reflect. All students completing the final reflection mentioned plans for reflection in the future. The one student who stated they would not adopt a practice of regular reflection in the future noted that they had a daily debrief with their partner. Having students purposely set plans for regular reflection seems to have contributed to them developing the habit of reflective practice.

In summary, students recognised the value of pausing to reflect, which allowed them to gain unique perspectives and develop greater introspection. Moreover, they acknowledged that without reflection, identifying areas for improvement would have been challenging. These findings are in line with prior literature that highlights the importance of reflection in pinpointing and addressing areas for growth. The current study adds to the literature by demonstrating that using reflective practice for the process of setting and working towards goals, both career and personal, led to improvements in critical thinking and employability skills. Additionally, regular reflective practice enhanced reflective skills, created habits and increased students' confidence. It also fostered personal growth and challenged their thought patterns.

7. Conclusion

The course coordinator's careful consideration of the assessment design and use of reflective tools within the course design has rendered results that contribute and respond to current literature. Analysing the reflective practice journals of 31 students enabled an evaluation of the effectiveness of an approach to teaching reflective practice. The course design aimed to enhance students' competency in reflection, provide experiences for students to regularly reflect and gain an appreciation of the benefits of reflection, encourage habits of reflection and consider future reflection practices. Using Greenaway's (2023) reviewing cycle provided greater insights into the extent to which the students' reflections encompassed the four zones. This variety of perspectives ascertained from the students' reflections provided evidence of the students' deep engagement and application of their learning.

Although students found reflective practice challenging (Griggs et al., 2016), scaffolding the questions over the semester enhanced their reflective skills and they began to recognise its benefits. Students' reflective journal responses combined with the insights gained from the application of Greenaway's reflection model for analysis demonstrated the success of the course in achieving its objectives. The study's outcomes supported Gallagher et al.'s (2017) findings that reflective practice leads to skill development, self-awareness and engagement in one's profession. Additionally, this study confirms that the process of regular reflection supports the building of habits of reflection (Rigolizzo & Zhu, 2020; Rivera et al., 2020; Wald et al., 2015). Having students develop strategies for skill development and revisiting prior reflections as they assessed their progress towards goals demonstrated the value of prior reflection review as shown by Rigolizzo and Zhu (2020). The combination of resources to reflect upon and introspective reflection questions helped maintain students' interest. Choosing appropriate questions is important in fostering reflection (Nybye & Wraae, 2023). The purposeful questions about reflection and students' plans to reflect laid a foundation to assist students in developing reflective practice habits. Reflective practice was connected with employability and generated greater interest among the students, as evidenced through their reflections and engagement with the course content. Students' comments highlighted that they were interested in using reflections for personal growth which contrasted with Smith and Trede's (2013) recommendation for focusing only on practical reflections.

This research makes two contributions. Firstly, for educators, the study provides insights into the assessment design, within the course, that incorporated reflective practice resources and scaffolded reflective practice questions to promote habits of reflective practice. Secondly, the research contributes to the literature on developing habits of reflective practice, demonstrating how incorporating goal-setting for self-identified skill development aids in developing reflective practice habits. Furthermore, the study supports the challenges and benefits of reflection identified in prior literature. Incidentally, the research demonstrates how Greenaway's (2023)

four zones can be used in other learning settings to analyse students' reflections to gauge their competency in gaining valuable understandings through reflective practice, which is an integral element of workplace success (Jackson & Meek, 2021).

There are some limitations to this study. This study describes the application of a reflective teaching approach at the end of a degree, however, there are benefits to introducing habits of reflection at the start of an undergraduate program (Brooman & Darwent, 2012). Only 40 students were enrolled in the course. Additional factors may need to be considered when dealing with large student cohorts. The choice of any theoretical lens to analyse reflections will highlight certain aspects at the expense of others (Greenaway & Knapp, 2016). While Greenaway's (2023) model was useful, if another theoretical lens had been used, it may have focused on different aspects of students' reflections. It is possible that there was some participant self-selection bias as those who chose to participate may have done so as they had positive experiences in the course generally or in the reflection component. Although some responses indicated negative attitudes towards reflection. Offering an incentive of a draw for $100 gift vouchers may have assisted in alleviating a bias towards positive students. Furthermore, participation was not onerous as it only involved giving consent and completing a brief questionnaire. The majority of the students were of mature age and working full-time. The demographics of the students may differ from those in other higher education institutions where there are more school leavers. A difference in the findings may have been presented if the cohort were predominantly school leavers rather than mature-age students. Another key aspect of the cohort was they were students studying an accounting major; this along with the study being undertaken with Australian university students may limit its generalisability. Accounting students have been shown to prefer sequential learning (Chen et al., 2018), and reflective abilities may be influenced by culture. While the students indicated their plans for future reflective practice, no follow-up was conducted to determine if they implemented these plans.

There are several possible directions for future research on enhancing students' reflective practice skills to develop habits of reflective practice. This study took a qualitative approach and did not constitute a controlled experiment. The course ran in an online mode only, it would be useful to contrast a reflective practice teaching approach within an online environment to a face-to-face environment. Future research could explore how students' demographics or work experience may influence their attitudes to reflection. The students were also required to develop plans for regular reflection. However, it is not known the extent, if any, that this process may have contributed to them developing the habit of reflective practice after university. Future studies could seek feedback from students on the possible influence of goal- setting regarding reflective practice on developing habits of reflective practice. It was concluded that one element of the effectiveness of the course was the regularity of reflections and feedback. Ascertaining what number of reflections are needed to develop a habit of reflecting and the optimal ways to provide adequate feedback with large classes has yet to be determined. It also would be helpful to understand the types of reflective questions that students found most challenging and additional resources that students would like to assist with reflective practice. A longitudinal study could explore the transfer of reflective practice skills to the workplace.

Although students found writing reflections challenging, they persevered, their competencies in reflective practice increased, they recognised the benefits of reflection, they developed habits of reflective practice and described how they would continue to use reflections in the future. This research demonstrated that regular reflections with feedback and appropriate resources aided students in gaining confidence and competency in reflective practice. Their commitment to the continued use of reflective practice will position them well for career success.

CRediT authorship contribution statement

Lyn Daff: Writing – review & editing, Writing – original draft, Validation, Supervision, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Cathy Tame:** Writing – review & editing, Writing – original draft, Methodology, Investigation, Formal analysis, Conceptualization. **John Sands:** Writing – review & editing, Writing – original draft, Conceptualization.

Data availability

The authors do not have permission to share data.

Appendix 1. Sub-themes and Themes

SUB-THEMES   THEMES

No experience

Doing it but did not know
they were doing it   Students' prior
                                                experiences in
Doing it and know they are   reflective practice
doing it

Unsure

Develop skills   Expected benefits
                                                to be gained
Set goals

Prompts assisted in writing

Helped understanding of   Positive response
approaches   to resources

Helped understanding of
benefits

Timelines and add to   Plans to regularly
calendar   reflect during the
                                                semester
Attach emotions to plans
(enjoyable)

Did not get easier

Understanding benefits made
it easier   Writing reflections
                                                became easier
Employed more reflective   over the semester
techniques

Became more comfortable
with expressing thoughts

Helped to become familiar   Feedback had a
with requirements   positive effect on
                                                students'
Increased willingness to be   reflecting
open

Self-efficacy

Self-learning and knowledge

Improved critical thinking   Benefits gained
                                                from reflective
Personal growth   practice

Developing empathy

Goal setting

Already developed habits

Helps in achieving goals   Reflective practice
                                                going forward
See benefits

Reminders and routines

16

References

Ahmed, A. M. (2020). From reluctance to addiction: The impact of reflective journals on Qatari undergraduate students' learning. *Reflective Practice, 21*(2), 251–270. https://doi.org/10.1080/14623943.2020.1735328

Allen, M. D., & Altepeter, C. (2023). Teaching social work group practice competencies through an online mutual aid MSW peer support group assignment. *Social Work Education*, 1–6. https://doi.org/10.1080/02615479.2023.2244970

Amulya, J. (2004). *What is reflective practice? Center for reflective community practice*. Massachusetts Institute of Technology.

Auyeung, P., & Sands, J. (1996). A cross cultural study of the learning style of accounting students. *Accounting and Finance, 36*(2), 261–274.

Auyeung, P. K., & Sands, J. S. (2003). The learning styles of accounting students in vertical and horizontal collectivist cultures. *Journal of Accounting and Finance, 2*, 31–45.

Awad, S., Turnnidge, J., Cheung, J. J. H., Taylor, D., Dalgarno, N., & Schwartz, A. (2023). Exploring perspectives of personal learning plans in a residency programme. *The Clinical Teacher.* , Article e13677. https://doi.org/10.1111/tct.13677

Bernard, H. R., Wutich, A., & Ryan, G. W. (2016). *Analyzing qualitative data: Systematic approaches* (2nd ed.). Sage Publications.

Botchwey, N., & Umemoto, K. (2018). A guide to designing engaged learning courses in community planning. *Journal of Planning Education and Research, 40*(3), 332–344. https://doi.org/10.1177/0739456x18772075

Boud, D. (2009). Relocating reflection in the context of practice. In H. Bradbury, N. Frost, S. Kilminster, & M. Zukas (Eds.), *Beyond reflective practice: New approaches to professional lifelong learning* (pp. 25–36). Routledge.

Boud, D., Keogh, R., & Walker, D. (1985). Promoting reflection in learning: A model. In D. Boud, & D. Walker (Eds.), *Reflection: Turning experience into learning* (pp. 18–40). Kogan.

Brewer, K. L., & Devnew, L. E. (2022). Developing responsible, self-aware management: An authentic leadership development program case study. *International Journal of Management in Education, 20*(3), Article 100697. https://doi.org/10.1016/j.ijme.2022.100697

Brooman, S., & Darwent, S. (2012). A positive view of first-year undergraduate reflective diaries: Focusing on what students can do. *Reflective Practice, 13*(4), 517–531. https://doi.org/10.1080/14623943.2012.670618

Budeva, D., Kehaiova, M., & Petkus, E. (2015). Nationality as a determinant of learning styles: Comparing marketing students from Bulgaria and the USA. *E-Journal of Business Education & Scholarship of Teaching, 9*(1), 97–106.

Caspersen, J., Frølich, N., Karlsen, H., & Aamodt, P. O. (2014). Learning outcomes across disciplines and professions: Measurement and interpretation. *Quality in Higher Education, 20*(2), 195–215. https://doi.org/10.1080/13538322.2014.904587

Castro, M. D. B., & Tumibay, G. M. (2021). A literature review: Efficacy of online learning courses for higher education institution using meta-analysis. *Education and Information Technologies, 26*, 1367–1385.

Cathro, V., O'Kane, P., & Gilbertson, D. (2017). Assessing reflection. *Education + Training, 59*(4), 427–442. https://doi.org/10.1108/et-01-2017-0008

Chan, C. K. Y., & Lee, K. K. W. (2021). Reflection literacy: A multilevel perspective on the challenges of using reflections in higher education through a comprehensive literature review. *Educational Research Review, 32*. https://doi.org/10.1016/j.edurev.2020.100376

Chen, C., Jones, K. T., & Xu, S. (2018). The association between students' style of learning preferences, social presence, collaborative learning and learning outcomes. *Journal of Educators Online, 15*(1). https://doi.org/10.9743/JEO2018.15.1.3.

Choi, S., Tian, X., & Stumph, C. (2022). Learning organizational behaviors and leadership through reflective journal writing. *International Journal of Management in Education, 20*(2), Article 100612. https://doi.org/10.1016/j.ijme.2022.100612

CPA and CAANZ. (2021). *Professional accreditation guidelines Australia and New Zealand technical and professional competency areas and learning outcomes*.

Creswell, J., & Creswell, D. (2023). *Research design qualitative quantitative and mixed methods approaches* (6th ed.). Sage.

Dellaportas, S., Stevenson-Clarke, P., Joshi, M., & De Fazio, T. (2022). Reflective practice and learning in accounting education. *Accounting Education*, 1–27. https://doi.org/10.1080/09639284.2022.2076565

Dewey, J. (1910). *How we think*. DC Heath and Co.

Dumford, A. D., & Miller, A. L. (2018). Online learning in higher education: Exploring advantages and disadvantages for engagement. *Journal of Computing in Higher Education, 30*, 452–465.

Eaton, C. (2016). I don't get it. – *the challenge of teaching reflective practice to health and care practitioners. Reflective Practice, 17*(2), 159–166. https://doi.org/10.1080/14623943.2016.1145582

Edwards, S. (2017). Reflecting differently. New dimensions: Reflection-before-action and reflection-beyond-action. *International Practice Development Journal, 7*(1). https://doi.org/10.19043/ipdj.71.002

Farrell, T. S. C. (2012). Reflecting on reflective practice: (re)visiting Dewey and Schön. *TESOL Journal, 3*(1), 7–16. https://doi.org/10.1002/tesj.10

Fletcher, T., & Hordvik, M. M. (2022). Emotions and pedagogical change in physical education teacher education: A collaborative self-study. *Sport, Education and Society, 28*(4), 381–394. https://doi.org/10.1080/13573322.2022.2035345

Gallagher, L., Lawler, D., Brady, V, C, O. B., Deasy, A., & Muldoon, K. (2017). An evaluation of the appropriateness and effectiveness of structured reflection for midwifery students in Ireland. *Nurse Education Practitioner, 22*, 7–14. https://doi.org/10.1016/j.nepr.2016.11.003

Gibbs, G. (1988). Learning by doing: A guide to teaching and learning methods. *Oxford Further Education Unit*.

Greenaway, R. (2002). The art of reviewing. *Journal of the Institute of Training and Occupational Learning, 3*(1), 47–53.

Greenaway, R. (2008). A view into the future: The value of other ways of learning and development. In P. Becker, & J. Schirp (Eds.), *Other ways of learning* (pp. 347–367). bsj Marburg.

Greenaway, R. (2023). *The active reviewing cycle*. In . Retrieved 8 August 2023 from https://reviewing.co.uk/learning-cycle/the-active-reviewing-cycle.htm.

Greenaway, R., & Knapp, C. (2016). Reviewing and reflection: Connecting people to experiences. In B. Humberstone, H. Prince, & H. K (Eds.), *Routledge international handbook of outdoor studies* (pp. 260–268). Routledge.

Griggs, V., Holden, R., Lawless, A., & Rae, J. (2016). From reflective learning to reflective practice: Assessing transfer. *Studies in Higher Education, 43*(7), 1172–1183. https://doi.org/10.1080/03075079.2016.1232382

Hancock, P., Freeman, M., Watty, K., Birt, J., & Tyler, J. (2016). *Accounting learning standards, revised*. Australian Business Deans Council.

Helyer, R. (2015). Learning through reflection: The critical role of reflection in work-based learning (wbl). *Journal of Work-Applied Management, 7*(1), 15–27.

International Accounting Education Standards Board. (2019). *Handbook of international educational pronouncements*.

Jackson, D. (2019). Student perceptions of the development of work readiness in Australian undergraduate programs. *Journal of College Student Development, 60*(2), 219–239. https://doi.org/10.1353/csd.2019.0020

Jackson, D., & Meek, S. (2021). Embedding work-integrated learning into accounting education: The state of play and pathways to future implementation. *Accounting Education, 30*(1), 63–85. https://doi.org/10.1080/09639284.2020.1794917

Joy, S., & Kolb, D. A. (2009). Are there cultural differences in learning style? *International Journal of Intercultural Relations, 33*(1), 69–85. https://doi.org/10.1016/j.ijintrel.2008.11.002

Jung, Y., & Wise, A. F. (2020). How and how well do students reflect? Multi-Dimensional automated reflection assessment in health professions education. In *Proceedings of the Tenth International Conference on Learning Analytics & Knowledge*.

Karakas, F., Manisaligil, A., & Sarigollu, E. (2015). Management learning at the speed of life: Designing reflective, creative, and collaborative spaces for millenials. *International Journal of Management in Education, 13*(3), 237–248. https://doi.org/10.1016/j.ijme.2015.07.001

Kiersch, C., & Gullekson, N. (2021). Developing character-based leadership through guided self-reflection. *International Journal of Management in Education, 19*(3), Article 100573. https://doi.org/10.1016/j.ijme.2021.100573

Kis, S. K., & Kartal, G. (2019). No pain no gain: Reflections on the promises and challenges of embedding reflective practices in large classes. *Reflective Practice, 20*(5), 637–653. https://doi.org/10.1080/14623943.2019.1651715

Kolb, D. A. (2014). *Experiential learning: Experience as the source of learning and development*. Pearson Education Ltd.

Mainga, W., Daniel, R. M., & Alamil, L. (2022). Perceptions of employability skills of undergraduate business students in a developing country: An exploratory study. *Higher Learning Research Communications, 12*(1), 28–63. https://doi.org/10.18870/hlrc.v12i1.1257

Marden, M. P., & Herrington, J. (2022). Encouraging reflective practice through learning portfolios in an authentic online foreign language learning environment. *Reflective Practice, 23*(2), 177–189. https://doi.org/10.1080/14623943.2021.2001321

Matsouka, K., & Mihail, D. M. (2016). Graduates' employability: What do graduates and employers think? *Industry and Higher Education, 30*(5), 321–326.

McGuigan, N., & Kern, T. (2009). The reflective accountant: Changing student perceptions of traditional accounting through reflective educational practice. *The International Journal of Learning: Annual Review, 16*(9), 49–68. https://doi.org/10.18848/1447-9494/CGP/v16i09/46586

Mohamad, S. K., & Tasir, Z. (2023). Exploring how feedback through questioning may influence reflective thinking skills based on association rules mining technique. *Thinking Skills and Creativity, 47*. https://doi.org/10.1016/j.tsc.2023.101231

Murphy, B., & Hassall, T. (2019). Developing accountants: From novice to expert. *Accounting Education, 29*(1), 1–31. https://doi.org/10.1080/09639284.2019.1682628

Ng, S. L., Kinsella, E. A., Friesen, F., & Hodges, B. (2015). Reclaiming a theoretical orientation to reflection in medical education research: A critical narrative review. *Medical Education, 49*(5), 461–475. https://doi.org/10.1111/medu.12680

Nicolini, D., & Korica, M. (2024). Structured shadowing as a pedagogy. *Management Learning.* https://doi.org/10.1177/13505076231221531

Nybye, N., & Wraae, B. (2023). Afterthought and mirroring in the entrepreneurial classroom. *International Journal of Management in Education, 21*(2), Article 100766. https://doi.org/10.1016/j.ijme.2023.100766

Ono, A., & Ichii, R. (2019). Business students' reflection on reflective writing assessments. *Journal of International Education in Business, 12*(2), 247–260. https://doi.org/10.1108/jieb-08-2018-0036

Osmani, M., Weerakkody, V., Hindi, N., & Eldabi, T. (2019). Graduates employability skills: A review of literature against market demand. *The Journal of Education for Business, 94*(7), 423–432. https://doi.org/10.1080/08832323.2018.1545629

Paisey, C., & Paisey, N. (2020). Protecting the public interest? Continuing professional development policies and role-profession conflict in accountancy. *Critical Perspectives on Accounting, 67*, Article 102040.

Pratt, D. D. (1991). Conceptions of self within China and the United States: Contrasting foundations for adult education. *International Journal of Intercultural Relations, 15*(3), 285–310.

Pratt, D. D. (1992). Conceptions of teaching. *Adult Education Quarterly, 42*(4), 203–220.

Pretorius, L., & Ford, A. (2016). Reflection for learning: Teaching reflective practice at the beginning of university study. *International Journal of Teaching and Learning in Higher Education, 28*(2), 241–253.

Prikshat, V., Montague, A., Connell, J., & Burgess, J. (2019). Australian graduates' work readiness – deficiencies, causes and potential solutions. *Higher Education, Skills and Work-based Learning, 10*(2), 369–386. https://doi.org/10.1108/heswbl-02-2019-0025

Qenani, E., MacDougall, N., & Sexton, C. (2014). An empirical study of self-perceived employability: Improving the prospects for student employment success in an uncertain environment. *Active Learning in Higher Education, 15*(3), 199–213. https://doi.org/10.1177/1469787414544875

Rigolizzo, M., & Zhu, Z. (2020). Motivating reflection habits and raising employee awareness of learning. *Evidence-based Healthcare: A Global Forum for Empirical Scholarship, 8*(2), 161–175. https://doi.org/10.1108/ebhrm-11-2019-0102

Rivera, R., de Rooij, A., & Jones, S. (2020). Reflective journaling: A theoretical model and digital prototype for developing resilience and creativity. In *Learning and collaboration technologies. Designing, Developing and Deploying Learning Experiences: 7th International Conference, LCT 2020, held as part of the 22nd HCI International Conference, HCII 2020, Copenhagen, Denmark, July 19–24, 2020, proceedings, Part I 22.*

Rodgers, C. (2002). Defining reflection another look at John Dewey and reflective thinking. *Teachers College Record, 104*(4), 842–866.

Rodríguez Gómez, G., & Ibarra Sáiz, M. (2015). Assessment as learning and empowerment: Towards sustainable learning in higher education. In M. Peris-Ortiz, & J. Lindahl (Eds.), *Sustainable learning in higher education* (pp. 1–20). Springer International Publishing.

Rogers, R. R. (2001). Reflection in higher education: A concept analysis. *Innovative Higher Education, 26*(1), 37–57.

Ryder, M., & Downs, C. (2022). Rethinking reflective practice: John Boyd's OODA loop as an alternative to Kolb. *International Journal of Management in Education, 20*(3), Article 100703. https://doi.org/10.1016/j.ijme.2022.100703

Schon, D. A. (1986). *The reflective practitioner: How professionals think in action.* Routledge.

Şener, B., & Mede, E. (2022). Promoting learner autonomy and improving reflective thinking skills through reflective practice and collaborative learning. *Innovation in Language Learning and Teaching*, 1–16. https://doi.org/10.1080/17501229.2022.204769

Smith, M., & Trede, F. (2013). Reflective practice in the transition phase from university student to novice graduate: Implications for teaching reflective practice. *Higher Education Research and Development, 32*(4), 632–645. https://doi.org/10.1080/07294360.2012.709226

Sudhakar, U., M, M., A, M. J. P., & A, N. (2020). Knowledge, attitude and self-awareness towards periodontics among non-clinical dental undergraduate students. *International Journal of Applied Decision Sciences, 6*(3), 495–499. https://doi.org/10.22271/oral.2020.v6.i3h.999

Tawfik, A. A., Hung, W., & Giabbanelli, P. J. (2020). Comparing how different inquiry-based approaches impact learning outcomes. *Interdisciplinary Journal of Problem-Based Learning, 14*(1). https://doi.org/10.14434/ijpbl.v14i1.28624

The University of Edinburg. (2022). Reflection toolkit. Retrieved 8 August 2023 from https://www.ed.ac.uk/reflection.

Thomas, R., Appelhans, S., Kozick, R., Matlack, C., Asare, P., Thompson, M., Thomas, S. J., Nickel, R., & Cheville, A. (2023a). *Addressing the barriers of knowledge transfer: Using eportfolios to enhance student reflection in technical courses* 2023. In *IEEE frontiers in education conference (FIE)*.

Thomas, R., Appelhans, S., Kozick, R., Matlack, C., Asare, P., Thompson, M., Thomas, S. J., Nickel, R., & Cheville, A. (2023b). *Work in progress: Cultivating reflective engineers: Does providing a reflective eportfolio experience in a first-year design course lead students to be more reflective in later courses?.*

Thompson, N., & Pascal, J. (2012). Developing critically reflective practice. *Reflective Practice, 13*(2), 311–325. https://doi.org/10.1080/14623943.2012.657795

Thompson, S., & Thompson, N. (2023). *The critically reflective practitioner* (3rd ed.). Bloomsbury Publishing.

Triandis, H. C. (1989). The self and social behavior in differing cultural contexts. *Psychological Review, 96*(3), 506–520.

Tyng, C. M., Amin, H. U., Saad, M. N., & Malik, A. S. (2017). The influences of emotion on learning and memory. *Frontiers in Psychology, 8*, 1454. https://doi.org/10.3389/fpsyg.2017.01454

Wald, H. S., Anthony, D., Hutchinson, T. A., Liben, S., Smilovitch, M., & Donato, A. A. (2015). Professional identity formation in medical education for humanistic, resilient physicians: Pedagogic strategies for bridging theory to practice. *Academic Medicine, 90*(6), 753–760. https://doi.org/10.1097/ACM.0000000000000725

Wilkin, C. L. (2022). Developing critical reflection: An integrated approach. *The British Accounting Review, 54*(3), Article 101043. https://doi.org/10.1016/j.bar.2021.101043

Wolcott, S. K., & Sargent, M. J. (2021). Critical thinking in accounting education: Status and call to action. *Journal of Accounting Education, 56*, Article 100731.

Wong, B., & Hoskins, K. (2022). Ready, set, work? Career preparations of final-year non-traditional university students. *Higher Education Pedagogies, 7*(1), 88–106. https://doi.org/10.1080/23752696.2022.2100446

Yong, B. P. P., & Ling, Y.-L. (2023). Skills gap: The importance of soft skills in graduate employability as perceived by employers and graduates. *Online Journal for TVET Practitioners, 8*(1), 25–42.

Zhang, C., Schießl, J., Plößl, L., Hofmann, F., & Gläser-Zikuda, M. (2023). Evaluating reflective writing in pre-service teachers: The potential of a mixed-methods approach. *Education Sciences, 13*(12). https://doi.org/10.3390/educsci13121213