ACTIVE LEARNING IN AN ONLINE POSTGRADUATE RESEARCH MODULE: PERCEPTIONS OF ACCOUNTING STUDENTS AND LECTURERS

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ABSTRACT

Chartered accountancy education offered by universities in South Africa has traditionally been characterised by passive face-to-face (F2F) learning approaches. Literature, however, has pointed out that active learning can enhance student learning, engagement, and motivation. Moreover, employing active online learning could facilitate the development of digital and critical thinking competencies in accounting students, the importance of which is increasingly emphasised. In response to this, a more traditional and passive F2F lecture week (as part of a postgraduate course on research in accounting) was redesigned during the COVID-19 pandemic to be presented fully online, based on the active learning principles found in Laurillard's Six Ways of Learning. A questionnaire was administered to investigate the perceptions of both students and lecturers as to whether the redesign led to improved learning and competency development, and to increased engagement and motivation. Although some students were resistant to the change in learning approach from passive to active, respondents felt that the active learning tasks led to increased engagement and enhanced learning by students. Student resistance should be managed in future redesign processes to minimise the effect thereof on learning outcomes, possibly through change management principles such as purposeful communication regarding the benefits and requirements of active learning. Respondents reported that the online learning environment provided students with increased flexibility, but that this flexibility had to be managed through self-regulation or monitoring by lecturers. Online learning also led to feelings of disconnect (between lecturers and students, within the student group and in relation to the content). Such disconnect could be alleviated by applying a blended learning approach in future, using the advantages of both the F2F and the online environment. The results of this study are important to lecturers seeking to design courses that engage and motivate students, enhance learning, and allow the development of the competencies required of the accountants of the future.

Keywords: active learning, engagement, online learning, student resistance, competency development

INTRODUCTION

Although research has shown that passive teaching fails to fully engage students in the learning process, traditional lectures are still widely used in higher education (White et al. 2016). Researchers agree that lecturers should redesign their modules to increase student engagement and learning by ensuring that sufficient and appropriate active learning tasks are included in the classroom (Beyleveld, De Villiers, and Fraser 2019; Malan 2020; Papageorgiou 2021; Sugahara and Dellaportas 2018). Active learning involves students in the learning process by requiring them to perform tasks on the theory learnt, individually or in groups, during a particular class (Felder and Brent 2016; Prince 2004). Technological advances allow active learning tasks also to be introduced in the online learning environment (Laurillard 2012). Active online learning could facilitate the development of both critical thinking skills and digital acumen – which are becoming increasingly important (Keevy 2020; Terblanche and De Clercq 2020).

During 2021, a usually passive and face-to-face (F2F) introductory lecture week, included in a postgraduate course on research in accounting, was redesigned based on the active learning principles found in Laurillard's Six Ways of Learning (Laurillard 2012). Owing to the COVID-19 pandemic, the module had to be presented fully online. This study investigated the perceptions of students and lecturers who experienced this novel pedagogy in the online environment. It focused specifically on increased engagement and motivation as well as enhanced learning and competency development. Implementation guidelines based on the results of this study could aid future redesign processes by lecturers.

LITERATURE REVIEW

The literature review provides theoretical background regarding the active learning concept, both generally and in the online space. In addition, Laurillard's Six Ways of Learning is introduced as an active learning framework.

Active learning and its perceived benefits

An active learning approach introduces activity into the traditional lecture to promote student engagement (Prince 2004). Typically, an active learning approach includes short course-related individual or small-group activities that all students in a class are called upon to do, alternating with instructor-led intervals in which student responses are processed and new information is presented (Felder and Brent 2016). Prince (2004) contrasts active learning with passive learning

where students merely attend to a lecturer speaking, listen to a podcast or read material, without engaging in an activity during the class.

Active learning resorts under a student-centred teaching approach that seeks to facilitate student engagement on the physical, emotional and cognitive levels to achieve deep learning outcomes (Burch et al. 2015; Lento 2015; Wilmot and Merino 2015). The active learning technique employed in class (i.e., the specific active learning task that is interspersed between the lecturing) might vary, and could be done individually, in pairs or in small groups (Wilmot and Merino 2015). Examples include exercises and solving problems in class, reflection, discussion, comparing notes with a partner, interactive notes, concept mapping, case studies, guest lectures by practitioners, simulations and games, role-playing, small group presentations, and problem-based learning (Burch et al. 2015; Butler and Von Wielligh 2012; Keevy 2020; Lento 2015; Papageorgiou 2021; Sugahara and Dellaportas 2018; Terblanche and De Clercq 2020; Wilmot and Merino 2015). A flipped classroom approach (where the content is provided to students before class, using a podcast) can also be employed to free up more class time for active learning tasks (Lento 2015).

Students retain much more of what they reflect on and do than of what they receive passively, owing to short attention span (Prince 2004; Sugahara and Dellaportas 2018). Interspersing passive teaching with active learning tasks improves understanding of the passively presented material (Wilmot and Merino 2015) and allows the student to refocus before the next passive teaching occurs. Active learning approaches are thus more likely to engage university students in the learning process and, in turn, increase student attention, motivation, confidence and enjoyment (Beyleveld et al. 2019; Sugahara and Dellaportas 2018). Students find group assignments especially motivating and engaging, as they can learn from each other and it thus adds another layer of accountability (Malan and Van Dyk 2021; Malan 2020).

Active learning strategies can improve the academic performance of both stronger and weaker students (Lento 2015; Papageorgiou 2021), but Murdoch and Guy (2002) asserted that this improvement in marks may be more pronounced in small class sizes. Hake (1998) found that students' academic performance improved significantly when interactive engagement methods were employed, with test scores measuring conceptual understanding being roughly twice as high as in traditional lectures. Moreover, graduate attributes and workplace skills can be developed more easily using an active learning approach (Beyleveld et al. 2019; Keevy 2020; Viviers, Fouche, and Reitsma 2016), as interactive learning facilitates a transfer of learning to practice (Sugahara and Dellaportas 2018). In the accounting education environment, specifically, active learning could develop critical thinking skills, which is becoming

increasingly important (Sugahara and Dellaportas 2018; Terblanche and De Clercq 2020).

Burch et al. (2015) noted that future research should consider the relationship between classroom activities, engagement and deep learning. However, no South African studies could be identified that specifically consider the perceptions of students and lecturers about an active learning approach in the accounting classroom and its effect on engagement, motivation and learning. There are several recent articles that report on specific active learning techniques that could be employed (Keevy 2020; Malan and Van Dyk 2021; Terblanche and De Clercq 2020; Viviers et al. 2016), but active learning as an overarching approach does not seem to be prominent as a pedagogical approach in South African accounting education. The most likely reasons are the large class groups that tertiary accounting educators deal with, and the knowledge-heavy curriculum prescribed by the South African Institute of Chartered Accountants (SAICA), which regulates education of chartered accountants (Keevy 2020; Papageorgiou 2021; Viviers et al. 2016). However, there is a growing awareness of the need to engage students in the learning process, especially in the online environment (Malan 2020).

Active learning in the online space

Even before the COVID-19 pandemic and the resultant increase in online learning, the university environment had become increasingly cognisant of the approaching Fourth Industrial Revolution. Technology permeates almost every aspect of daily life, and even more so for students as digital natives (Al-Htaybat, Von Alberti-Alhtaybat, and Alhatabat 2018). Advances in technology provide opportunities to improve student engagement and learning in online or blended learning environments through the inclusion of active learning tasks (Serrano et al. 2019). Furthermore, Terblanche, and De Clercq (2020) argue that technology-based techniques resorting under an active learning approach could facilitate the development of digital and critical thinking competencies as required by SAICA's CA2025 competency framework. Flipped classroom learning is also facilitated using technology (Lento 2015).

Formal online learning, as opposed to F2F learning, takes place when the lecturer and student are physically separated, with learning activities facilitated by technology (Malan 2020). Student engagement and motivation are even more important in the online environment, as the lecturer is not physically present to monitor student activity. Engagement in the form of online participation is associated with increased student learning and performance (Malan 2020). To engage students, online courses should be designed appropriately and include (Artino Jr and Stephens 2009; Carr-Chellman and Duchastel 2000; Helfaya 2019; Holzweiss et al. 2014; Malan 2020):

- clearly described learning outcomes and plan of action (guidance from the lecturer in terms of requirements, due dates and rubrics for assessments);
- purposefully designed activities that students engage with individually or as a group (for example, assignments that are based on real-life examples and that require critical thinking);
- opportunities for discussion with fellow-students and lecturers;
- a variety of technological interventions (for example: quizzes, synchronous online discussion forums and asynchronous podcasts); and
- timeous and useful feedback on student achievement in assessments to motivate students and provide them with the opportunity to refine their knowledge and improve.

Laurillard's approach to active learning

It is crucial to design technology-based interventions appropriately when using either an online or blended approach to teaching. These interventions should align with the desired learning outcomes and assessment in the module (Terblanche and De Clercq 2020). If appropriately designed, an online or blended learning course can increase engagement, motivation and performance (Tseng and Walsh 2016). One possible framework that can be employed during the design process is Laurillard's Six Ways of Learning (6WOL) (Laurillard 2012), which is explicated in Table 1.

Table 1: Laurillard's 6WOL (as adapted from Laurillard 2012)

	Description of learning experience	Individual versus group	With or without feedback	Examples of learning experience
Acquisition	The student receives information when listening to a lecturer or reading material	Individual	No feedback	Reading course material; listening to presentations by lecturers (face-to-face or online)
Investigation	The student, usually in a self-paced and self-directed fashion, gathers information	Individual	No feedback	Using digital tools to collect, analyse and compare information, guided by a lecturer
Discussion	The student discusses a concept with peers and/or a lecturer	Group	Limited feedback	Face-to-face discussions in class; online discussions using videoconferencing and discussion forums
Practice	The student applies learnt knowledge (formative)	Individual	Limited feedback	Doing class exercises and case studies
Production	The student applies learnt knowledge (summative)	Individual	Comprehensive feedback	Exams and quizzes; producing essays and reports
Collaboration	A group of students collaborate to produce something	Group	Comprehensive feedback	Group projects

When designing or redesigning a course, lecturers should determine the quantity and type of active learning techniques which would best achieve the learning outcomes (Laurillard 2012).

Often, engagement and learning are maximised when some active learning tasks are individual (investigation and practice) while others are collaborative (discussion and collaboration), since groupwork increases the social and collaborative engagement of the learner. Thus, another layer of engagement besides the purely cognitive and behavioural is added (Malan 2020). Furthermore, some learning activities allow for feedback to students, which is obviously ideal for the student although possibly time-consuming for the lecturer (Laurillard 2012). Activities which entail feedback (practice, production and collaboration) should be maximised as far as practically possible.

SITUATIONAL CONTEXT AND BACKGROUND TO THE STUDY

A research module in accounting was recently introduced at a residential South African university with course work containing the following elements:

- Self-paced pre-reading (delivered using acquisition as well as investigation as ways of learning)
- An introductory week of lectures (employing acquisition, practice, discussion and collaboration as ways of learning)
- A quiz to test conceptual understanding of the course work (based on production as a way of learning).

During 2020 (the first year of the module's existence), the introductory week of lectures was taught using passive F2F teaching. In the second year of delivery (2021), when the research was conducted, a total of 19 students registered for the module and 10 lecturers presented material during the introductory week. During 2021 the module was delivered in the online mode owing to the disruption caused by the COVID-19 pandemic. Moreover, the learning activities during the introductory week were redesigned in line with the active learning principles contained in Laurillard's 6WOL to increase student engagement, motivation and learning. Topics were identified and the lectures on these topics were followed by newly designed active learning tasks. The topics and active learning tasks contained in the redesigned introductory week for 2021 can be seen in Table 2.

Table 2: Topics and active learning tasks in redesigned introductory week

Topic	Description of active learning task	6WOL type
Identifying the research question	As a group, construct a research question for the topic allocated and email to supervisor, who will respond with comments.	Discussion and collaboration
Writing an introduction	Individually, draft and hand in an introduction that culminates in the research question (decided by group in earlier task).	Practice
Writing a literature	Individually, draft and hand in a skeleton for your literature review	Practice

Topic	Description of active learning task	6WOL type
review	based on your research question.	
Finding literature	Individually, identify keywords and search for five relevant articles/sources. List the weblinks for the five sources and hand in this list.	Practice
Reading literature	Individually, choose one of the five articles identified during the previous task. Read the article and summarise it. Hand in the summary.	Practice
Referencing and plagiarism	Individually, do the in-text and reference list referencing for the five sources found previously. Hand in the referencing.	Practice
Research methods	As a group, decide on, write and hand in the research methodology section for the research proposal.	Discussion and collaboration
Writing up results and conclusion	Summarise one of the articles and draw a picture of the golden thread that runs through it. Hand in the summary and picture.	Practice

For each topic listed in Table 2, lecturers presented material to the students, using a big group meeting on the electronic videoconferencing platform, Microsoft Teams (acquisition way of learning). After lecturing had taken place on each topic, the students had to complete individual active learning tasks (involving practice) as well as group tasks (involving discussion and collaboration). For group tasks, students met in smaller groups via Microsoft Teams. Students were awarded marks (1% of final mark) for each active learning task completed. Some of the submissions were handed in via email while others were submitted electronically via the Learner Management System.

METHODOLOGY

A pragmatic approach was employed to decide on the research methods to investigate the perceptions of the 19 students and 10 lecturers regarding the online active learning approach employed during the introductory week. As the students had to move on to another module immediately after the introductory week, it was decided that, although interviews are best suited to gather participants' perceptions on a phenomenon, interviews as data collection tool would be impractical. Therefore, a questionnaire with many open-ended questions was employed. The questionnaire was administered approximately one week after the completion of the introductory week. Ethical clearance and institutional access to the respondents was obtained before data collection. Informed consent was obtained from 19 respondents (13 students and 6 lecturers) who agreed to complete the questionnaire, leading to a response rate of 66 per cent.

The questionnaire was based on the engagement, learning and competency development themes identified during the literature review. After development, input from an educational specialist was used to refine the questionnaire. The questionnaire consisted of two sections – the first focused on perceptions related to active learning, while the second focused on perceptions relating to online learning. Each section started with closed-ended questions to gather quantitative data and concluded with open-ended questions to gather qualitative data.

Since the respondents were all accountants or accountancy students, it was decided to start with the closed-ended questions to break the ice before moving to the open-ended questions aimed at providing a richer understanding of the perceptions of respondents related to the key themes of engagement, learning and competency development in either an active learning or online learning environment.

The section on active learning had four closed-ended questions: whether active learning led to superior engagement and learning (when compared to passive learning); whether active learning developed critical thinking competencies; and what the respondents' views were on the effectiveness of each of the tasks listed in Table 2. The open-ended questions asked respondents: to explain their answers to the closed-ended questions on engagement and learning; the positive and negative aspects of the active learning tasks; and how they felt about future use of active learning techniques in other subjects.

The section on online learning had three closed-ended questions: whether online learning led to superior engagement and learning (when compared to F2F learning); whether online learning developed digital acumen competencies; and whether respondents would have preferred the learning to be fully online, blended or fully F2F. In the open-ended questions they were asked: to explain their answers to the closed-ended questions on engagement and learning; and to explain the positive and negative aspects of online learning.

The quantitative data arising from the closed-ended questions were analysed using descriptive statistics. The qualitative data arising from all open-ended questions pertaining to active learning were thematically analysed together, to obtain a holistic view of respondent views. The same was done for the qualitative data arising from all open-ended questions pertaining to online learning. A directive (deductive) approach to thematic analysis was employed (Hsieh and Shannon 2005), using themes identified during the literature review, as starting point.

RESULTS AND DISCUSSION

The results and discussion has sections focusing on active learning and online learning, separately. In each section, the descriptive statistics based on the quantitative data is presented first, after which the thematic analysis of the qualitative data is discussed. As the number of respondents were limited, the responses of students and lecturers were not analysed separately. Some implementation guidance, which could be employed in future redesign of modules, is also provided.

Active learning

All respondents agreed that, when compared to passive learning, active learning enhanced student learning and understanding. Furthermore, 84 per cent of respondents felt that active learning increased students' engagement and motivation. In terms of competency development, 89 per cent of respondents felt that active learning developed the ability to think critically more than passive learning did. The students were asked additional questions relating to the active learning tasks. The percentage of the 13 student respondents who felt that each individual task (Table 2) led to improved learning, understanding, engagement or motivation was as follows:

- Identifying the research question (100%)
- Writing an introduction (92%)
- Writing a literature review (69%)
- Finding literature (100%)
- Reading literature (77%)
- Referencing and plagiarism (92%)
- Research methods (85%)
- Writing up results and conclusion (69%)

The respondents' perceptions of active learning (based on answers to the open-ended questions) can be grouped into the following themes: increased engagement, enhanced learning, the importance of planning, and student resistance. While the first two themes confirmed the findings of previous research as reported in the literature review, the latter two themes provided additional viewpoints that need to be considered when adjusting courses to employ an overarching active learning approach. These two themes expand the existing knowledge on active learning in the accounting education environment in South Africa and are incorporated into the guidelines provided in the concluding section. The four themes and their sub-themes are shown in Table 3 and are discussed next.

Table 3: Themes and sub-themes relating to active learning

Theme	Sub-theme	Quote from respondent
Increased engagement	Practical engagement	"I knew that I would have to apply what I was learning in class in the active learning assignment later that day. I also knew that there was a deadline and that I couldn't just put it off."
	Emotional engagement	"I really enjoyed the active learning tasks in this module."
	Content engagement	"Forces students to engage in the content, and focus when presentations are taking place. Shows the relevance of the sessions that was completed, and allows time for

Theme	Sub-theme	Quote from respondent
		consolidation of the skills, techniques, knowledge learned."
Enhanced learning	Deeper understanding	"You get to know how far you really understood the work [...] and see where you have to improve."
	Improved performance	"When I am actively taking part, I feel like I remember it better, and can apply it in future."
	Critical thinking	"I think it is very helpful, since it makes me actually think and not just listen."
Importance of planning	Preparing students	"The active learning tasks should be communicated well so that the students know exactly what is expected of them."
	Task timing	"Some of the tasks were done too soon to feel valuable to students."
	Task design	"Many of them [the tasks] seemed to be go and do things, without proper feedback always built into them."
Student resistance	Student resistance	"Some people really do not enjoy being asked a question or to demonstrate something (i.e., being put on the spot), which makes the entire lesson nerve-wracking and extremely unenjoyable."

From the respondent comments it was clear that the increased engagement, which is usually associated with active learning (Sugahara and Dellaportas 2018), was felt by students on various levels: practically, emotionally and content-wise. The multifaceted nature of student engagement has also previously been noted by researchers, for example by Burch et al. (2015), who referred to the components of engagement as physical, emotional and cognitive. The substance of the engagement sub-themes identified in the present study corresponds largely with the components of Burch et al. (2015).

Respondent quotations indicated that active learning tasks engaged students practically and helped them "get through the day" – allowing them a break from passive teaching and thus making it easier to concentrate when passive teaching did occur. Being aware of the active learning task that would come "forces students to listen carefully when the topic is presented". The deadline to complete the active learning task also "forced one to start applying the material you just learned, even though it might not be perfect". A desire for perfectionism may trip up some accountancy students, as they first want to understand the theory perfectly before they start applying it – which makes learning a long and tedious process.

Emotional engagement was achieved when students felt a "personal connection" to the lecturer and to each other; this connection could be facilitated through active learning tasks. The tasks facilitated discussions and allowed students to develop their view by having to share it. Students grew in confidence when they successfully completed a task, which in turn decreased their stress. Furthermore, the students enjoyed the tasks – in the words of one respondent, it made them "feel more motivated to listen and learn". Active learning also allowed students to engage with the content (subject material) they were applying during the active learning task. This approach helped them to perceive why and how the content was relevant and what was important. Content engagement (dubbed cognitive engagement by Burch

et al. 2015) enabled students to process the information at a deeper level.

Increased engagement led to enhanced learning by students. Respondents perceived this enhanced learning to take the form of deeper understanding, improved performance and critical thinking capabilities (sub-themes of enhanced learning). Deeper understanding came about as the active learning tasks required students to try and apply their theoretical knowledge gained from the passive learning. This process tested their understanding, allowed them to identify deficiencies and required them to ask for assistance to consolidate their knowledge. One respondent stated that active learning worked because "practising questions allows students to develop their own understanding of a topic, which is far more valuable than someone else's explanation could ever be". Active learning tasks thus facilitated a deeper and personal understanding of the work and ensured that students could apply it, as was also mentioned by Wilmot and Merino (2015).

In line with the findings of Sugahara and Dellaportas (2018), respondents associated active learning with improved performance, retention of information for longer and competency development (specifically critical thinking). As one respondent noted:

> "The lecturers seem to think students need to be told everything, but I think students who work through questions and figure out things on their own are better equipped to retain the information long after a topic has been completed (making studying for the test easier), as well as having better-developed critical thinking skills and exam strategy."

The active learning tasks in the module required students to apply the acquired content knowledge to the topic that they would be researching throughout the year (i.e., it allowed them already to start on the research proposal by working on small parts of it). Some of the students applauded this; one for example noted that the positive aspect of the active learning tasks was "being able to start with my research task which is often the most challenging part". This response points out that the tasks were effective owing to being designed to be of future use and so improve future performance.

The planning of tasks thus remained crucial for their effectiveness. Respondents felt that tasks could be improved by preparing the student better for the task, timing the task more appropriately and designing the task well (three sub-themes identified). Students sometimes felt ill-prepared for tasks if they did not receive sufficient input or guidance beforehand or if the instructions were too vague. For example, one student commented that a certain "exercise was also very vague and I don't think anyone knew at all what they were doing". The timing of tasks was also seen as critical in designing appropriate active learning tasks as "[s]ome of the tasks were done too soon to feel valuable to students". Tasks should not overburden students, but

rather be embedded in class time. Long stretches of passive teaching should be avoided with tasks rather "interspersed during the lecture to keep engagement up".

Task design should be meticulously considered to implement active learning effectively. In the case of the research module, one could employ the research topic allocated to the student or a hypothetical one. While the hypothetical one might be easier and thus more relatable to prior learning, their own topic allows students to work proactively on their larger research project. At a minimum, the task should relate to the preceding module content, as tasks were "somewhat time consuming when not well aligned to the training that was conducted". Furthermore, the student respondents preferred the group tasks to the individual ones. In line with the findings of Malan (2020), the respondents felt that students should have the opportunity to ask questions while they performed tasks and ideally receive feedback in some form. Respondents also noted that the module content and class size of the research module was well-suited to active learning, but that it could be more problematic using this approach in bigger groups. The problem of applying active learning in larger classes was also noted by Serrano et al. (2019). As one respondent said:

> "I think active learning is always a good idea. Again, technology has an important part to play in active learning and can be used to implement it in bigger groups. For instance, quizzes, polls, clickers, etc. where students are anonymised definitely encourages students to take part in bigger groups. Using something like breakout rooms for groupwork and discussion, along with peer feedback to see the other side of assessment, can also be extremely valuable. Bigger groups are always tricky though."

However, not all students experienced active learning positively. Some students expressed resistance towards this approach, and their emotional engagement was decidedly negative. Lecturers need to be aware that personal preference would affect the way students responded towards active learning endeavours. Resistant students mentioned that they "enjoy just listening in a class" and prefer passive teaching "where we learn the theory and are given question packs which we go through in our own time and when we feel ready to try them".

The importance of planning and student resistance have not been comprehensively addressed in prior research. As accounting programmes have traditionally been facilitated using passive teaching, both students and lecturers seem to go through a change process when designing and taking part in a course designed using an overarching active learning approach. It might thus be appropriate to utilise some change management principles when redesigning courses with substantial active learning in class. These principles include clear and repeated communication before and during the change; explicit planning of the tasks to maximise their effectiveness; and being aware of potential resistance to change and having strategies in place

to manage such resistance (Rosenbaum, More, and Steane 2018; Simoes and Esposito 2014).

Online learning

Respondents had mixed feelings about the introductory week being presented fully online, but mostly they did not feel that online learning led to enhanced student learning and understanding (63%) or to students being more engaged and motivated (84%) when compared to traditional F2F learning. In hindsight, barring the effects of the COVID-19 pandemic, 42 per cent of the respondents would have preferred fully F2F classes, with 37 per cent preferring a blended approach. However, all respondents felt that online learning facilitated the development of digital user competencies, as required of accountants of the future. In addition to attending live-streamed classes and commenting in the chat, students were required to collaborate with other students via MS Teams - creating teams, organising small group meetings and collaborating on shared documents.

The respondents' perceptions on online learning (based on answers to the open-ended questions) can be summarised into the following themes: disconnect, flexibility, and the impact of technology. The themes and sub-themes are shown in Table 4 and discussed next.

Table 4: Themes and sub-themes relating to online learning

Theme	Sub-theme	Quote from respondent
Disconnect	Lecturer/content-to-student	I believe that it is harder for students to connect with both the lecturer and the subject during online learning. Thus, this leads to a more difficult learning process.
	Student-to-student	The online environment allows student[s] increased anonymity and lack of group cohesiveness. F2F environment allows students to bond and make friends between sessions which translates to a more engaging classroom experience, particularly in a small group.
	Emotional	While busy with online learning, I get distracted faster and get tired fast. I could just walk away without feeling guilty. In F2F learning, I feel more motivated and feel more productive.
Flexibility	Space	Being in my own space was quite enjoyable. It was nice having water, coffee, tea, something to eat, etc. close at hand.
	Time	It definitely saved on time and you could get more done in a day.
	Self-management	Being at home (especially during a big year like Honours) it comes down to self-motivation and discipline, and I think it depends on personality type if online learning is more effective or not.
Impact of technology	Affordances	I really felt like I learnt how to collaborate better with others over MS Teams.
	Difficulties	Technical difficulties waste some time.

Many respondents commented on feeling disconnected in the online space, which could decrease engagement, motivation and learning, echoing a finding by Malan (2020). Students felt disconnected from lecturers and fellow-students and found themselves too emotionally demotivated to engage in their studies. Both lecturers and students can attest that digital

engagement demand high levels of concentration – the connection between lecturers and the content they present, and students can suffer as a result. For example, one lecturer commented that there "was very limited interaction, sometimes you wonder whether there are indeed students on the other side of the screen". With students' cameras mostly switched off, lecturers could not see whether students were "keeping up with the work" or monitor student engagement.

Students also struggled to remain focused on what lecturers were saying, as conveyed in a respondent's comment: "there is an element of human communication that cannot be captured via an online medium". Not being able to see lecturers' body language and facial expressions detracted from the learning experience. Some students felt that it was harder to approach lecturers for help in the online space. Asking question was awkward as, said one respondent, there were "no connections built within the class and between lecturers and students". Peer-interaction is also more strained in the online environment, and students found it difficult to bond and "build relationships". A few respondents stated that lack of personal interaction with their classmates was the only negative aspect of online learning. Some respondents, however, experienced a more general (even emotional) feeling of disconnect which they ascribed to online learning. Feelings of being "lost" or "isolated" were mentioned often. Respondents also complained about the anonymity of students and the fact that students could "disappear" without being noticed. Several students mentioned that they felt demotivated, were more tired and found it harder to concentrate in this environment.

On a more positive note, however, online learning was perceived by respondents to add flexibility to the learning process. In terms of space, students could study from home or any other location, and so spend more time with family and be more protected from the COVID-19 pandemic. Students enjoyed studying in the comfort of their own environment, with food and beverages readily available. But, comments also revealed that "there are lots of distractions when you work from home" that need to be managed by students. For example, one student positively noted of online learning: "I could sit in my bed while listening and working. I could do other tasks while busy listening." While students may be tempted to multitask, it could detract severely from the learning experience if the student is not sufficiently focused during class.

As students do not need to commute to class, online learning saves time and resources so that respondents "could get more done in a day". The fact that lectures were recorded provided students with some flexibility as missed lectures "could be easily caught up afterwards". Although time flexibility could be advantageous to students, it needs to be managed correctly so as not to become a disadvantage. Students need to be self-regulated (Wilmot and Merino

2015) – which is easier for some personality types than others. Some students felt that they had to work harder in an online environment, but that this also "results in a more enhanced learning as students need to engage further than just getting all relevant information in lectures". Although online monitoring and deadlines can provide some structure, the onus to be productive and manage time is placed more explicitly on the student, as illustrated by this comment from a respondent:

> "[W]ith online learning, students are by themself and need to be self-disciplined in order to stay motivated and engaged, compared to F2F lectures where you are somewhat 'forced' to stay engaged by attending scheduled lectures."

Unsurprisingly, technology affected the perceptions of respondents relating to online learning. On the one hand, technical difficulties were mentioned as an aspect that could cause major disruptions. On the other hand, the affordances of the online learning platform (Microsoft Teams) were noted by the respondents. Respondents were excited to engage in a different way and learn online collaboration skills which they could apply in future. The recording of the session was beneficial for two reasons: students could rewatch aspects they were unsure about and catch up on any sessions they missed. While some respondents perceived it to be more difficult to ask questions in an online class, others felt it provided the "opportunity to see all the questions and answers from everybody in class and students learn more from each other as well". Thus, respondents perceived the Microsoft Teams platform to provide ample opportunity for online engagement.

Guidelines for future redesign processes

Employing active learning as an overarching approach when redesigning a traditionally passive course will have beneficial effects on engagement, learning and competency development if the proper change management principles are employed during the redesign. The redesign will entail the following:

1. Students who have been mainly exposed to passive teaching in prior modules should be introduced to the advantages of active learning in advance, with due warning that the course is presented using active learning principles and that this approach will require an adjustment from students.
2. Each active learning task should be planned properly to ensure that the subject content underlying the task is covered comprehensively before the task; task instructions are clearly conveyed to students; and the task is appropriately aligned to the subject content. Where possible, groupwork should be employed and feedback provided afterwards.

Engagement in the online environment adds another layer of complexity to active learning. Where possible, blended learning could be considered as an alternative to online learning (Laurillard 2012; Serrano et al. 2019). Combining F2F and online learning can reduce the disconnect felt by both lecturers and students in the online environment, while still utilising technology and facilitating the development of digital acumen in students. Although online learning provides flexibility, it also requires additional self-regulation by students and monitoring by lecturers. The completion of active learning tasks could serve as monitoring tool by lecturers and improve the motivation of students in the online environment.

CONCLUSION

The COVID-19 pandemic has emphasised the need to design courses that engage students in the learning process. Increased engagement improves learning outcomes and competency development which has become increasingly important in the education of professional accountants. This article investigated the perceptions of students and lecturers relating to the active online learning approach used in a postgraduate course on research in accounting. As the present study only focused on the postgraduate environment and a small class size, future studies could employ the guidelines developed to redesign undergraduate modules with larger class sizes.

In line with prior research, it was found that employing active learning tasks led to increased engagement and enhanced learning by students. Respondents' comments further revealed that the active learning tasks need to be planned properly to ensure maximum benefit to students. Moreover, some students were resistant to the change in learning approach from passive to active. This resistance would need to be managed in future redesign processes to minimise the effect thereof on learning outcomes, possibly through change management principles such as purposeful communication regarding the benefits and requirements of active learning. The hesitance regarding active learning could further be addressed by careful design of the active learning tasks, ensuring proper alignment to content as well as inclusion of groupwork with feedback were possible.

Respondents reported that the online learning environment provided them with increased flexibility, but that this flexibility had to be managed through self-regulation or monitoring by lecturers. Moreover, online learning led to feelings of disconnect (between lecturers and students, within the student group, and in relation to the content). Such disconnect could be alleviated by applying a blended learning approach in future, using the advantages of both the F2F and the online environment to facilitate engagement, learning and competency development.

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