



# Enhancing learning for Gen z students through active learning: an analysis of student perspectives

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## Abstract

The research aims to achieve two objectives: to evaluate the implementation of good teaching practices that use active learning strategies for Gen Z students and to recommend appropriate teaching practices for their needs. The study focuses on the strategic management accounting course and analyses both quantitative and qualitative data to evaluate the effectiveness of the teaching practices. The results demonstrate that students were highly satisfied with the active learning strategies implemented in the course. Qualitative data shows that the students felt that they were the centre of the learning process, and that their learning experiences were enhanced. The study also offers suggestions to instructors on how they can modify their communication styles and classroom management techniques to create a better learning environment for Gen Z students.

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## Introduction

Literature in education and teaching practices highlights the importance and benefits of active learning strategies that put learners at the centre of the learning process. (Bay & Pacharn, 2017; Huber et al., 2017; Lento, 2016; Riley & Ward, 2017; Sugahara & Lau, 2019). Active learning is an educational approach that involves engaging students in activities and tasks that require them to actively participate in the learning process (Riley & Ward, 2017). Active learning strategies can result in several learning activities being employed to encourage students to develop their technical skills

as well as soft skills. Instructors are responsible for promoting an appropriate learning environment and atmosphere. Several research studies have shown that the promotion of an appropriate learning environment helps learners to develop their potential and other related skills (e.g., McVay et al. (2008)). Moreover, the development of digital technology in recent years has accelerated a shift that requires students to develop their technical competencies and digital literacy as well as soft skills to meet professional and labour market expectations (Howieson et al., 2014; Oosthuizen et al., 2021). Therefore, instructors must adapt their teaching strategies to align with these evolving demands.

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Because students have no relevant work experience to help them understand and relate to the fundamental concepts of accounting, they negatively perceive the subject as boring (Matherly & Burney, 2013). It is crucial for instructors to create a positive leaning environment to engage students in the learning process and improve their academic performance. The learning environment encompasses psychological, social, cultural, and physical elements in which learning takes place and exerting an impact on student motivation and success (Rusticus et al., 2023). A study revealed that fostering a positive learning environment hinges on active student participation, classroom engagement, and the perceived relevance of the curriculum to students' future careers (Rusticus et al., 2023). Moreover, it was found that the emotional climate of the classroom, driven by the supportive and welcoming environment provided by the faculty, is another factor that improves the learning environment for students. The challenge for instructors, therefore, is to develop new teaching strategies that help students understand the main concepts and get hands-on experience by using active learning techniques and activities, creating an appropriate learning atmosphere to stimulate students' awareness, thereby promoting positive perspectives on the subject.

Other important challenges for instructors are the unique and specific characteristics of students in Generation Z (Szymkowiak et al., 2021). Gen Z, born between 1997 and 2012, is known for its strong inclination towards technology and digital communication, often preferring interactive and multimedia-rich learning experiences, which contrasts with the learning preferences of previous generations (Flom et al., 2023; Seemiller & Grace, 2016). Because Gen Z students have different characteristics from students in the past, instructors need to take a learner's characteristics into account and adjust their teaching and learning management to fit those characteristics in order to improve their learning efficiency.

The importance of teaching and learning management and active learning strategies that promote the learning experiences of students leads to the research question of how good teaching practices with active learning strategies could be designed to fit Gen Z's learning characteristics. The objectives of this study are twofold: (1) to evaluate the implementation of good teaching practices that use active learning strategies for Gen Z students; and (2) to provide recommendations for instructors regarding the implementation of good teaching practices that are appropriate for Gen Z students.

This study provides three main contributions to accounting education literature on active learning and teaching practices. Firstly, the study extends the literature on the benefits of active learning in higher education by demonstrating how different active learning strategies are implemented in one course. Because each active learning technique contributes to specific learning and teaching purposes, this study shows that integrating various techniques in a single course will enhance students' learning experiences and knowledge more cohesively. Secondly, the study advances the literature on good teaching practices by including specific characteristics of Gen Z students in the teaching design. By considering the unique characteristics of learners, instructors will be able to better understand their students and find better ways to deliver course content. Finally, the study provides practical recommendations for instructors on how to implement good teaching practices with active learning strategies to fit the characteristics of Gen Z students.

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## Literature Review

### *Active Learning Strategies*

Active learning, as a pedagogical approach, places students at the centre of the learning process through various engaging activities (Riley & Ward, 2017). Active learning builds on the learning theory of constructivism, which emphasises that students build their own understanding. Active learning diverges from traditional instructional methods. (Stanley & Marsden, 2012). In contrast to passive learning, where students simply receive information, active learning aims to foster a deeper understanding, critical thinking, and retention of information by encouraging students to actively engage with the material (Jordan & Samuels, 2020). To achieve its goals, lecturers play an important role in providing learning activities that are beneficial and meaningful to students, and help them to relate to the subject content (Prince, 2004). Learning engagement, a key aspect of active learning, involves active involvement, participation, and investment of learners in educational activities and processes. This engagement spans the cognitive, emotional and behavioural aspect of the learner's interaction with instructors and fellow students (Fredricks et al., 2004).

A number of research studies have centred on utilising active learning strategies in accounting fields including financial accounting (Bay & Pacharn, 2017; Bayne et al., 2022; Huber et al., 2017; Lento, 2016; Selamat & Ngalim, 2022), managerial accounting (Matherly & Burney, 2013; Tan, 2019), accounting information systems (Riley & Ward, 2017), and even accounting ethics (Stephen, 2015). For example, Riley and Ward (2017) found that students who actively engaged in individual active learning in an accounting information course outperformed their peers and reported greater satisfaction than students engaged in passive lectures. Tan et al. (2013) used final exam score of M.B.A students in a managerial accounting course and investigated the impact of active and passive learning. Kern (2002) observed that students involved in active learning in a fundamental accounting course exhibited improved problem-solving skills compared to those in a solely passive lecture format. These studies highlight the benefits of active learning which effectively promote learning experiences among accounting students. Active learning helps students to develop technical knowledge and skills through several effective activities and engages students in their learning, which in turn improves students' satisfaction and happiness. Given the typically problem-based nature of accounting classes, active learning is expected to remain crucial in accounting educators (Jordan & Samuels, 2020).

There are many techniques, which can be applied in active learning activities such as case-based learning (Tan, 2019), collaborative learning (Oosthuizen et al., 2021; Tan, 2019), cooperative learning (Bay & Pacharn, 2017; Riley & Ward, 2017), and problem-based learning (Prince, 2004).

Case-based learning refers to learning approaches that employ case studies as a tool to help students analyse and reflect on important issues within the case studies. The case study analysis encourages students to participate in a decision-making process, which is a crucial skill in an actual work environment. It also helps students to develop teamwork and communication skills (Tan, 2019). However, case-based learning cannot be used at every level of education. For example, in a course such as fundamental accounting, traditional lecture-based learning is still important. Tran and Herzig (2023) applied blended case-based learning to teach graduate students about material flow cost accounting. From the student perspectives, they found participants could enhance their knowledge about the topic as well as professional skills, such as critical thinking, teamwork, and communication skills. Case-based learning might be

useful in advanced courses where students are required to develop critical thinking skills through case studies (Wolcott et al., 2002).

Collaborative learning refers to teaching and learning management based on group work. This learning approach originated from an idea that knowledge comes not only from instructors but also from students themselves by working together to build on each other's work; students should be able to provide feedback and ideas to each other, as well as to communicate openly with mutual respect (Nsor-Ambala, 2022; Tan, 2019). Adesina et al. (2023) studied the impact of peer assessment on group work and found that when students feel that their contributions are valuable in group work, they become more engaged and learn better. Additionally, the way they perceive and evaluate their peers' work can also affect their level of engagement in the group. This learning approach can be used in tandem with case-based learning and game-based learning. Besides collaborative learning, instructors may employ a cooperative learning method to help students learn and work together in small groups. However, cooperative learning focuses on improving individual learning rather than teamwork and social interaction, and students are evaluated individually (Prince, 2004; Riley & Ward, 2017). Bay and Pacharn (2017) conducted a study on a group exam in an intermediate accounting course. The results showed that test scores in a group exam are higher compared to a regular exam. However, the evidence indicates that there is potential for free riding, but this negative impact of group work can be mitigated by good evaluation design. Similarly, Mahoney and Harris-Reeves (2019) discovered that collaborative testing helps students to improve their performance. Nevertheless, their findings highlight that middle and lower-performing students benefit the most from collaborative tests, while upper-performing students do not experience significant benefits from collaborate testing.

Problem-based learning refers to learning approaches that introduce relevant problems at the beginning of the learning process, providing opportunities for students to actively learn and find solutions. The problems are used to drive the entire learning cycle to the evaluation stage (Prince, 2004). In problem-based learning, students study and learn about new issues that they have never explored before. It is different from case-based learning where instructors use case studies as a major tool to convey knowledge to the students (Milne & McConnell, 2001). Stanley and Marsden (2012) implemented problem-based learning in an accounting capstone course for final-year students and employed the FIRDE

(Facts, Ideas, Research, Decide, and Execute) problem solving methodology. They found that students express agreement that their understanding of accounting concepts and principles has improved. They feel capable of applying the principles of the course to new situations and have increased comfort in addressing unstructured problems and those based on incomplete facts.

### *Good Teaching Practices and Classroom Environment*

In addition to the selection of the aforementioned learning activities, instructors need to design classroom and learning activities that promote a positive learning environment for students. Chickering and Gamson (1987) proposed seven good teaching practices for undergraduate students as a guideline for instructors, students, and administrators to improve their teaching practices and learning management at the college level. The principles for good practices in education encompass various approaches to fostering an effective learning environment. These include encouraging contact between students and faculty, emphasizing reciprocity and cooperation among students, implementing active learning techniques, providing timely feedback, highlighting the importance of time management, communicating

elevated expectations, and valuing diverse talents and learning approaches (McCabe & Meuter, 2011). These strategies collectively contribute to creating an engaging and inclusive educational setting. McVay et al. (2008) further applied and tailored these practices in accounting classes, as illustrated in [Table 1](#).

When suitable teaching practices are implemented, they can increase student satisfaction and happiness. Satisfaction and happiness play important roles in learning outcomes by influencing a student's overall learning experience and engagement (Closs et al., 2022). When students feel satisfied and happy with their learning environment and activities, several positive outcomes can be observed, including increased motivation, improved attention and retention, promotion of a positive learning environment, reduced stress and anxiety, and long-term engagement and commitment (Closs et al., 2022; Rusticus et al., 2023; Sasson & Yehuda, 2023). It is recommended that regular feedback, open communication, and a willingness to adapt teaching strategies based on student needs are essential elements in ensuring satisfaction, happiness, and, consequently, positive learning outcomes (McCabe & Meuter, 2011; McVay et al., 2008; Rusticus et al., 2023).

**Table 1** Seven principles for good practice in undergraduate education

Principles for good practices	Approaches to promote an environment for good practices
1. Fostering communication between students and faculty members	Frequent student-faculty contact in and out of classes is the most important factor in student motivation and involvement both in-class and out-of-class, with activities that include in-person interaction, online communication, and telephony.
2. Cultivating mutual exchange and collaboration among students	Learning is enhanced when it is more like a team effort than a solo racer, such as a group assignment, and a score rating based on the level of group interaction.
3. Implementing active learning methodologies	Students engage in active learning, such as discussion, a reflective essay, or case analysis.
4. providing timely feedback	Students need help in assessing existing knowledge and competence to benefit from courses by using frequent opportunities to perform and appropriate feedback on performance.
5. Highlighting the importance of dedicating time to tasks	Learning to use one's time well helps students to achieve better time management. Example activities include setting online notifications and providing an assignment submission schedule in the course syllabus that will help them plan their tasks and avoid procrastination.
6. Conveying elevated expectations	Expect more and you will get more. High expectations are important for everyone to be well motivated. Example activities include giving clear assignment details and providing relevant examples, required topics, and clear evaluation criteria.
7. Valuing a variety of talents and leaning approaches	Provide different teaching experiences and evaluate styles that fit different students' talents. Example activities include designing assignments that require multiple skills from different students and providing different theoretical and practical assignments.

**Source:** Chickering and Gamson (1987); McVay et al. (2008)

### *Characteristics of Gen Z Students*

Current undergraduate students belong to Gen Z, and they possess unique characteristics different from students of previous generations. Gen Z is the first generation to grow up with digital technology. This affects their communication styles, information consumption habits, and overall worldview (Seemiller & Grace, 2016). Regarding their educational preferences, Gen Z tends to value practical, hand-on learning experiences. They are accustomed to technology-driven education and often seek diverse learning environments (Seemiller & Grace, 2017). A study of these distinctive characteristics is crucial for the instructors to modify teaching practices to fit students' unique needs and engage students in the learning processes.

Edmond and Driskill (2019) summarised four unique characteristics of Gen Z and teaching recommendations. Firstly, Gen Z students are born into a world where every physical facet, from people to places, has been digitalised. This results in Gen Z's inability to distinguish the physical world and the "Phygital" world. Moreover, Gen Z students develop always-on behaviours. Therefore, instructors should attach great significance to the digital capacity of Gen Z and use digital learning tools effectively (Szymkowiak et al., 2021). Secondly, Gen Z students are individualistic and customise everything around them into hyper-custom and DIY fashion. For this reason, instructors need to provide opportunities for students to customise their blended learning and activities (Edmond & Driskill, 2019). Thirdly, Gen Z students are realists who view things as they are and question the reality of life, unlike previous generations who are more positive towards life. Gen Z students are more sceptical about the importance of college degrees and studying in formal educational institutions when they can acquire knowledge anywhere anytime from the Internet. Instructors need to shift from textbook-based teaching to more applicable real-world skill teaching via simulation or collaborative partnerships and internships (Oosthuizen et al., 2021). Finally, Gen Z students suffer from the fear of "missing out". They are interested in being a communication nexus where they are up-to-date with everything all the time. Therefore, instructors need to provide students with frequent feedback and appropriate suggestions (Edmond & Driskill, 2019).

While Gen X and Gen Y (Millennials) typically experienced a traditional education system, with Gen Y witnessing the integration of technology, Gen Z has grown up with digital learning tools and online platforms, reflecting a more sophisticated approach to education. (Seemiller & Grace, 2016). Additionally,

Gen Z values engaging and hands-on experiences (Hernandez-de-Menendez et al., 2020). Studies demonstrate the effectiveness of active learning for Gen Z, highlighting their positive response to these methods and underscoring their contribution to a more effective and meaningful learning experience for this generation (Hernandez-de-Menendez et al., 2020; Seemiller & Grace, 2017).

Concerning Gen Z's impact on the accounting profession, as Gen Z students are known for their ability to utilize digital and information technology, accounting firms are likely to benefit from the tech-savvy nature of Gen Z employees. Research has shown that accounting professionals have an overall positive perception towards AI and believe it will enhance their job performance by diminishing repetitive tasks and minimising the potential for human errors (Horne et al., 2023). Empowering Gen Z's nature with the required skills and capabilities through teaching and an enhanced learning environment will have an impact on students' future careers.

To respond to these characteristics, instructors need to adjust their teaching practices to promote a positive learning atmosphere and environment that fits the students' needs. The application of good teaching practices with active learning strategies will be elaborated in the following section.

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### **Methodology**

#### *Application of Good Teaching Practices with Active Learning Strategies*

The seven principles for good teaching practices in undergraduate education proposed by Chickering and Gamson (1987) and McVay et al. (2008) and active learning activities were applied in two classes of the three-credit selective strategic management accounting course. Enrolment was open for senior undergraduate students in the second semester of 2020. There were 68 enrolled students. The first part of the course was arranged in the physical classroom setting and the second part was adjusted to the virtual setting due to the new wave of Covid-19. The course is a newly launched selective course developed by the researcher, and it requires a fundamental managerial accounting course as a prerequisite. The course centres on contemporary managerial accounting techniques for strategic decision making through the use of active learning techniques with the aim to develop students' technical and soft skills.



Good teaching practices were explicitly integrated into the teaching and learning management of this course. The first practice was to encourage contact between students and an instructor. Students could communicate with the researcher through several channels, such as in-person contact, online forum, e-mail, and chat in Microsoft Teams. These communication channels were clearly stipulated in the course syllabus. The researcher also encouraged students to communicate in 3-way communications including instructor-student, student-instructor, and student-student via the use of weekly assignments. The researcher assured students that he would reply to their messages within an hour during his office hours to show that they could contact their instructor anytime when they needed help. However, the students needed to write formal business messages and e-mails the way an employee communicates with his/her supervisors.

Secondly, developing reciprocity and cooperation among students was implemented. In the first week of the semester, students were tasked with arranging voluntary grouping to get to know each other. A group coordinator was selected as a representative to coordinate with the instructor. In addition, a group facilitator was appointed to assign relevant tasks and encourage all group members to participate in each assignment. All group members would take turns serving as a group facilitator for a week. All group members would identify the proportion of their effort in each assignment with the consent of all other group members.

Thirdly, several active learning activities were employed, including case-based learning, collaborative learning, problem-based learning, cooperative learning. These active learning strategies were considered suitable pedagogical approaches for this advanced managerial course for several reasons. Firstly, case-based learning allows students to apply theoretical knowledge studied in fundamental courses to practical situations they may encounter in their future professional careers. Secondly, problem-based learning can enhance critical thinking and problem-solving skills by encouraging students to explore multiple solutions and understand the underlying principles of complex accounting and financial issues. Lastly, collaborative and cooperative learning encourage students to work together on a task or project, helping them develop interpersonal skills and learn how to work effectively in a team, which is essential in professional settings.

In terms of case-based learning, every week, the researcher reviewed and summarised the content students previously learned in the fundamental course, presented

a new topic through a lecture, and provided a relevant case study to the students. Each group discussed and summarised key learnings, then shared them with the class. At the end of the class, the researcher concluded and provided suggestions. For the collaborative learning, there were three types of assignments in this course consisting of weekly assignments (a case study), the mid-term group assignment (data analytics and visualisation), and the semester group assignment (a business plan and profit planning). Each individual was assessed through group performance. Students needed to collaborate, effectively assign tasks among group members, and deliver them in a timely manner.

In addition to case-based learning that students were familiar with, the researcher used problem-based learning in some topics and asked students to research and conduct a group discussion. For example, the researcher might ask a question as to why some Hollywood movies were successful but made little profit or even made big losses. After that, students conducted self-research, discovered a key word (specific accounting techniques in the film industry) and discussed their procedures and impacts. Regarding cooperative learning, while all assignments for the entire semester were group assignments, the final examination was still in the form of individual assessments. The group assignment assisted students in developing teamwork, learning about collaboration, and helping each other in study groups. It was found that most of the students selected as a weekly group facilitator were good at the weekly topics and helped other group members who were not good at a certain topic to learn together efficiently.

The fourth practice was to give prompt feedback. Every time there was a weekly assignment, the researcher would provide feedback regarding the core content of the lessons and suggest how to work as a team on projects such as worksheet design, formulas, and features of MS Excel. As for the mid-term assignment, each student in the class would present suggestions about content and visualisation to the presenting groups from the report reader's perspective. For the semester assignment, the instructor allowed fellow groups to ask questions and give feedback on the stipulated topics to the presenting groups via written critiques and peer review.

Next, the practice of emphasising time on task was employed. The researcher clearly specified the assignment schedule and deadlines in the course syllabus and explained the scope of the assignment content from the first week to help students manage their time effectively. Additionally, auto-notifications were sent to the students before the assignment's due date.

The sixth practice was to communicate the instructor's high expectations. The researcher explained the assignment's scope and content in detail with a clear marking scheme. To help students assess group assignments before submission, the researcher informed students about the evaluation criteria, score allocation, and scales for each assignment. The researcher also encouraged students to put their best effort into every assignment because challenge and high expectations will lead to more effort and higher efficiency aligned with the theory of goal setting (Locke & Latham, 1990).

The final practice was respecting diverse talents and ways of learning. Giving several types of assignments that required different kinds of knowledge and skills, such as technical knowledge, visual communication, designing, and computer skills helped stimulate every group member to bring out their individual talent in order to complete the group assignments. The researcher fully realised that each student possessed unique talent and the rotation of serving as a weekly group facilitator would promote their leadership skills and respect toward others.

### Data Collection

Basically, the university asked students to evaluate teaching practices using an online questionnaire through a course evaluation system before the end of the semester. This standardised questionnaire consisted of 10 questions including five questions about teaching practices employed in the course. The students were asked to rate the predetermined statements on a scale of 1 to 5 (1 is strongly disagree and 5 is strongly agree) based on their opinion and experience in the class. The evaluation was anonymous. The instructor could only check the evaluation results after grading submissions. However, only five statements related to learning management were selected for quantitative analysis. This study

obtained quantitative and qualitative data from this course evaluation system. Out of the 68 students enrolled in the course, 59 evaluated it by responding to the questionnaire. Twenty-two students provided additional comments, and one student later sent an email giving feedback about their learning experience.

### Assessment of Good Teaching Practices with Active Learning Strategies

In the current study, active learning strategies were evaluated both quantitatively and qualitatively. However, this research focuses on the qualitative analysis. Firstly, the researcher conducted an analysis of the traditional course assessment arranged by the university with a focus on five learning management topics. Descriptive statistics such as average, maximum, minimum, and standard deviation were used for data analysis. Secondly, the researcher analysed students' comments in the course evaluation system, coded these comments and suggestions, categorised them into themes, and summarised them. As suggested by the literature, the trustworthiness of the qualitative analysis was used to ensure the reliability of the qualitative findings (Tracy, 2013).

## Results

### Quantitative Results

Fifty-nine students completed the evaluation, which accounted for 86.76 percent of enrolled students. As presented in Table 2, results show that students were satisfied with good teaching practices with a score of over 4.2 points in every aspect with the highest score and lowest standard deviation in the statement, "the instructor provides opportunities for students to ask questions in every class."

**Table 2** Summary of evaluation results related to teaching practices.

Evaluation Topics	Highest Score	Lowest Score	Mean	Standard Deviation
1 The instructor clearly explains the objectives, activities, and evaluation methods	5	4	4.86	0.35
2 The instructor utilises several teaching techniques that fit the content of each lesson	5	4	4.78	0.42
3 The instructor has techniques to stimulate students' curiosity and participation for both in-class learning and online learning	5	3	4.81	0.48
4 The instructor provides opportunities for students to ask questions in every class	5	4	4.90	0.30
5 The instructor assesses and evaluates students based on predetermined criteria	5	4	4.83	0.38

### Qualitative Results

Among evaluation respondents, there were 23 comments from 22 students who provided additional comments, and one student who sent a commentary e-mail after the grades were published. The shortest and longest messages were three and 387 words, respectively, with an average of 84 words.

All comments were scrupulously reviewed before being coded and categorised into themes (Tracy, 2013). Two themes emerged from the analysis: (1) student-centred learning, and (2) attentive listening and encouragement.

#### *Student-centred learning.*

The first theme signifies the fact that students realise that the teaching practices in this course were based on student-centred active learning. This type of learning encouraged students to discuss and learn while the instructor acted as a facilitator who kept the discussion within the topic-related scope. This is the core principle of active learning and matches the researcher's identified objectives. One of the students mentions that:

...lecturer puts his words into action in putting students at the centre and gears group discussion toward the entire class as he said. He also tries to understand and summarise everything that all students opine without making judgment. It is a practical discussion. This course is one of few applicable accounting courses that draw talents, dedication, and fun... (Comment provider 23)

It is noteworthy that despite the well-documented benefits of active learning strategies and the university's encouragement for their implementation, several students reported limited exposure to active learning environments. For instance, one respondent mentioned that this course appeared to be the sole one adhering to the university's policy on discussion-based learning by commenting that:

...the uni[versity] encourages discussion-based learning and I believe that this course is the only course that complies with the [university's] policy. The lecturer spent a good deal of time in class to encourage discussion, while everyone seriously discussed. He also provided opportunities for students to comment and exchange views in the way that promotes well-rounded perspectives... (comment provider 10)

This feedback highlights the potential disparity between the university's intentions and the actual prevalence of active learning experiences.

While all respondents shared similar comments that student-centred learning is a learning approach that stimulates more effective learning through discussions and group work, however, many students suggested that discussion-based learning would be more effective if it was arranged in a classroom setting. Students felt that discussion in a physical classroom is more suitable as they can directly and promptly interact with other students. One of the respondents commented that:

...really love discussion-based learning. I think that discussion would be more effective if it occurred in a physical classroom. Discussion in break-out room was challenging and obscured sometimes (comment provider 6)

In conclusion, the students acknowledged the course's emphasis on student-centred active learning, with instructor acting as a facilitator for discussions and valuing diverse viewpoint. However, students noted a lack of exposure to such methods. Some students indicated a preference for in-person classroom, suggesting they are better suited for active learning strategies.

#### *Attentive listening and encouragement*

The second theme concerns the educator's attention, empathy, and encouragement. Many respondents note that they dare express their views because the instructor really listens to them no matter what they are, no matter if they are right or wrong, and no matter if they are off the topic. The instructor is able to connect the dots, grasp their ideas, and link them to the main topics. This encourages students to be more expressive. One of the respondents states that:

...I have enough courage to answer a question, to raise my hand when I have a question, and to send an e-mail when I don't understand something because the lecturer has never blamed me when I'm wrong and he understands everything even though I think that my answers and questions were somewhat stupid and not well-analysed. Sometimes, I answered with confusion, but he translated it from Thai to Thai to get everyone on board... (comment provider 14)

Based on the analysis, it is observed that students occasionally encounter challenges in articulating their thoughts and communicating effectively. Therefore, it becomes imperative for the instructor to systematically structure these ideas to ensure a comprehensive understanding amount all students. This method encourages students to speak and express their views



more often. At the same time, students are aware of their limitations and put more effort into self-development. For example:

...even though some assignments are not as good as our professor expected because of our misunderstanding, he has never complained. Instead, he gives us suggestions. Sometimes, students answer some questions with confusion in disorganised sentences, but he still pays attention to what we say and summarises them again to clarify our points... (comment provider 8)

Showing empathy with uplifting words of encouragement motivates students to express their ideas and complete the assignment to their best ability without worrying whether their opinions and results are right or wrong. They believe that the instructor always gives them full support. Examples of these comments are as follows:

There are a lot of assignments in this course, but our lecturer answers all our doubts, provides positive feedback, tells us what we need to edit. I really appreciate his effort to understand student's attempts...every time we have questions, he answers them attentively. He is very detailed in his explanation, and patient. (comment provider 10)

In conclusion, the qualitative results show that the education practices the researcher implemented for the course were successful. The students realise that they are the centre of learning. Bringing seven good teaching practices into action does promote a learning environment. The conclusion will be discussed in the next section.

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## Discussion and Conclusion

This study aims to examine and assess how good teaching practices with active learning strategies foster a conducive learning environment in a managerial accounting course for Gen Z students. It also provides a guideline for instructors to implement effective teaching practices that cater to the needs of the students. The findings of the quantitative analysis unequivocally demonstrate that students are highly satisfied with these teaching practices. The aspects where students mostly agree include the opportunities to express ideas and ask questions, the clear evaluation and assessment as stipulated in the class, and the use of different active learning strategies that motivate and engage learning. However, the students' satisfaction towards classroom

participation is comparatively lower than other aspects. This may be a result of the transition from in-class learning to virtual learning. The learning activities were originally designed for a physical classroom setting. When the course was shifted to an online setting, the execution of these learning activities could not be carried out as planned.

The results of the qualitative analysis of teaching practices demonstrate that students perceive themselves as the centre of learning, aligning with the key objectives of good teaching practices and active learning under the learning theory of constructivism. Since each active learning technique contributes to specific learning and teaching purposes, the qualitative results indicate that integrating various techniques in a single course will enhance students' learning experiences and knowledge more cohesively and improve several skills required in professional settings. Moreover, the results show that customising good teaching practices by incorporating specific characteristics of Gen Z students into the teaching design could help instructors better understand their students and find more effective ways to deliver course content.

In terms of communication between the instructor and students, these practices contribute to effective 3-way communication both through electronic channels and in-person interaction. The students are enthusiastic to contact the instructor when they need help. Working on group assignments serves to foster good communication among students. However, to promote effective communication between instructors and students, positive communication and prompt feedback are not sufficient. Instructors should provide constructive feedback to motivate students to put more effort into learning and completing the assignments as shown in the second theme of the qualitative analysis "attentive listening and encouragement."

For the second practice, focusing on student collaboration development, and the third practice, focusing on active learning strategies, the qualitative results have shown that the students perceive themselves as the centre of learning through collaborative group work, extensive discussion, and exchange of knowledge. It can be argued that the active learning strategies implemented in the course, such as case-based learning, collaborative learning, problem-based learning, and cooperative learning, help students apply theoretical knowledge to practical situations and enhance their critical thinking and problem-solving skills. Moreover, these strategies provide opportunities for students to improve their communication and interpersonal skills.

It is crucial to note that a positive learning environment leads to increased motivation, reduced stress and anxiety, and improved engagement of students.

The students do not feel they are being left behind. Even though Gen Z students are daily users of digital technology, it turns out that they prefer in-class discussion to online discussion. The results align with studies by Fillion et al. (2009) and Mardini and Mahd (2022) which suggest that in-class participation has a greater influence on the learning atmosphere, learning efficiency, and interaction compared to online learning. In light of the challenges posed by the transition to virtual learning (Chacon et al., 2023), it becomes evident that adapting active learning strategies to the online environment requires careful consideration and innovative approaches. To address the decreased satisfaction with classroom participation, instructors may explore ways to enhance virtual interactions and discussions, fostering a sense of community even in the digital space. Moreover, as the educational landscape continues to evolve, it is essential for educators to remain flexible and open to refining their teaching methods to effectively cater to the changing needs of Gen Z students.

For the assignment timeline and communication of the instructor's high expectations, the results suggest that instructors need to provide clarity and details for assignments. Setting a clear and achievable assignment timeline based on students' feedback for the mutual assignment timeline is among many techniques to improve their cooperation in meeting the timeline. Therefore, instructors should provide opportunities for students to participate in learning customisation that aligns with the behaviours of Gen Z students. Instructors should also identify clear and detailed evaluation criteria and communicate their high expectations to their students.

By recognising the realist nature of Gen Z students, the transition from passive learning to practical, real-world skill development through collaborative learning and case studies proved highly effective in enhancing their understanding and connection to fundamental managerial accounting concepts. This approach made the learning process enjoyable for students, as it seamlessly integrated theoretical and practical aspects of managerial accounting.

Results from qualitative analysis demonstrate that no students feel that they are overworked, or excluded from the group, or not delegated responsibilities in the team, nor is any team member a "free rider". This indicates that all group members can utilise their competencies and work well with others. Every student in the group respects each other. All of these align with the seventh principle for good practice in education.

It is important to note that despite the acknowledged benefits of active learning, students reported limited exposure to it at the university, indicating a potential disparity between university intentions and active learning experiences. This highlights the need for a comprehensive approach to promote active learning across courses and disciplines. The feedback emphasises aligning institutional goals with practical classroom practices to provide a dynamic learning environment. Addressing this gap could enhance student engagement, critical thinking, and problem-solving skills, preparing them better for real-world challenges. Universities should support instructors in adopting active learning strategies, fostering interactive classrooms that empower students to participate actively. Regular assessment of teaching methodologies and openness to student feedback are essential to ensure a well-rounded and empowering education for future generations.

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### Limitations

This study highlights the advantages of active learning in fostering a learning atmosphere and environment. Instructors should take students' unique characteristics into account in course design. However, because this research study focuses on the application of active learning strategies in an advanced course for senior undergraduate students in a small classroom setting, instructors of a fundamental course with a large number of enrolled students who wish to apply the teaching practices and suggestions from this study should keep in mind that they need to adjust teaching practices that align with the nature of their respective courses. For example, in a larger classroom, they may switch from giving prompt feedback to giving specific feedback to students in need and may conduct a study pertaining to active learning strategies in other areas of accounting. This study emphasises teaching practices; however, the learning achievement is yet to be explored. More comparative research studies will be needed to examine learning achievement between a course with good teaching practices and active learning strategies and a traditional course with regular teaching and learning management.

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### Conflict of Interest

The author declares that there is no conflict of interest.

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