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IMPACT EVALUATION OF LEARNER EXPERIENCE AND ACHIEVEMENT  
IN AN ONLINE MASTER OF APPLIED MANAGEMENT

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# IMPACT EVALUATION OF LEARNER EXPERIENCE AND ACHIEVEMENT IN AN ONLINE MASTER OF APPLIED MANAGEMENT

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## INTRODUCTION

While online education has been part of the adult and further education landscape for some time, it has recently gained greater importance and attracted larger numbers of learners. However, in the past two years, due to global impacts from the COVID-19 pandemic, learners' ability to progress study and gain tertiary qualifications in the online environment has seen an increased uptake of this mode. While this move has been forced upon some institutions (Gallagher & Palmer, 2020), at Southern Institute of Technology (SIT), Invercargill, New Zealand, online learning opportunities for learners (Level 3 to Level 9 of the New Zealand Qualifications Framework), have been long established. The Master of Applied Management (MAM) Programme is an example. This qualification is for management practitioners and recent graduates (domestic and international) wishing to undertake advanced study, often with a view to obtaining a more senior work role.

This Level 9 Programme comprises both compulsory and elective papers, to a required total of 180 credits. The four compulsory papers are:

- MGT801 *Management Practice*;
- MGT802 *Researching Management Issues and Trends*;
- MGT803 *Research Proposal*,
- MGT804 *Research Methodology and Proposal*, a combination of MGT802 and MGT803, which commenced delivery in 2021.

All compulsory papers must be completed before enrolment in one of: MGT901 (45-credit research project), MGT910 (60-credit research project) or MGT902 (90-credit research thesis). Since 2017, 207 learners have completed at least two compulsory papers delivered through SIT2LRN, the institute's distance learning faculty (Figure 1).

Year	Papers	Total Learners
2017	MGT801, MGT802, MGT803	39
2018	MGT801, MGT802, MGT803	50
2019	MGT801, MGT802, MGT803	47
2020	MGT801, MGT802, MGT803	71
2021	MGT801, MGT802, MGT803, MGT804	33*
	<b>TOTAL</b>	207

Figure 1. Papers completed/ongoing in the Master of Applied Management (MAM) programme at SIT.

\* *Ongoing Enrolments*

Note – Data for 2021 included only learners enrolled for the first two 17-week intakes offered by SIT2LRN.

A significant increase in completions (2020) was possibly due to the opportunity provided by the 2020 lockdown to SIT2LRN mature learners (those over the age of 25) who are already in employment. This period may have provided these learners with a chance to fast-track or begin their studies while much of the country was shut down.

## LEARNER EXPERIENCES IN ONLINE COURSES

Understanding learners' perceptions of online learning is a complex and multi-faceted subject. Literature about these learner experiences is diverse. While wider research has centred on learners' perceptions of the delivery of papers, communication, facilitation and learners' own management of their learning, this review takes a more generic approach. The material discussed here reflects learners' perceptions of their online learning experience, with the aim of achieving a better understanding of what learners experience while undertaking online courses.

Teaching staff are important in a learner's online learning experience. Fedynich et al. (2015, p. 6) note that teaching staff have "been identified as being vitally important to students' satisfaction" as it relates to online learning. Gray and DiLoreto (2016) corroborate a strong correlation between teaching staff and the quality of learners' learning and satisfaction with online courses. Martin and Bollinger (2018, p. 218) observe: "It is important to note that engagement strategies that support interactions with instructors were valued more than strategies that aimed at interactions with learning material and other learners. Instructor presence is very important to online learners." It is important that staff have the proper preparation for teaching online from both academic and technological perspectives (Chaves, 2021). According to Bollinger and Halupa (2018) learners report that teaching staff are important in helping them to become more engaged with their study and achieving more positive learning outcomes.

Facilitation methods chosen for online courses should be well designed for teaching and learning to be successful. To improve the online learner experience, Fedynich et al. (2015, p. 6) suggest that staff can "ask students for their ideas [and] provide students with structured collaborations by embedding recurring activities that require conversation between partners, encourag[ing] students to dialogue" about course assignments. In contrast, Bollinger and Halupa (2018) note that learners do not regard discussions with other learners and getting to know these learners highly. However, Discussion Boards (DBs) can assist online learners, fostering course-related engagement between learners, and between learners and instructors (Hill & Horrocks, 2020). Having clear expectations and measurable learning objectives to engage learners is important to improve learning; collaborative activities (for example, case studies) can also help foster learner-to-learner engagement. Sadaf et al. (2019) also note that YouTube videos, podcasts and TED Talks can also promote learning.

Learners' engagement with online courses is important for successful outcomes. Martin and Bollinger (2018) confirm that learners engaged with online study are more determined to do well, more satisfied with their course and receive higher academic results. They also note (p. 206) that "student engagement in online learning is very important because online learners seem to have fewer opportunities to be engaged with the institution." Postulating that online learners may have less engagement with their peers "due to geographic separation, diversity in culture, stage of life, type of job and life experiences" (p. 312), Martin and Bollinger (2018) also report that women usually have higher levels of engagement than men, while learners in graduate programmes have higher levels of engagement than those in undergraduate programmes. Alqurashi (2016) found a strong link between a learner's past experience with online learning and their competency with technology, and overall course satisfaction, noting that learners with a low motivation for seeking information were more likely to use library resources rather than online sources.

Compton et al. (2006) consider adult students as 25 years or older. All students participating in this study were 25 years or older (Figure 3) and thus are considered as adults. The Organisation for Economic Co-operation and Development Policy Response to Coronavirus (2020, p. 1) observes that for adult students "much of the training that had started as face-to-face in classroom environments has been pursued online" following the COVID-19 crisis. The flexibility of distant learning allows adult students to benefit from lifelong learning (Kara et al., 2019), although these authors also note that adult students need programs that are designed to meet their requirements. Learners' multiple roles – such as parents, workers, partners, and students – must be considered, as they add additional responsibilities and workloads for adult students (Kara et al., 2019).

This brief review highlights the need for tertiary institutions to recognise skilled teaching staff, delivery methods, learner engagement with their course, and learner motivation as important considerations in overall educational strategies. Learners' perception of online course experiences is multifaceted. The research in this study attempts to add to the existing knowledge on this topic by investigating learner experiences in an online Master's-level course.

Moving to focus on the individual learner, the impact evaluation (Owen, 2007) research we undertook concentrated on a process-outcome approach, asking: "How have the compulsory papers in the MAM supported online learners to develop the requisite knowledge and skills to achieve successful outcomes to continue with either a supervised research project or a research thesis?" The research sought feedback from past learners to guide further development of the programme, and to gain insights into experiences of online Masters' programmes more generally.

## METHODOLOGY

The research population comprised any past learner in four compulsory MAM papers (MGT801, MGT802, MGT803 and MGT804) taught through SIT2LRN between 2017 and 2021. Data collection was limited to learners who had completed at least two of the compulsory papers to ensure that feedback did not reflect one particular facilitator.

As the three researchers all worked for either SIT or SIT2LRN, and the lead researcher was a facilitator of three of the four compulsory papers, the lead researcher did not undertake the initial analysis of the data in order to reduce potential bias.

The interview sample was purposively selected based on the expression of interest indicated by respondents on the questionnaire. A mixed-method approach ensured a greater depth of feedback in the interviews than was possible through the questionnaire. The questionnaire gathered responses to specific questions (demographics, content, delivery, organisation and facilitation, and student effort and workload), while the interviews explored interviewees' experience of the papers, perceived support in developing academic skills, level of preparation for the project or thesis, and the value of their experience with the facilitators.

Questions were piloted and modified according to the comments. Questionnaire and interview questions aligned with the research question, and were framed based on five major factors:

- objectives;
- impact of time between completion of compulsory papers and undertaking project/thesis;
- role of facilitator as it supported achievement in compulsory papers and readiness for project/thesis;
- design of learning materials, and
- relevance of assessment activities.

A database of potential respondents was constructed at SIT2LRN and the questionnaire link was sent by an administrator (not associated with the project). Ethical approval, Number 2021/39, was obtained from the SIT Human Research Ethics Committee.

The 20-minute, Survey Monkey questionnaire concluded with an invitation for respondents to self-identify via email for the interview, conducted via Blackboard Collaborate. Written consent was gained and with the individual's permission, the interview was recorded, allowing the recording to be forwarded, together with a transcript, to the interviewee for verification.

Thematic interview data analysis (Braun & Clark, 2006) was followed by code identification. The main codes included positive reference to the following variables: value of feedback from facilitator; motivation generated through that feedback, clarity of content, usefulness of video presentations, appreciation of immediate and regular email contact, specific and helpful advice via email/visual presentation, detailed feedback/advice on assignments, and interaction generated through Discussion Boards. Less positive codes related to unhelpful or irritating group work and the challenge of time limitation in the papers.

Inductive analysis of interview data involved identifying, analysing, and interpreting patterns of meaning within the qualitative data. Codes were collated thematically (Braun & Clarke, 2006, p. 35). Key themes included presentation and content of material, effective communication, detailed feedback, perceived support, and challenges to effective work. While the themes strongly related to the data, some alignment of themes with the questionnaire and interview questions was noted. Nevertheless, the questions did not provide a preconceived framework for the analysis. Although Braun and Clarke (2006, p. 15) note that there should be "disjuncture between" questions asked and themes identified, a degree of similarity was nonetheless found.

Findings and recommendations were presented according to Owen's (2007) impact evaluation approach which is "concerned with establishing what works and why" (p. 255) in a particular programme. Findings were categorised as "process" or "outcome" as this form of impact evaluation has been used to review "mature programs" (Owen, 2007, p. 258) to consider how programme implementation is reflected in the programme outcomes.

Analysis of the questionnaire data revealed some interesting demographic data:

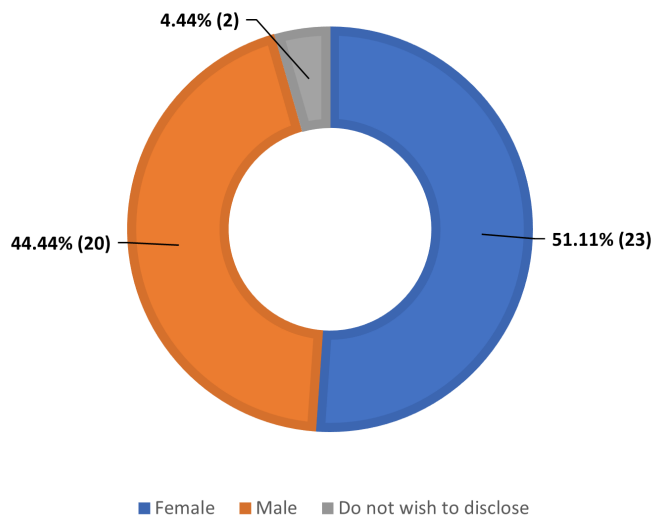


Figure 2. Gender of respondents.

Of the 45 respondents, slightly more females responded than males, consistent with the overall SIT2LRN demographic data.

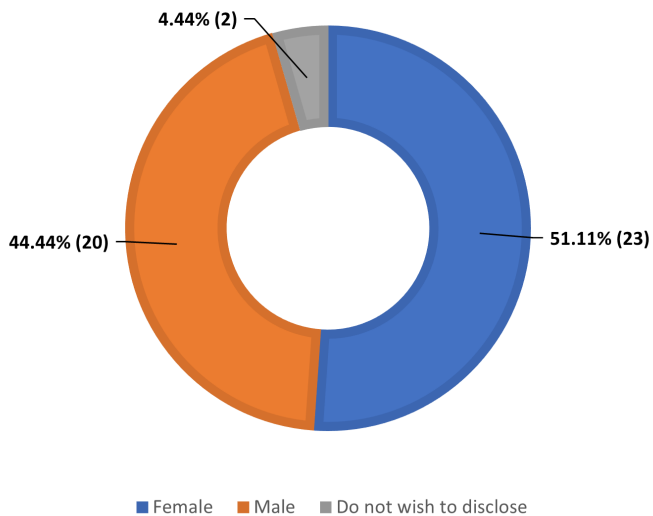


Figure 3. Age when respondents first undertook the compulsory papers.

Eighty percent of the respondents were 35–54 years of age, a figure consistent with overall SIT2LRN demographics.

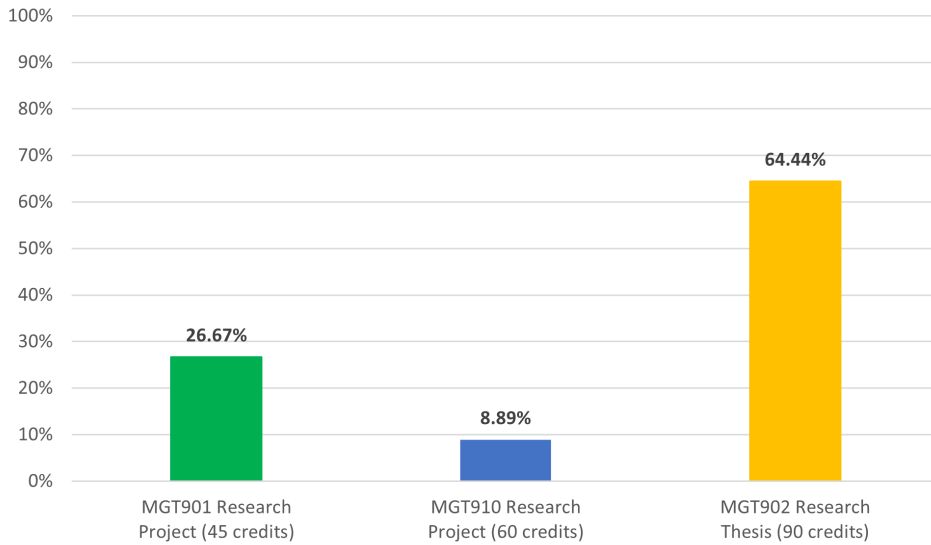


Figure 4. Study pathway respondents planned to pursue.

While the programme does offer 45 and 60 credit research projects, 64 percent of respondents planned to complete the 90-credit thesis pathway.

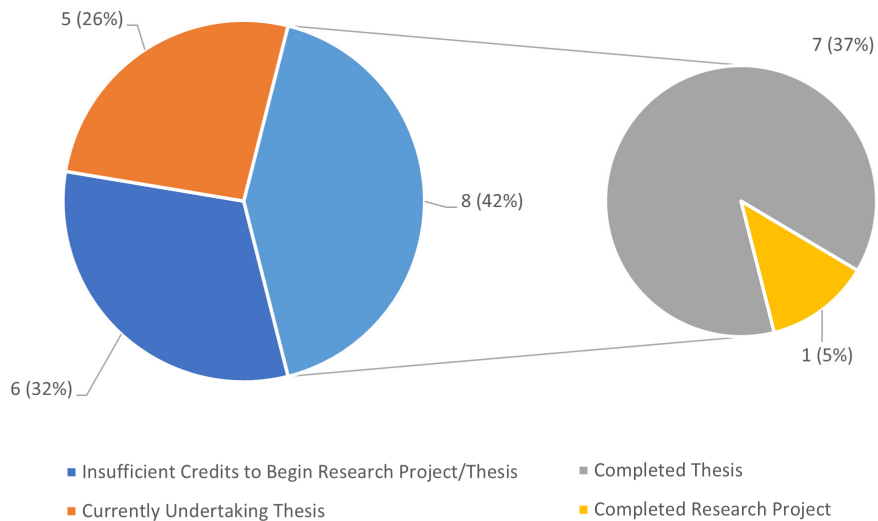


Figure 5. Study pathway that interviewees pursued.

Of 19 respondents interviewed, 12 (63 percent) had completed or were in progress with their thesis, one (5 percent) had completed the research project, and six (32 percent) others had not yet completed the required credits to begin their final paper.

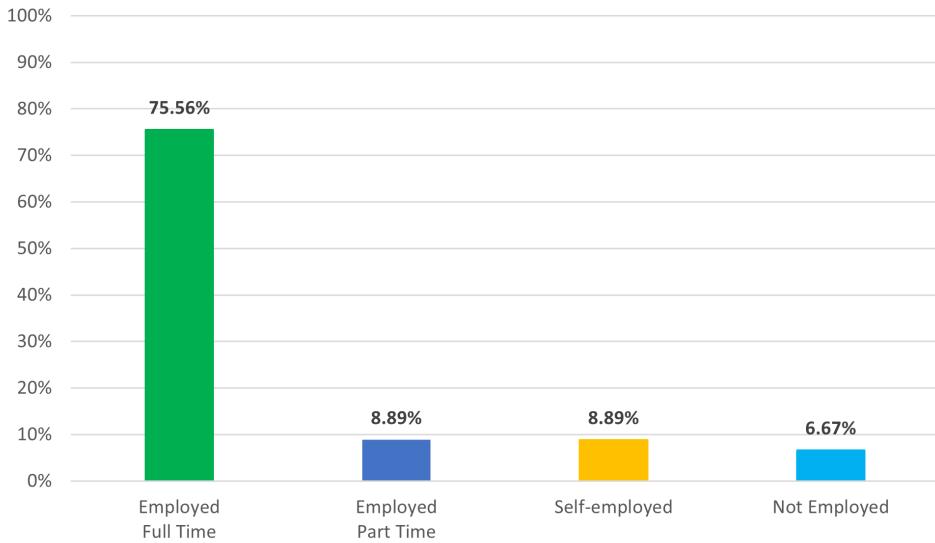
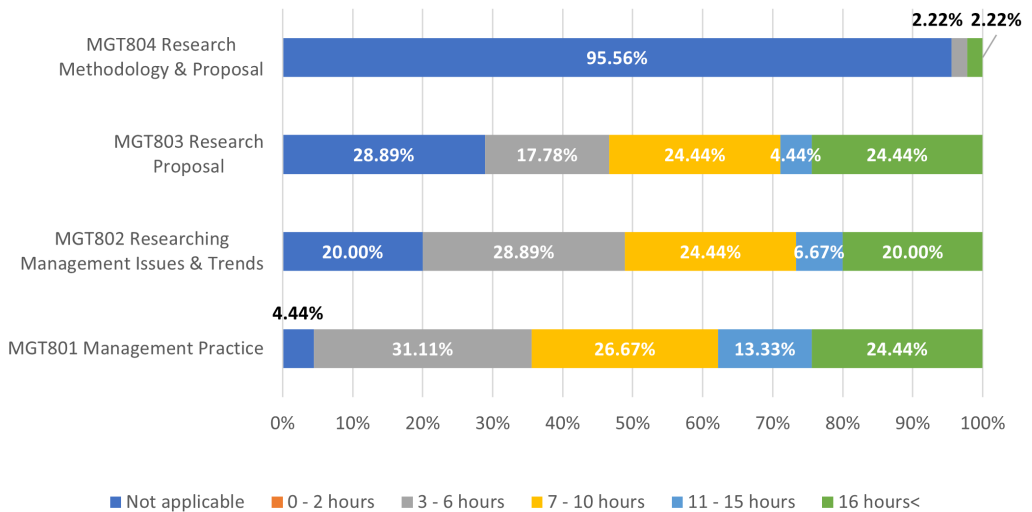


Figure 6. Employment status of respondents when compulsory papers were undertaken.

Most SIT2LRN learners are employed. Of the 45 respondents, 76 percent were in full-time employment while studying, demonstrating a commitment to furthering their education.





	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
	MGT801 Management Practice	MGT802 Researching Management Issues & Trends	MGT803 Research Proposal	MGT804 Research Methodology & Proposal							
■ Not applicable	2	9	13	43							
■ 0 - 2 hours	0	0	0	0							
■ 3 - 6 hours	14	13	8	1							
■ 7 - 10 hours	12	11	11	0							
■ 11 - 15 hours	6	3	2	0							
■ 16 hours<	11	9	11	1							

■ Not applicable ■ 0 - 2 hours ■ 3 - 6 hours ■ 7 - 10 hours ■ 11 - 15 hours ■ 16 hours<

Figure 7. The approximate number of hours per week in study.

Approximately 50 percent studied for ten hours or less per week per paper, below the figure recommended by SIT2LRN. According to NZQA recommended guidelines, where one credit equates to ten hours of study, a 45-credit paper is 450 hours over 17 weeks (26.5 hrs/wk), a 60-credit paper is 600 hours over 34 weeks (17.6 hrs/wk), and a 90-credit paper is 900 hours over 34 weeks (26.5 hrs/wk). More than half the respondents felt they had invested sufficient time in their studies, and over 50 percent stated that they accessed reading beyond recommended material.

## RESEARCH ANALYSIS AND FINDINGS

### Questionnaire analysis and findings

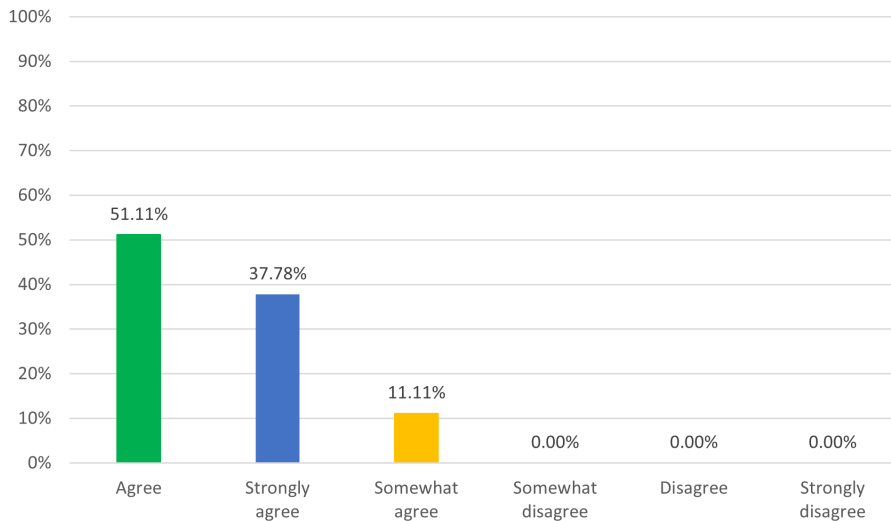


Figure 8. "Respondent experience of the papers matched the information provided in each paper outline."

Eighty-nine percent agreed that experience of content matched the information provided, while 92 percent agreed that they understood what they were expected to achieve the learning outcomes; Sadaf et al. (2019)

found that clear expectations and measurable learning objectives help engage learners. Encouragingly, 91 percent considered that assessment activities supported learning; 96 percent believed that content was designed to extend knowledge of theories, concepts and practices, supporting the learner to understand complex concepts.

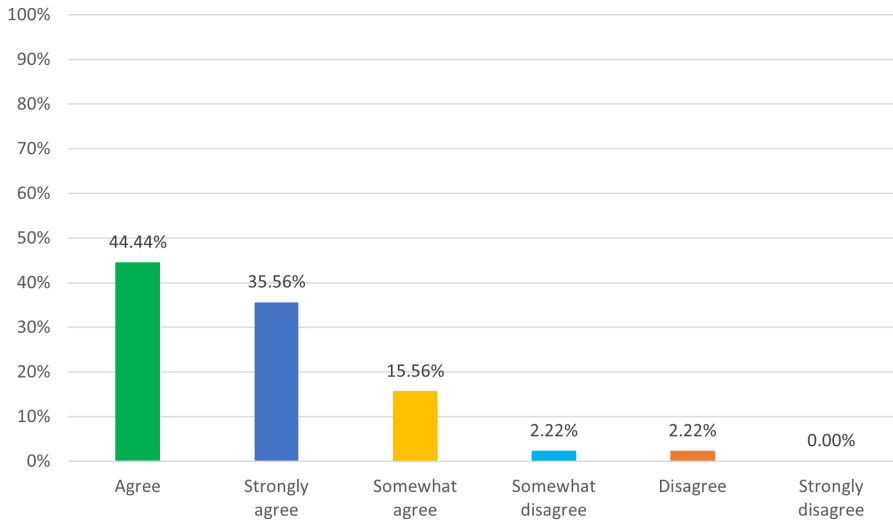


Figure 9. "The learning environment of the papers was open and inclusive."

Structurally, more than 80 percent considered the learning environment to be open and inclusive. A similar percentage noted Discussion Board activities assisted them to achieve intended learning activities, consistent with the findings of Horrocks and Hill (2020).

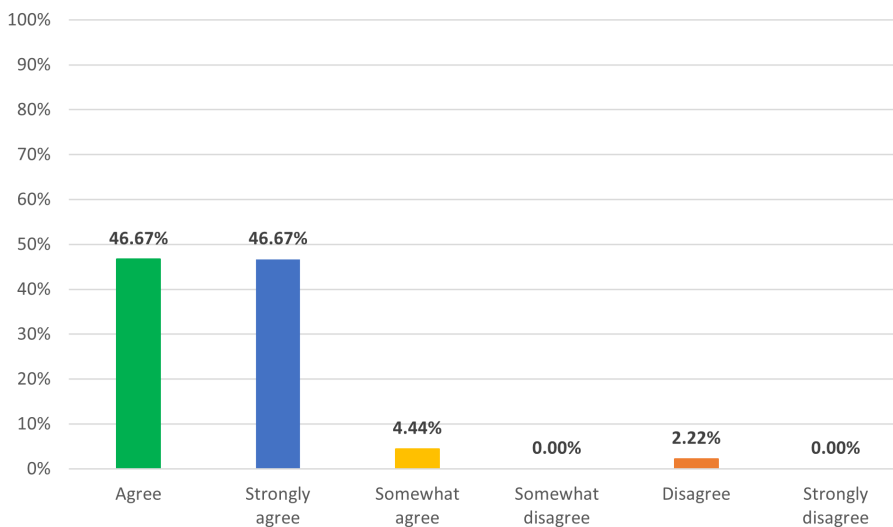


Figure 10. "Through the stated learning outcomes, respondents understood what they were expected to achieve."

Delivery, organisation and facilitation were all favourably considered; over 90 percent clearly understood the organisation of the papers, and what was expected of them. A similar percentage were satisfied with Blackboard for access to content and assessments.

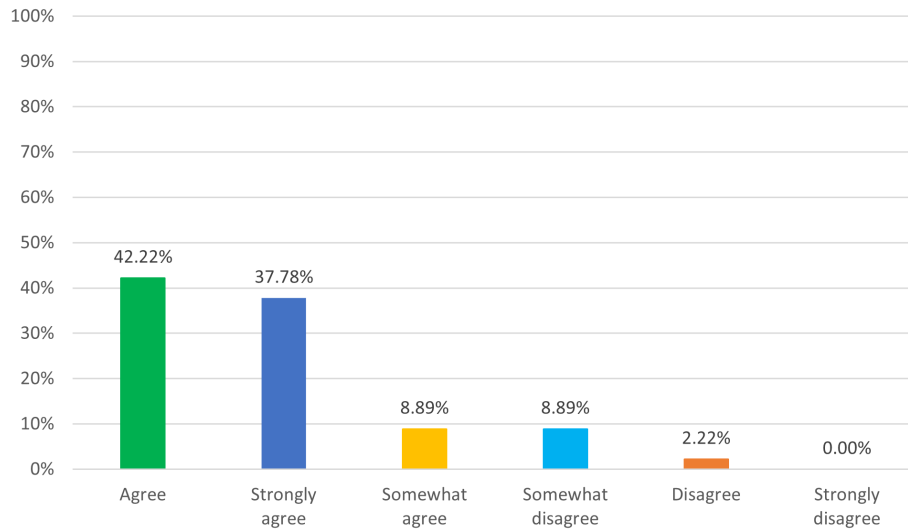


Figure 11. "Respondents received prompt feedback from their facilitators."

Facilitator support rated highly; 87 percent received prompt feedback from facilitators. Over 90 percent noted that facilitators communicated what was expected of the learner in the papers and encouraged them to actively engage in their learning, while providing useful feedback. Strong facilitator engagement aligns with research by Fedynich et al. (2015), Gray and DiLoreto (2016) and Martin and Bollinger (2018) regarding the importance that teaching staff have on a learner's online learning experience.

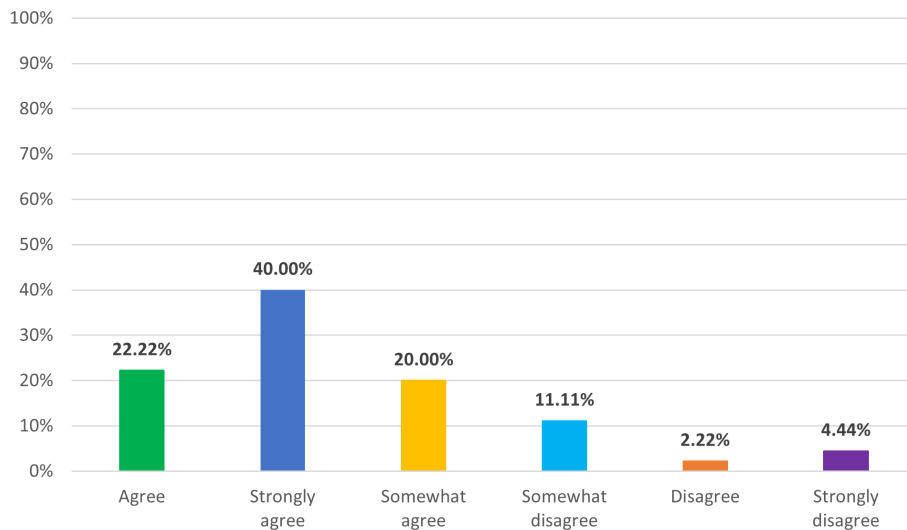


Figure 12. "Respondents were able to learn by collaborating and discussing with other learners."

Collaboration with other learners was rated highly by only 60 percent of respondents. Bollinger and Halupa (2018) note that learners may have less engagement with peers because of geographic location, separation, cultural diversity, type of employment and life experiences. Support from facilitators and SIT2LRN (nearly 80 percent) and family and friends (80 percent) was valued, and almost 93 percent of respondents considered that papers provided them with positive learning experiences.

### Interview findings

Nineteen, 45-minute interviews were conducted using Blackboard Collaborate. Findings were categorised using the process-outcome evaluation model (explained above):

#### a) Process

- Content and structure
- Delivery
- Facilitator support.

#### b) Outcomes

- Preparation for project/thesis
- Overall experience
- Improvements.

These elements will be further discussed in the Research Recommendations and Conclusion.

### Process – Content and structure

Learners noted the value of a weekly program. Some had not studied recently, and realised that there was a big workload to tackle in a short amount of time. They valued the way the three papers interlinked and built on each other. Most found real-time contact with a facilitator valuable; one respondent noted, "I really enjoy being able to have a conversation with my facilitators, so perhaps that should be looked at. The ability to correspond

face to face and get real time feedback is very beneficial." Many found the Discussion Boards useful, supporting the findings of Hill and Horrocks (2020), noting that they were good for supporting new skills development and learning from others. As one participant remarked, "the activities where we had to write our answers were good; you learned from others after posting to the DBs." As Sadaf et al. (2019) found, case studies were also valued as reality-based, and as supporting meaningful learning.

Papers were viewed as highly applied. One learner observed: "The applied nature runs through the whole DNA of the Master's." In terms of improvements to the content and structure, learners indicated that online materials and videos were particularly helpful, and content and structure were deemed to be satisfactory: "The content of the modules was good. I don't see how it might be done better."

### **Process – Delivery**

One learner valued the way "it [delivery] was always from simple to more advanced learning. I could build on my already learned knowledge, so that was the thing ... I enjoyed." Weekly activities kept another learner on track: "The approach through the papers was really good." Discussion Boards were also valued. There were some aspects identified for improvement, such as the need for more specific feedback. Acknowledging papers are delivered online, one learner said, "there should be more contact with the facilitator." A final suggestion related to making the rationale for activities explicit. One learner observed, "I would have appreciated it more if we knew the rationale for these exercises and activities; making the intention explicit. We have the Learning Outcomes but not necessarily the skill outcomes." This observation is consistent with Sadaf et al. (2019), who highlight the importance that clear expectations and measurable learning objectives play in helping engage learners to improve learning. This relates to the need for learners to understand the "why" of undertaking activities, and how they correlate with learning outcomes.

### **Process – Facilitator support**

Learners considered that facilitators provided support and encouragement during the papers, factors which are important in online learning (Fedynich et al., 2015). Facilitators were "supportive, approachable and flexible [and] kept me engaged and encouraged." Another learner noted: "It is great to have someone with experience who can go 'this is where we should be at.'" Feedback was the subject of numerous comments, including: "Getting that live feedback and understanding was good. The Skype formative assessment and feedback was really valuable," and: "Feedback was excellent as were the marked-up comments on the assignments – this is brilliant because as a distance learner, you don't get that contact otherwise." Regular and positive contact with the facilitator rated highly: "There was regular contact with both facilitators; the key was whenever I did have a question it was answered really quickly." One desired feature was more connection with the rest of the class, particularly using Blackboard Collaborate: "I think it would have been beneficial to have something like Collaborate in those papers. In the first paper we all got together on Skype and connections were not good. It was run by the facilitator – not the best way. Collaborate seems so much better."

### **Outcomes – Preparation for project or thesis**

Kara et al. (2019) noted that adult students need programmes designed to meet their requirements. A number of skills were valued by the learners, including "soft skills" and more practical academic skills: "I think it is those soft skills; about meeting deadlines, writing, researching, being able to reference correctly, being curious, thinking about topics that are relevant in business management." The solid scaffolding of papers was valued. For one learner "they helped enormously. A thesis is a bit of a scary unknown so step by step it got me closer. There was solid scaffolding and progression – no sudden shock." A sense of discovery featured in the comments in noting

that research can “widen your perspective; they help you to understand the strategic implications of what you do in organisations.” Excellent ideas for improvements were proposed for preparation for the project or thesis. More detail about a range of methodologies would be helpful, because “knowing what time requirements are needed for different methodologies would have been very good.”

### **Outcomes – Overall experience**

There was a good balance of comments regarding the overall experience. The first of the three compulsory papers was considered a “heavy workload,” although content was stimulating. One learner commented: “[The first paper] was heavy but you need that to motivate you; I loved the content. Not just one thing to look at – it was relevant for NZ and we could find resources for the cases really easily.” For another learner, “it got me in the momentum of study again.” However, a third learner cautioned, “You need to be realistic about the workload. It is tough to give up every evening. If you are working part time you can take more than one paper but if working full time be careful.” Kara et al. (2019) support the need for students to give consideration to their multiple roles as adults.

Again the quality of facilitators was considered important in student engagement, supported by Bollinger and Halupa (2018). One learner explained that “the quality of tutors all the way through was really strong [and] I can comfortably say that the tutelage and course design on most of the papers was really good; none were below par.” Another supported this judgement: “The approachability and flexibility of the facilitators really helped me to be engaged and encouraged [me] to be in it.”

### **Outcomes – Improvements**

Potential improvements to papers were identified. Feedback, unsurprisingly, featured highly. More uniformity and consistency of feedback was requested: “I had one facilitator that gave a lot of feedback on my work, at the end of the rubric they would explain what I had done well and what I can improve; the other facilitator would just give me feedback on the rubric. If there was some way of having more uniformity of feedback; that would be good.” Another noted: “I think that in other papers when you got the feedback on assessments that was often a score or a repeat of what was on the rubric; it wasn’t adding any additional feedback that was beneficial to my learning. I think that was a deficiency.”

Discussion Boards (DBs) were valued by some learners: “I think when the DBs are used properly, they add value. I would not get rid of them. Perhaps seed the Social Discussion tab with ideas for comment.” However, improvement in timing was recommended: “I felt confident posting to the DBs but most of the time there was no alignment between the learner posts and the assignment due date. There was a kind of incongruity because people were commenting at different times.”

One learner identified the potential value of having access to a mentor following completion of their studies: “I think that having a mentor (not an academic mentor) would be such a great informal opportunity; you could ask those questions that might seem a bit silly; gather more resources. It’s a different kind of relationship.”

## RESEARCH RECOMMENDATIONS

Based on the findings from this research, the following recommendations are offered to academic and educational programme managers and facilitators.

Focus Area	Recommendations
<b>Structure and Content</b>	<ul style="list-style-type: none"> <li>• If learner satisfaction with the overall papers is high, retain the basic structure.</li> <li>• Consider minor adjustments to content; adding further diversity in methodological approaches, and an introduction to how to conduct an 'Industry Theory and Strategic Analysis.'</li> </ul>
Communication and Interaction	<ul style="list-style-type: none"> <li>• Interaction and communication between learners and facilitators should be a priority. Each facilitator can decide how this can be done, e.g. through effective use of Collaborate or Skype.</li> <li>• Initial discussion with learners about what study at the Master's level involves. For example, the need to deeply explore subjects, look at different points of view, and construct justifying statements.</li> <li>• Individual interviews to monitor progress conducted with learners half-way through each paper.</li> <li>• As part of the orientation to the programme, advise learners of time requirements and need for good time management.</li> <li>• From the commencement, advise learners how all the papers are interrelated and how this is all connected to the project/thesis.</li> </ul>
<b>Programme Management</b>	<ul style="list-style-type: none"> <li>• Aim to enhance learner-to-learner interaction, e.g. through using Discussion Boards.</li> <li>• Ensure learners receive timely, effective, and consistent feedback to enable them to improve in subsequent performances.</li> <li>• Ensure learners understand the rationale for exercises and activities, and ensure activities (e.g. Discussion Board) link to the assignment tasks.</li> <li>• Facilitators and programme managers should foster a strong community of practice among not only postgraduate learners, but all distance learners.</li> </ul>
<b>Technology Access and Knowledge</b>	Consider learner demographic and knowledge, and that learners are often returning to study after long absences. Provide supportive tutorials, training sessions, and access to academic resources (e.g., MS Office suite).

Figure 13. Research recommendations.

## CONCLUSION

Through examining the secondary data, and responses from the questionnaires and interviews, several recommendations have been made to contribute to research in this area. Some recommendations are purposefully generic. This is to help learners and facilitators better apply these recommendations to their own situation.

While one limitation of this research was that it was undertaken in a regional Institute of Technology and was related to a specific Master's programme, most of its conclusions could be applied to a wider audience of online learners. Perhaps further research could be aligned to understanding how this research compares, for example, with online study in a university setting.

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**Warren Smith** is the academic manager (acting) for the Southern Institute of Technology and a senior programme manager within the distance learning facility, SIT2LRN. His research focuses on learners' experiences in postgraduate programmes delivered via distance learning and on identifying opportunities for improving the overall learner experience.

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