

Increasing Student Engagement and Interaction in the Online Classroom: A High Impact Mini-Teaching Approach

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The Covid-19 pandemic dramatically transformed how and where students were taught. Universities had to suddenly switch to online learning with virtually no preparation. Students and teachers lacked experience in online learning. This sudden change generated a high degree of uncertainty and a notable fear in the decline in the perceived quality of higher education due to the absence of in-person classes. In this context, this study explains how an accounting instructor navigated the crisis by adopting a diverse high impact mini-teaching approach. The quantitative analyses of the online student surveys showed that this strategy was successful in sustaining students' interest levels high during the Covid pandemic period. The teaching strategy increased student retention and progression rates and can help address the current drastic declining undergraduate accounting student enrolments. The findings of this study suggest the strategy is exportable to other courses and can provide practical guidance for instructors who would like to achieve high level student engagement and satisfaction in the online classroom using digital learning platforms in the future.

Keywords: accounting education, Covid-19, synchronous online learning, engagement, interaction

INTRODUCTION

In 2020, the coronavirus hit the world suddenly that resulted in the Covid Pandemic disruption that massively disrupted the normal work and life of people including students. It is estimated that educational institutions around the world had to close their educational institutions as a result of the Covid 19-pandemic, impacting over one billion students representing more than 90% of the world's student population (UNESCO, 2020).

The abrupt transition to online learning was particularly challenging and stressful for students causing anxiety and several mental health conditions. This is because not all young students have the capacity to derive benefit from these novel and unique learning environments that are unfamiliar, while others are battling not to fall behind in their education and to maintain their motivation and engagement (UNESCO, 2020). This is corroborated by Hartnett (2016) who found that in the absence of direct and immediate assistance from the instructors to support online learning, students lack the ability to develop conceptual understanding as well as to sustain meaningful interaction and engagement with digital resources. Additionally, most instructors that have never taught online or obtained adequate training, are not likely to deliver effective online learning (Chiu, 2017; Chiu and Churchill, 2016; Ingvarson et al., 2005). Furthermore, due to the instructors' lack of familiarity and competence with online learning and the students' home learning environments, the instructors may not adequately support their students' learning

needs. It is also worth noting that the unique toxic combination of the Covid-19 pandemic, social isolation and economic recession resulting in anxiety is likely to exacerbate the existing mental health problems afflicting students (Singh et al., 2020). In addition, the researcher's class there was a huge disparity in the academic abilities of the students; differing backgrounds and walks of life of the students; and a general short attention span of this generation Z of students.

The importance of student engagement in student learning cannot be overemphasized. The existence of student engagement can exist in several forms such as the attendance of classes (behavioral engagement), the mastery of the course content (cognitive engagement), and/or the expression of enjoyment toward the course activities or instructors (emotional engagement) (Fredricks et. al., 2004). This leads to the research question:

“What are the effects of using the high impact multi-strategy teaching approach on student engagement and interaction as measured by the overall course rating?”

CONCEPTUAL FRAMEWORK

Consistent with Jia et al. (2022), this study adopts the community of inquiry framework and the self-determination theory (SDT). According to Garrison (2016), the community of inquiry framework comprises a group of individuals working collaboratively together to engage in purposeful reflection and discourse to construct personal meaning and confirm mutual understanding. The community of inquiry framework was initially put forward for use in text-based asynchronous communication (Garrison, 2007). The community of inquiry framework suggests that learning takes place via the interaction of three primary elements comprising the teaching presence, social presence and cognitive presence.

Teaching presence involves the planning that is invested in developing the course and student enabling learning to take place through the initiation of discussion topics by the instructor, the construction of understanding through sharing personal meanings and the provision of direct instruction (Garrison, 2007). Social presence is the ability of participants to socially present themselves via the communication medium in use (Garrison, 2007). Cognitive presence refers to the degree to which the students can infer meaning and understanding by providing students with a sense of puzzlement (trigger), giving students the opportunities to reflect (exploration) and directing students to think and learn through engaging discussions with others (integration) and requiring students to apply knowledge to address problems by solving issues (resolution).

Previous studies indicate that teaching, social and cognitive presence all exert a positive influence on student learning experiences. For instance, Kozan and Richardson (2014) find that teaching presence positively enhances student learning; Rourke et al. (1999) find that social presence can improve students' online participation frequency; and Whitehead et al. (2014) find that social presence helps to limit the students' sense of loneliness and reduce stress. Çakiroğlu (2019) finds that students possessing a higher perception of cognitive presence was associated with higher academic achievements. These findings all point towards the applicability of a community of inquiry framework as useful for designing an online digital learning environment.

Advanced by Deci and Ryan (1985), self-determination theory is a macro-level theory of human motivation which seeks to describe the dynamics of human need, motivation, and well-being within a social context. The theory is based on the notion that individuals have three universal and psychological needs comprising autonomy (the feeling of being self-governed and self-endorsed), competence (the feeling of being competent and effective), and relatedness (the feeling of being connected, loved and interacted) that motivate them to action or inaction. Hsu et al. (2019) find that when pedagogy is designed to sufficiently address these three psychological needs, students are actively motivated to engage in learning tasks. This finding is corroborated by Reeve (2013) who finds that classrooms which support these three psychological needs will probably lead higher engagement of students in learning.

Lietaert et al. (2015) find that various contextual factors, such as teacher and peer support influence student motivation and engagement. This is consistent with the view that teacher support is one of the most

vital pillars in encouraging student motivation in schools (Allen et al., 2013; Roorda et al., 2011; Wang and Eccles, 2012). The three teacher support dimensions identified in self-determination theory relating to classroom practice include autonomy, structure and involvement (Lietaert et al., 2015; Roorda et al., 2011). Chiu (2021) acknowledge that these dimensions could be useful tools to achieve the objective of satisfying student's psychological needs through promoting positive learning as an effective strategy to deal with the objectives of the pandemic.

SYNCHRONOUS ONLINE LEARNING WITH A VIDEO-CONFERENCING TOOL

The use of synchronous online learning for teaching in educational institutions is not new and its use has expanded rapidly as a result of the Covid pandemic. Anastasiades et al. (2010) describes video-conferencing as communication performed in real time between people in two or more locations separated by distance. Synchronous online learning refers to where instructors and students can communicate instantaneously via both video and audio platforms. The availability of facial expressions and observations of body language means that high levels of immediacy, interaction and social presence can be achieved which can lead to the facilitation of learning and enhancement of learner's engagement.

Although there is the argument that the interaction among the persons in a video-conferencing mode is much reduced and more impersonal in comparison with the face-to-face learning environment (Schweizer et al., 2003) research findings show that students generally appear to perform just as well in the synchronous learning and learning conducted face-to-face with respect to learning gains (Szeto, 2014).

Further, some studies posit that the non-verbal cues made possible by the video conferencing tool enhance social presence and a sense of rapport among students and teachers when physical presence is not possible. For instance, Han (2013) found that the use of teacher video casting in a synchronous virtual course resulted in students feeling more connected to the instructor and being more meaningfully engaged when interacting with both the instructor and their peers than when compared to the course without video casting.

Despite the increased prevalence of the use of online learning as a medium for teaching, there is no research to date to the researcher's knowledge that has examined the use of an intensive diverse high Impact multi-strategy mini-teaching approach in a synchronous online teaching environment. This study addresses this gap in the literature and represents one of the important contributions of this paper.

In the present study, the adaptation of an intensive diverse high Impact multi-strategy mini-teaching approach in a synchronous online teaching environment is first described using both the community of inquiry and self-determination theory conceptual framework approaches. Although some previous community inquiry studies and self-determination theory studies have investigated the use of technology, none have specifically focused on examined the effect of an intensive diverse high Impact multi-strategy mini-teaching approach supported by videoconferencing. Next, there is the examination of the effects on the students' motivation and interaction as measured by the overall course rating when the intensive diverse high impact multi-strategy mini-teaching approach is adopted.

METHODOLOGY

The methodology consists of designing and implementing an intensive diverse high impact multi-strategy online mini-teaching approach that implements the three goals of teaching presence, social presence, and cognitive presence core elements of the community of inquiry conceptual framework as well as the three universal and psychological needs of the self-determination theory conceptual frameworks consisting of autonomy, competence, and relatedness. This methodological approach was systematically first initially simultaneously applied to the teaching of Accounting Course 1 and Accounting Course 2 in the Fall semester of 2020. The same process was then repeated and extended to both courses for the Spring of 2021. The study used a quantitative data collection and analysis method to explain the results on the online surveys completed by the students to evaluate student satisfaction as measured by eleven individual survey feedback questions and the overall course rating based on a Likert scale (OIRA, 2020). The eleven

individual survey feedback questions indicating student engagement and interaction in the online class room and hence evidence student satisfaction are as follows: 1) How much were students encouraged to think for themselves, in-class or online? 2) Did you develop significant skills in the field as a result of taking this course?; 3) Were students required to apply concepts to demonstrate understanding?; 4) How much intellectual discipline was required in this course?; 5) To what extent was a variety of methods for communicating the course material used?; 6) Did opportunities for engagement and interaction clearly support the course goals and learning objectives?; 7) Did discussion forums help me understand the course content?; 8) How well-organized was the course content?; 9) How did the work load for this course compare to that of others of equal credit?; 10) Overall, how would you rate the instructor?; and 11) What is your overall rating of this course?

The Accounting Course 1 and Accounting Course 2 are both senior undergraduate Accounting Program degree courses that have been anonymized for the purpose of data protection. The intensive diverse high impact multi-strategy online mini-teaching approach via the synchronous online video conferencing tool involves the accounting instructor first designing the course content to achieve the specific learning outcomes of each course. In addition, different learning activities are built into the course to facilitate different learning styles as well student engagement and interaction in the classroom. Further, the students are encouraged to be as original and creative as much as possible by presenting their own final perspectives and developing independent thinking, critical thinking, technical, problem-solving, information technology, research, verbal communication, time management, presentation, teamwork, soft and other employable skills in relation to the learning outcomes of the course and in their course assessments.

RESULTS AND ANALYSIS

The tables below contain the results gathered during the online course evaluations for Accounting Course 1 (Fall 2020); Accounting Course 2 (Fall 2020); Accounting Course 1 (Spring 2021); and Accounting Course 2 (Spring 2021). Table 1 contains the detailed student survey feedback results gathered during the online course evaluations for Accounting Course 1 (Fall 2020) in terms of the first eight individual survey feedback questions. It is observed in Table 1 that a significant majority of students ranked Accounting Courses 1 taught during the Fall semester of 2020 in the 'Much (4)' and 'Very Much (5)' categories across the eight survey questions. The mean of the questions feedback results ranges from 3.77 to 4.69; the median ranges from 4.00 to 5.00; and the mode range is 4 to 5, indicating highly positive student satisfaction.

TABLE 1
STUDENT SURVEY FEEDBACK RESULTS FOR QUESTIONS 1 TO 8 FOR ACCOUNTING
COURSE 1 (FALL 2020)

#	Question	Very Little (1)	Little (2)	Average (3)	Much (4)	Very Much (5)	Response Count	Mean	Median	Mode	Standard Deviation
1	How much were students encouraged to think for themselves, online?	0	1	0	3	12	16	4.63	5.00	5	0.81
2	Did you develop significant skills in the field as a result of taking this course?	1	1	2	7	5	16	3.88	4.00	4	1.15
3	Were students required to apply concepts to demonstrate understanding?	0	0	2	2	12	16	4.63	5.00	5	0.72
4	How much intellectual discipline was required in this course?	0	0	3	4	9	16	4.38	5.00	5	0.81
5	To what extent was a variety of methods for communicating the course material used?	0	1	1	4	10	16	4.44	5.00	5	0.89
6	Did opportunities for engagement and interaction clearly support the course goals and learning objectives?	0	0	1	3	12	16	4.69	5.00	5	0.60
7	Did discussion forums help me understand the course content?	1	2	2	4	7	16	3.88	4.00	5	1.31
8	How well-organized was the course content?	1	2	2	5	6	16	3.77	4.00	4	1.24

Table 2 contains the detailed student survey feedback results gathered during the online course evaluations for Accounting Course 1 (Spring 2021) in terms of the first eight individual survey feedback questions. Again, it is observed in Table 2 that a significant majority of students ranked Accounting Courses 1 taught during the Fall semester of 2020 in the ‘Much (4)’ and ‘Very Much (5)’ categories across the eight

survey questions. The mean of the questions feedback results ranges from 4.17 to 4.67; the median range is 4.00 to 5.00; and the mode ranges from 4 to 5, indicating highly positive student satisfaction.

TABLE 2
DETAILED STUDENT SURVEY FEEDBACK RESULTS FOR QUESTIONS 1 TO 8 FOR
ACCOUNTING COURSE 1 (SPRING 2021)

#	Question	Very Little (1)	Little (2)	Average (3)	Much (4)	Very Much (5)	Response Count	Mean	Median	Mode	Standard Deviation
1	How much were students encouraged to think for themselves, online?	0	0	1	1	4	6	4.50	5.00	5	0.84
2	Did you develop significant skills in the field as a result of taking this course?	0	0	1	0	5	6	4.67	5.00	5	0.82
3	Were students required to apply concepts to demonstrate understanding?	0	0	0	2	4	6	4.67	5.00	5	0.52
4	How much intellectual discipline was required in this course?	0	0	1	3	2	6	4.17	4.00	4	0.75
5	To what extent was a variety of methods for communicating the course material used?	0	0	1	0	5	6	4.67	5.00	5	0.82
6	Did opportunities for engagement and interaction clearly support the course goals and learning objectives?	0	0	1	1	4	6	4.50	5.00	5	0.84
7	Did discussion forums help me understand the course content?	0	0	1	2	3	6	4.33	4.50	5	0.82
8	How well-organized was the course content?	0	0	1	0	5	6	4.67	5.00	5	0.82

Table 3 contains the detailed student survey feedback results gathered during the online course evaluations for Accounting Course 2 (Fall 2020) in terms of the first eight individual survey feedback questions. It is observed in Table 3 that a significant majority of students ranked Accounting Courses 2 taught during the Fall semester of 2020 in the ‘Much (4)’ and ‘Very Much (5)’ categories across the eight survey questions. The mean of the questions feedback results ranges from 4.00 to 4.83; the median range is 4.00 to 5.00; and the mode ranges from 4 to 5, indicating highly positive student satisfaction.

TABLE 3
DETAILED STUDENT SURVEY FEEDBACK RESULTS FOR QUESTIONS 1 TO 8 FOR
ACCOUNTING COURSE 2 (FALL 2020)

#	Question	Very Little (1)	Little (2)	Average (3)	Much (4)	Very Much (5)	Response Count	Mean	Median	Mode	Standard Deviation
1	How much were students encouraged to think for themselves, online?	0	0	0	2	4	6	4.67	5.00	5	0.52
2	Did you develop significant skills in the field as a result of taking this course?	0	0	1	1	4	6	4.50	5.00	5	0.84
3	Were students required to apply concepts to demonstrate understanding?	0	0	1	1	5	7	4.57	5.00	5	0.79
4	How much intellectual discipline was required in this course?	0	0	2	3	2	7	4.00	4.00	4	0.82
5	To what extent was a variety of methods for communicating the course material used?	0	0	1	0	6	7	4.71	5.00	5	0.76
6	Did opportunities for engagement and interaction clearly support the course goals and learning objectives?	0	0	1	1	5	7	4.57	5.00	5	0.79

#	Question	Very Little (1)	Little (2)	Average (3)	Much (4)	Very Much (5)	Response Count	Mean	Median	Mode	Standard Deviation
7	Did discussion forums help me understand the course content?	0	0	2	1	4	7	4.29	5.00	5	0.95
8	How well-organized was the course content?	0	0	0	1	5	6	4.83	5.00	5	0.41

Table 4 contains the detailed student survey feedback results gathered during the online course evaluations for Accounting Course 2 (Spring 2021) in terms of the first eight individual survey feedback questions. Again, it is observed in Table 4 that a significant majority of students ranked Accounting Course 2 taught during the Fall semester of 2020 in the ‘Much (4)’ and ‘Very Much (5)’ categories across the eight survey questions. The mean of the questions feedback results ranges from 3.89 to 4.56; the median ranges from 4.00 to 5.00; and the mode ranges from 4 to 5, indicating highly positive student satisfaction. However, the Spring 2021 semester results represent a slight decline compared to the results for the fall semester of 2020 in terms of the mean, median and mode statistics.

**TABLE 4
DETAILED STUDENT SURVEY FEEDBACK RESULTS FOR QUESTIONS 1 TO 8 FOR
ACCOUNTING COURSE 2 (SPRING 2021)**

#	Question	Very Little (1)	Little (2)	Average (3)	Much (4)	Very Much (5)	Response Count	Mean	Median	Mode	Standard Deviation
1	How much were students encouraged to think for themselves, online?	0	0	1	2	6	9	4.56	5.00	5	0.73
2	Did you develop significant skills in the field as a result of taking this course?	0	0	1	4	4	9	4.33	4.00	5, 4	0.71
3	Were students required to apply concepts to demonstrate understanding?	0	0	0	3	6	9	4.67	5.00	5	0.50
4	How much intellectual discipline was required in this course?	0	1	1	5	2	9	3.89	4.00	4	0.93

#	Question	Very Little (1)	Little (2)	Average (3)	Much (4)	Very Much (5)	Response Count	Mean	Median	Mode	Standard Deviation
5	To what extent was a variety of methods for communicating the course material used?	0	0	1	4	4	9	4.33	4.00	5, 4	0.71
6	Did opportunities for engagement and interaction clearly support the course goals and learning objectives?	0	0	0	4	4	8	4.50	4.50	5, 4	0.53
7	Did discussion forums help me understand the course content?	0	0	3	4	2	9	3.89	4.00	4	0.78
8	How well-organized was the course content?	0	0	2	4	3	9	4.11	4.00	4	0.78

Table 5 shows the student survey feedback results in terms of the overall ratings of the courses. It is observed in Table 5 that a significant majority of students ranked both Accounting Courses 1 and 2 in the ‘Very Good (4)’ and ‘Excellent (5)’ categories for both the Fall 2020 and Spring 2021 semesters. More specifically, 11 out of 16 respondents (68.75%) in the Fall 2020 semester and 5 out of 6 respondents (83.33%) in the Spring 2021 semester ranked the Accounting Course 1 in the ‘Very Good (4)’ and ‘Excellent (5)’ categories. Similarly, 6 out of 7 respondents (85.71%) in the Fall 2020 semester and 7 out of 9 respondents (77.78%) in the Spring 2021 semester ranked the Accounting Course 2 in the ‘Very Good (4)’ and ‘Excellent (5)’ categories. The mean of the questions feedback results ranges from 3.81 to 4.29; the median is 4; and the mode ranges from 4 to 5, indicating highly positive student satisfaction.

TABLE 5
STUDENT SURVEY FEEDBACK RESULTS FOR QUESTION 11 - OVERALL RATINGS OF THE COURSES

Accounting Course	Semester	Poor (1)	Average (2)	Good (3)	Very Good (4)	Excellent (5)	Response Count	Mean	Median	Mode	Std Dev
Course 1	Fall 2020	0	3	2	6	5	16	3.81	4.00	4	1.11
Course 1	Spring 2021	0	0	1	3	2	6	4.17	4.00	4	0.75
Course 2	Fall 2020	0	0	1	3	3	7	4.29	4.00	5, 4	0.76
Course 2	Spring 2021	0	0	2	3	4	9	4.22	4.00	5	0.83

However, it is observed in Table 5 that the mean student satisfaction score for Accounting Course 1 rose by 9.45% from a mean of 3.81 in the Fall 2020 semester to 4.17 in the Spring 2021 semester. This observation is consistent with the detailed student survey feedback results gathered during the online course evaluations for Accounting Course 1 in terms of the ten detailed granular individual survey feedback results as evidenced in Tables 1 and 2 for the fall 2020 and spring 2021 semesters respectively. The result in Table 5 is also negatively correlated to the course workload for the Accounting Course 1 that declined by 23.97% from a mean of 4.38 to 3.33 in Table 6 which shows the student survey feedback results in terms of how course workloads compare to others of equal credit. In this case, the accounting instructor intentionally decreased the course workload in the Spring 2021 semester in response to students' feedback stating that the courseload was heavier compared to other courses of equal credit that they took.

In contrast, it is seen in Table 5 that the mean student satisfaction score for Accounting Course 2 fell slightly by 1.63% from a mean of 4.29 in the fall 2020 semester to 4.22 in the Spring 2021 semester. This observation is consistent with the detailed student survey feedback results gathered during the online course evaluations for Accounting Course 2 in terms of the granular individual survey feedback results as evidenced in Tables 3 and 4 for the fall 2020 and spring 2021 semesters respectively. The result in Table 5 is also negatively correlated to the course workload for the Accounting Course 2 that increased by 30.81% from a mean of 3.57 to 4.67 in Table 6. This is evidence that the student satisfaction achieved in a course is adversely affected if the students perceive course workloads of the course to be higher when compared to other courses of equal credit.

Another observation is that the percentage fall in the mean student satisfaction for the Accounting Course 2 over the two semesters as measured by the overall course rating in Table 5 is marginal (1.63%) compared to the percentage increase in course workload which rose by (25.00%) for the Accounting Course 2 in Table 6. This might be due to the accounting instructor being more experienced during the Spring 2021 semester in online classroom teaching which likely helped him to motivate and inspire students to mitigate the adverse effects of the heavier course workload on student satisfaction as measured by the overall course rating as evidenced in Table 7 which shows an improvement in the perceived overall rating of the instructor from the fall semester 2020 to the spring 2021 semester.

TABLE 6
STUDENT SURVEY FEEDBACK RESULTS FOR QUESTION 9 - HOW COURSE
WORKLOADS COMPARE TO OTHERS OF EQUAL CREDIT

Accounting Course	Semester	Much Lighter (1)	Lighter (2)	About the Same (3)	Heavier (4)	Much Heavier (5)	Response Count	Mean	Median	Mode	Std Dev
Course 1	Fall 2020	0	0	2	6	8	16	4.38	4.50	5	0.72
Course 1	Spring 2021	0	1	2	3	0	6	3.33	3.50	4	0.82
Course 2	Fall 2020	0	0	3	4	0	7	3.57	4.00	4	0.53
Course 2	Spring 2021	0	0	0	3	6	6	4.67	5.00	5	0.50

A final observation is the overall ratings of the instructor by the students for both Accounting Courses 1 and 2 as shown in Table 7. Again, it is observed in Table 7 that a significant majority of students ranked overall rating of the instructors for both Accounting Courses 1 and 2 taught during the Fall semester of 2020 and the Spring semester of 2021 in the ‘Very Good (4)’ and ‘Excellent (5)’ categories across the survey questions. The mean of the questions feedback results ranges from 4.31 to 4.57; the median is the maximum value of 5.00; and the mode is also the maximum value of 5, indicating highly positive student satisfaction.

TABLE 7
STUDENT SURVEY FEEDBACK RESULTS FOR QUESTION 10 - OVERALL RATINGS OF THE INSTRUCTOR

Accounting Course	Semester	Poor (1)	Average (2)	Good (3)	Very Good (4)	Excellent (5)	Response Count	Mean	Median	Mode	Std Dev
Course 1	Fall 2020	0	1	3	2	10	16	4.31	5.00	5	1.01
Course 1	Spring 2021	0	0	1	1	4	6	4.50	5.00	5	0.84
Course 2	Fall 2020	0	0	1	1	5	7	4.57	5.00	5	0.79
Course 2	Spring 2021	0	0	1	3	5	9	4.44	5.00	5	0.73

This results in Table 7 provide evidence that the perceived quality of the teaching in terms of the overall rating of the instructor is an important determinant of student engagement and interaction in the online classroom as indicated by student satisfaction. Additionally, the results in Table 7 are highly consistent with the results in Tables 1 to 4 that measure the granular ratings of the courses and Table 5 that measure the overall rating of the courses. The perceived quality of the instructor therefore seems to be an important caveat to take into consideration when implementing the high impact mini-teaching approach to increase student engagement and interaction in the online classroom as measured by the granular and overall ratings of the courses.

INTERPRETATIONS AND CONCLUSION

This study explains how the accounting instructor navigated the Covid-19 pandemic crisis by adopting a diverse high impact multi-strategy mini-teaching approach to increase student engagement and interaction in the classroom. The study attempts to answer two research questions. The research question is – “What are the effects of using the high impact multi-strategy teaching approach on student engagement and interaction as measured by the overall course rating?”

The study has several interesting findings and contributes to the literature. First, the study finds that the adopted teaching approach significantly enhanced student learning, interaction, and increased engagement evidenced by the high overall ratings of the instructor and the high course ratings measured on a granular and overall level. This helped the students to develop their technical, independent thinking, critical thinking, problem solving, research, teamworking, time management, presentation, communication, other soft skills

as well as their abilities to relate theoretical concepts to practice. These vital employable skills are becoming increasingly valued by employers in today's business world.

Second, further evidence of high student satisfaction and engagement was backed by the 100% retention, completion, progression, and success rates for both the Accounting 1 and 2 courses for the two semesters. This teaching strategy can therefore help address the recent notable decline in undergraduate accounting student enrolments.

In addition, there is a negative association between the students' granular and overall ratings of the course and overall rating of the instructor on one hand and the volume of the course workload. Notwithstanding, there is evidence to suggest that the more experienced an accounting instructor is the more likely he or she will be able to inspire and motivate the students to alleviate the negative effects of heavier workloads on student satisfaction measured using course ratings.

Fourth, it is observed that academically weaker and generally less prepared students found the courses quite challenging. Likewise, it was the instructor's experience that the online delivery and course preparation involved a lot more effort and preparation work beforehand compared to teaching the same course content face-to-face during in-person class meetings.

Fifth, the study provides evidence that the perceived quality of the teaching in terms of the overall rating of the instructor is an important factor in determining student engagement and interaction in the online classroom as indicated by student satisfaction. This implies that the teaching abilities and quality of the instructor need to be carefully evaluated and taken into consideration when implementing the high impact mini-teaching approach. Thus, additional training of the instructor may be required.

Sixth, similar results were obtained when the accounting instructor adopted and applied the same teaching approach used for the Accounting Courses 1 and 2 in this study to other accounting courses. This is evidence that the teaching approach can be extended to other accounting and non-accounting courses.

However, this study has certain limitations and shortcomings. The first is that the sample sizes of the accounting courses are small. A similar study with a higher number of courses and bigger sample sizes would provide more robust results.

Additionally, the study was carried out over a short period of time September 2020 to May 2021 over two semesters in response to the suspension of face-to-face class teaching by the researcher's university in response to the Covid-19 pandemic. Short term studies pose the risk of the novelty effect (Chen et al., 2016).

Finally, a suggested future area of research is to examine the impact of the intensive diverse high impact multi-strategy mini-teaching approach on student engagement as measured by course ratings over a longer period (for example, more than one academic year) to determine whether the positive effects of this approach hold over time.

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