Research Article

Perceptions Toward the Use of Digital Learning Resources Versus Traditional Textbooks in Studying Core Accounting Subjects Among Accountancy Students of Cavite State University Main Campus, S.Y. 2025–2026

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ABSTRACT

A cross-sectional study was conducted in a state university in the Province of Cavite which covered the academic year 2025-2026 and explored the perceptions of accountancy students toward the use of digital learning materials as against traditional textbooks in studying core accounting subjects. Specifically, it aims to characterize the participants in terms of age, gender, year level, and monthly family income, investigate how often and in what situations accountancy students use digital and printed textbooks, examine the advantages and disadvantages of using both materials in learningaccounting core subjects, and recognize preferences. The research employed both quantitative and qualitative research with emphasis on the students' experiences and perceptions. The entire population of 242 students enrolled under the accountancy program were included in the data collection applying in-depth and key informant interviews and focus group discussions, per year level. Responses were decoded manually following the steps of thematic analysis of Braun and Clark (2006). The findings revealed that printed textbooks remain as the main learning resources for students, with most indicating that they "often" use them while studying as a foundational resource. In contrast, digital materials are "often" utilized to augment the learning process. Further, the demographic profile of the participants is not a factor on the perceptions of students towards both digital and traditional learning materials; rather, the context of use is the main driver of their preference between digital and traditional learning materials. Students

alternately use both printed and digital materials, allowing one to supplement the gaps of the other.

Keywords*: Printed textbooks, Learning materials, Learning preferences, Thematic analysis*

Introduction

As education endures to grow along with technological advancements, digital and multimediaresources have appeared to be essential tools to supplement or equal traditional printed textbooks. According to Asio et al. (2021), for a long time, printed textbooks have been the most common learning aid used by the majority of students because they provide clear and detailed discussions not usually found anywhere. However, due to the recent COVID-19 pandemic, most human activities were paralyzed, leading to unprecedented and unimaginable challenges for humankind.

One of the sectors that took a massive blow was the educational system. According to Phan and Ngo (2022), COVID-19 pandemic has created a fundamental shift in the landscape of higher education worldwide, requiring transformations of practices across the field of teaching. Because of this, academic institutions were forced to adapt and implement the application of different online tools, establish new teaching protocols, and adjust curricula to ensure continuity of learning while confined to their homes. With schools adapting to the new normal, the pandemic has introduced students to the widespread use of online notes, reviewers, video lectures, and platforms such as Studocu, Scribd, and CourseHero, for reviews, other than traditional printed textbooks. However, despite its popularity, digital learning resources and its effects on the post-pandemic learning outcomes, specifically, of accountancy course, remained to be unclear.

Accountancy, a course often viewed as difficult and highly technical due to its complexity and stringent fundamentals and principles and the need to compute detailed and intricate cases and problems, the type of learning materials applied carry an enormous role in the students' ability to comprehend and perform well academically. Since many students struggle to realize and keep up with the different accounting concepts, the learning resources they utilize, whether a textbook, digital note, or video lecture can significantly affect their ability to acquire knowledge. This highlights the need to look closely at which materials contribute to this learning process and understand the predictors for their learning material preferences.

Several studies have shown that students' perceptions towards learning resources are affected by various factors such as cost and its perceived effectiveness. In fact, Yu et al. (2022) emphasized that a blended approach, using information technology, captures the learners' attention more, increases their satisfaction, and fosters positive attitudes and improved learning outcomes to students. Osih and Singh (2020) also reported that most of the students preferred e-textbooks over printed textbooks. Chang (2020) confirmed that based on the National Survey of Student Engagement, some students chose not to purchase required academic materials for its cost. Ruggieri (2020) further pointed out that textbook costs increase at a higher rate as compared to tuition and inflation, making higher education less affordable. On the other hand, Baker and Driscoll (2022) revealed that new technology may not necessarily be as effective as conventional textbooks when dealing with accounting subjects. These outcomes suggest that the effectiveness of the learning materials is dependent on both the subject matter and students' individual learning preferences.

In the Philippines, according to Asio et al. (2021), most college students are provided with access to gadgets and internet connectivity, making online learning more inclusive. Kilag et al. (2023) likewise discovered students' preference towards online tools and resources. Also, students, as well as faculty members, were found to value the accessibility of different learning resources, including digital text-

books, videos, and online websites, and emphasized improvements in student engagement and active learning in class.

Prior literature have also stated how gender, accessibility, and income predict students' choice of learning materials. Jabbar (2022) found that females preferred online learning materials, while males favored otherwise. Additionally, price, convenience, portability, easy access, and textual features were among the students' motivation for choosing these learning materials. Crispus and Chrinerius (2025) stated that family income is imperative for the students' selection of learning materials. Students from families with stable incomes have greater ability to acquire printed textbooks while students from lower-income families often face challenges in earning these resources.

In recent years, a number of studies on students' preferences regarding the types of learning materials were analyzed using quantitative approaches. In fact, Cuyag et al. (2024) recommended the conduct of a study employing similar concepts in a qualitative method to provide a nuanced approach. Although few studies confirmed the application of online resources as learning and teaching methodologies in countries where the practice has long been normal, the conduct of another study in a local setting, is deemed necessary, which will further demonstrate the need to learn about local experiences and perceptions towards the use of digital materials, brought about by these changes in the educational system, particularly in the Philippines while exploring specific factors, such as gender, cost, accessibility, convenience, and perceived effectiveness, that may posit important implications on the students' choice of learning resources. Baker and Driscoll (2022), for instance, in the narrative "Student Perceptions of the Learning Effectiveness of Printed Versus Digital Textbooks in College Accounting Classes" found that students perceived printed textbooks as more effective than digital materials and recommended exploring "whys" behind these perceptions. This raises important questions about how accountancy students view and choose between digital and traditional learning materials.

Thus, this study aims to explore the perceptions of accountancy students towards the use of digital or multimedia resources over traditional or printed textbooks, their preferences, as well as the factors affecting their choice of learning materials.

Objectives of the Study
1. Determine the demographic profile of the respondents in terms of:
   1.1 Year level
   1.2 Age
   1.3 Gender
   1.4 Monthly family income
2. Discuss how often and in what situations accountancy students' use of digital and printed textbooks in studying accounting core subjects.
3. Discuss the perceived advantages and disadvantages of using digital and printed textbooks in learning accounting core subjects.
4. Understand students' preferences toward digital and printed textbooks in studying accounting core subjects

Conceptual Framework of the Study
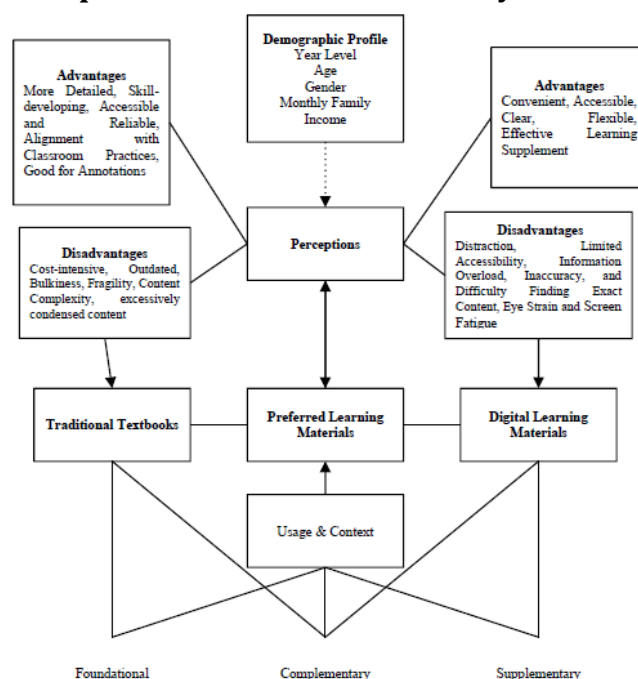

Figure 1. Conceptual Framework of the Study

Literature Review
The literature study revealed that both the digital and traditional learning materials played crucial roles in promoting successful teaching and learning. Printed textbooks are

still required as they help students gain focus, understanding, and critical thinking, especially in areas of learning that involve multi-level analysis (Soe, 2024; Li & Wang, 2024). In contrast, digital learning materials have also become popular due to their simplicity of use, flexibility, and ability to create engagement and simplify complex ideas using visual and interactive features (Haleem et al., 2022; Faizal, 2023).

Various studies confirm that there is effectiveness in online educational resources, where multimedia and videos should be effectively utilized as part of the educational experience (Tani et al. 2022; Da Costa et al. 2021; Aligo & Prudente, 2025). However, conflicting findings are also present, where there were indications that printed textbooks are still effective for deep conceptual understanding, knowledge retention, and problem-solving tasks (Park & Lee, 2021; Baker & Driscoll, 2022), while others indicated no difference in the academic achievement of students who used printed materials against students who used online materials, and its effectiveness depends on situational and learner factors (Area-Moreira et al., 2023).

Synthesizing this context as some studies say that digital formats are better (e.g., Osih & Singh, 2020), while others say that print formats are better (e.g., Baker & Driscoll, 2022). However, these variances are most likely due to changes in the study context rather than contradictory effects. Digital formats often exhibit superior results in environments characterized by lower subject complexity or students possessing higher digital familiarity, while print advantages are mostly noted in situations necessitating sustained attention or deep comprehension. Variations in student demographics, previous technology experience, and instructional design may explain the mixed findings seen among research.

Learning theories are commonly used in the literature to explain the choices and perception regarding the learning materials. Felder and Silverman's Learning Style Model (1988) explains that structured and step-by-step study materials are suited to sensory and sequential learners, while intuitive and visual learners are suited to digital materials. Moreover, Kolb's Experiential Learning Theory

(1984) proposes that both types of materials should be utilized as printed materials are effective for reflecting and conceptualizing, whereas digital tools are effective for experimenting and applying concepts. Conversely, Cognitive Load Theory (1988) asserts that some students may be overpowered and overwhelmed by digital tools, leading them to distractedly perceive the materials whereas, on the other hand, traditional text materials are effective for cognitively challenging issues like accounting.

Furthermore, according to Cognitive Load Theory, digital accounting materials may raise extraneous cognitive load when students have to scroll between or switch views between a complex balance sheet and a ledger. This frequent navigation might break up concentration and make it harder to integrate problems, especially when it comes to accounting duties that demand simultaneous comparison of more than one number.

Although various studies have looked into students' perceptions of learning materials, the majority of them were conducted in countries where digital learning is already established. In the Philippines, where digital learning became popular only during the COVID-19 pandemic, students' experiences and perceptions are still unknown. Furthermore, few studies focus on accounting students, whose education necessitates mastery of advanced and technical ideas. Also, there has been little study comparing the effectiveness of digital learning materials to traditional printed textbooks in accounting education, and only a few studies have taken into consideration qualitative criteria such as gender, cost, accessibility, convenience, and perceived effectiveness. Thus, this study aims to fill these gaps by examining accountancy students' perceptions of the use of digital and multimedia learning materials over traditional textbooks, as well as identifying the factors that influence their preferences and academic outcomes.

Materials and Methods

This research used quantitative and qualitative approaches. For the quantitative approach, the researchers distributed a survey questionnaire, in printed form, to all BS Accountancy students in order to quantify the

overall perception of the students regarding their frequency of use of both digital learning materials and printed textbooks, as well as to gather demographic information relevant to the study. The results of the quantitative survey helped the researchers identify potential In-depth interviewees and Focus Group Discussion (FGD) participants. However, the final selection was based primarily on participants' accessibility to the researchers and their willingness to join the discussions.

In terms of qualitative approach, this research employed focus group discussion, in-depth, and key informant interviews integrated in its main research instrument. The researchers were able to obtain genuine insights that represent how students interact with textbook and digital learning materials by employing a qualitative design, instead of focusing on quantitative data.

Items in the interview guide used in focus group discussion, in-depth, and key informant interviews were adapted and further modified from the research of Corpuz et al. (2024), published in the "International Journal of Research Publication and Review" while the self-constructed questions were used during the actual interview with key informants.

Criteria in Selecting the Participants.

a. The population of the study consists of all Bachelor of Science in Accountancy (BSAcc) students of Cavite State University – Main Campus for the Academic Year 2025–2026. The total number of enrolled students in the BS Accountancy program are presented below, excluding the 7 researchers from 3rd year, leaving an accessible population of 242 students.

b. For the in-depth interviews, the researchers used a combination of quota and convenience sampling. A quota of ten (10) students per year level was set, to ensure that each level in the BS Accountancy program was equally and properly represented. After setting the quota, the researchers approached the accountancy students who belong to the population and are available at the time of data collection. Those who agree to participate, were selected until the needed number of interviewees are completed.

c. For the FGDs, the researchers applied convenience sampling to select participants who are available and willing to join the scheduled discussions, considering that students have different class schedules and academic commitments.

d. For the Key Informant Interviews, the researchers used purposive sampling, selecting participants with specific roles and expertise relevant to the study: the department chairperson, one full-time instructor, and one part-time instructor.

Sample Size and Data Saturation

Sample size for interviews was determined by the principle of data saturation. To capture various perspectives on the use of printed and digital learning materials, 40 students were interviewed, 24 participated in focus group discussions, and 3 key informants were consulted. As data collection continued, patterns and themes surfaced recurrently; no substantially new data was added by additional participants. This meant that data saturation had occurred and thus supported the sample sizes selected for providing sufficient rich and in-depth qualitative data required for meaningful thematic analysis.

Data Collection and Analysis

The data collection was done with careful ethical consideration to ensure validity and accuracy. The data collected were further presented through frequency counts and percentage distribution to characterize the preference of each respondent. A structured survey was utilized to capture descriptive quantitative patterns of resource usage and perceived effectiveness (analyzed using frequency and percentage distribution). This was complemented by qualitative inquiry through 40 indepth interviews, 24 FGD participants, and 3 key informant interviews, analyzed thematically to generate contextual interpretations of learning behaviour and preferences."

After data collection, the qualitative results from the interviews were analyzed using a thematic analysis framework following six phases, as outlined by Braun & Clarke (2006), was employed. First, the researcher engaged in familiarization with the data by reviewing and

repeatedly reading all the interview and discussion responses to ensure the completeness and relevance of the data. Second, initial codes were generated by identifying significant ideas, phrases or keywords that expressed the students' and stakeholders' insight about the learning resources.

Third, after the coding the researcher proceeded to come up with themes by grouping similar codes into broader categories based on shared meanings and relationships. Fourth, the researcher then reviewed the themes by comparing against the coded data and the entire data set to ensure consistency, coherence and clear distinction among themes. Themes that lacked sufficient support were revised, merged or excluded.

Fifth, once the themes were finalized the researchers defined and named the themes to clearly obtain their core meanings and relevance to the research objectives. Representative responses from the FGDs, in-depth interviews and key informant interviews were used to support each theme. Lastly, in the final phase, producing the report, the themes were integrated into the presentation and discussion of findings. Where the qualitative results were used to explain, validate and enrich the quantitative data obtained from the survey questionnaires.

To ensure credibility and accuracy, the researcher performed peer checking and validation of the identified themes. In order to maintain authenticity of the insights, the result presented narratively supported by direct quotation from the participants. On the other hand, the demographic profile of the participants was gathered to provide background context for the students. The data from this section were not analyzed statistically but were used to better understand how demographic factors (e.g. age, year level, gender, monthly family income and student type) may have shaped their experiences and perspectives.

Result and Discussion

The study presented the results of the analysis regarding the perception towards the use of learning materials of the entire Bachelor of Science in Accountancy students of Cavite State University - Main Campus, located in Indang, Cavite, particularly in the first semester of academic year 2025-2026. The results were guided and arranged by research objectives to come up with its thematic structure.

Table 1: Thematic Structure Based on Research Objectives

RESEARCH OBJECTIVE	THEMES	CODES
1. Determine the demographic profile of the respondents in terms of: 1.1 Year level 1.2 Age 1.3 Gender 1.4 Monthly family income	—	—
2. Explore how often and in what situations accountancy students' use of digital and printed textbooks in studying accounting core subjects.	1. Usage of Printed Textbook	Often Used, Lessons in the Curriculum, Studying Concepts for the First Time, Advance Reading, Better Foundation, Study Pattern
	2. Usage of Digital Learning Materials	Supplementary Material, Technology, Other Resources, Textbooks are Insufficient and Unclear, Examination Reviewer, Used in Transit

RESEARCH OBJECTIVE	THEMES	CODES
3. Examine the perceived advantages and disadvantages of using digital and printed textbooks in learning accounting core subjects.	1. Perceived Advantages of Printed Textbook	More Detailed, Skill-developing, Accessible and Reliable, Alignment with Classroom Practices, Good for Annotations
	2. Perceived Disadvantages of Printed Textbook and Students' Coping Strategies	High Cost, Outdated, Lack of Portability, Susceptible to Damage, Overly Complex Details, Overly Condensed Details
	3. Perceived Advantages of Digital Learning Materials	Convenient, Accessible, Clear, Flexible, Effective Learning Supplement
	4. Perceived Disadvantages of Digital Learning Materials and Students' Coping Strategies	Distraction, Access Limitations, Information Overload, Inaccuracy, and Difficulty Finding Exact Content, Eye Strain and Screen Fatigue
4. Understand students' preferences toward digital and printed textbooks in studying accounting core subjects.	1. Perceived Effectiveness of Printed Textbooks and Digital Learning Materials	Effective, ineffective
	2. Overall Preference and the Factors Influencing it	Accessibility and Convenience, Learning Efficacy and Performance, Learning style and Habits, Classroom and Instructional Influence, Distraction Control, Purpose Specific Choices

Research Objective 1: Describe the demographic profile of the respondents

Year Level. Figure II shows that most of the accountancy students are composed by first year levels. Across the different year levels, the majority of Accountancy students prefer using both digital learning materials and printed textbooks for their academic growth indicating that learning material preference is not dependent on year level. This is related to the study of Mizrachi & Salaz (2020), who reported that students' year of study has no associations with their learning format preference.
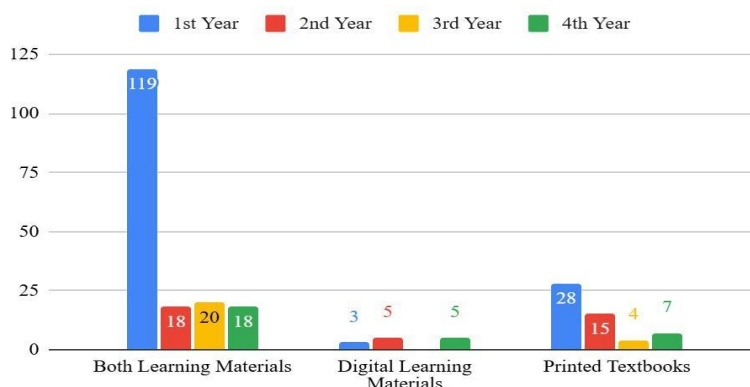

Figure 2. Learning Material Preference of Accountancy Students According to Year Level

Age. Most of the respondents belong to the 18-20 age group which is the typical age range of undergraduate accountancy students. This indicates that age did not influence learning material preference because participants from different age groups consistently preferred the combined use of digital learning materials and printed textbooks. This result is consistent with the findings of Cabual (2021), who found that age is not a factor in learning styles and preferred learning modality.
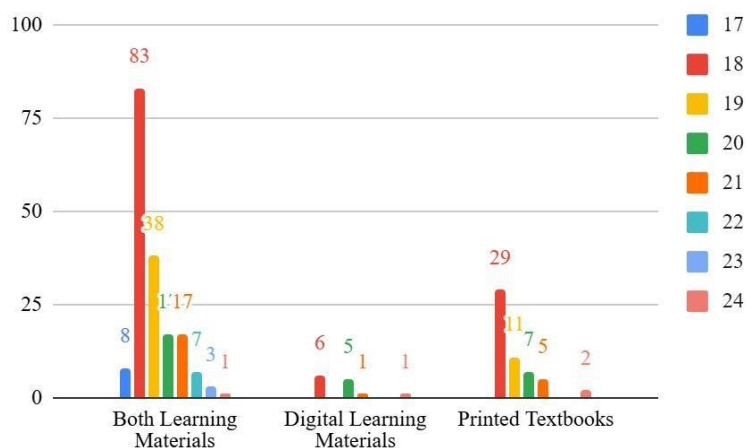

Figure 3. Learning Material Preference of Accountancy Students According to Age

Gender. The results indicate that most of the respondents are female and both genders significantly favor the use of both digital learning materials and printed textbooks. This suggests that blended learning works well for both genders. This aligns with the study of Hilton et al. (2020), that gender does not always create a meaningful gap in learning behaviour.
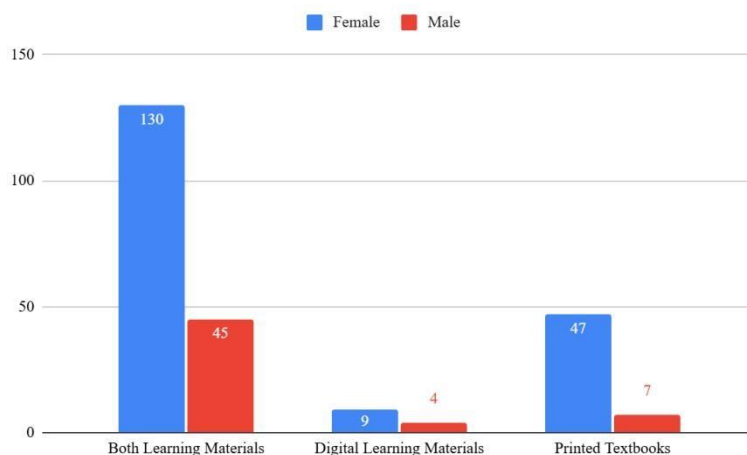

Figure 4. Learning Material Preference of Accountancy Students According to Gender

Monthly Family Income. The majority of students in all income groups favor the use of both learning materials, with the highest count coming from the range of 20,460-48,120. This implies that a student's preferred learning material is not much affected by their financial situation as an accountancy student. All income levels still have printed textbooks as their only preferences, with the range of 20,460-48,120

having the highest number. These findings suggest that students from all income levels and types expressed a great preference for both digital and traditional textbook learning materials. Although income was found not to have an impact on preference, it was observed from the qualitative data that students' income affects their usage and access of learning resources, supporting the views expressed by Lazaro et al. (2023).
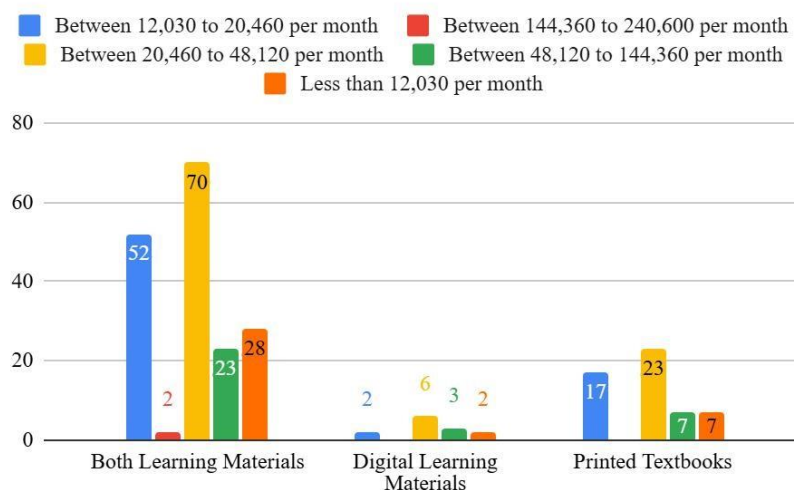

Figure 5. Learning Material Preference of Accountancy Students According to Monthly Family Income

Student Type. The same pattern appears when the preference is classified according to student type. The majority of the students still preferred both digital learning materials and printed textbooks even if they have a scholarship grant, a working student, and just a regular student. All categories had very few digital learning materials as their preference, indicating that students still require printed textbooks for their accounting courses, regardless of their student type. In general, the data shows that regardless of student type, many students still push to rely on printed materials and digital learning materials. These findings are also inclined to the study of Lazaro et al. (2023) that highlighted the learning environment of students impact how they engage with learning materials, but not how they prefer it.
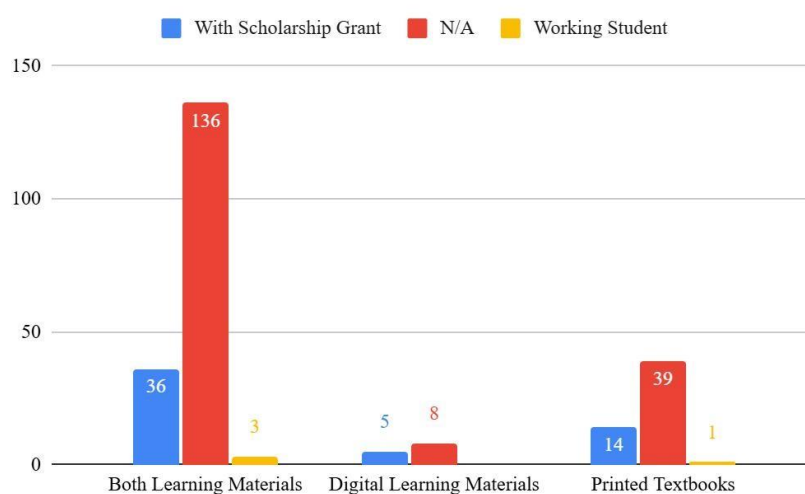

Figure 6. Learning Material Preference of Accountancy Students According to Student Type

Overall, the demographic analysis reveals that students from a variety of backgrounds consistently prefer using both traditional textbooks and digital learning materials. The majority of accountancy students selected both learning materials as their preference regardless of year level, age, or gender indicating that accountancy students gain the most from mixing both the learning materials.

Research Objective 2: Explore how often and in what situations accountancy students' use of digital and printed textbooks in studying accounting core subjects.

With the availability of both printed textbook and digital learning resources, students now use it in various frequencies and learning situations such as classroom discussions, exam preparation, building a foundational knowledge about the topic, or aiming to have supplementary knowledge about a certain concept. This section emphasizes the strengths of both materials and situations where the resources are used the most.

Theme 1: Usage of Printed Textbook

In the survey conducted on the whole population, the 1st section of the questionnaire asked about the student's usage of printed textbooks in studying accounting core subjects and principles. The table below shows the presentation of the student's responses.
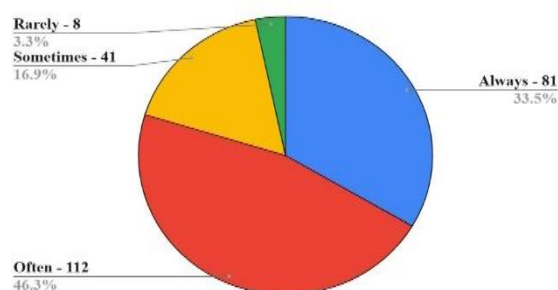

Figure 7. Usage of Printed Learning Materials

As shown in the figure, 112 students answered "often", 81 were "always", 41 were "sometimes", and 8 answered "rarely", from a total of 242 respondents. According to Dharmarajlu (2025), printed textbooks play a huge role in higher education since it serves as a guide material for lesson transitions. This is in line with what IDI 39-Female-4th Year-21 and FGD 2-Participant 2Female-2nd Year-20 had stated. Based on them, traditional textbooks were required by their professors and usually, they use this as a guide throughout their lessons or discussions. Also, it offers an easier way to them because it already includes a list of topics they need to focus more on studying. Furthermore, some of them use this not just often but always, specifically for IDI 33-Male-4th Year21 and FGD 3-Participant 2-Female-3rd Year-20, traditional handouts offer more detailed discussion of topics, good for advanced reading since discussions were mostly textbook-based. Due to this, printed materials became the primary used learning material for most of the students.

On the other hand, there are still students who use printed textbooks sometimes or rarely. They have their own reasons as to why they're not using printed materials as often as others. IDI 20Female-2nd Year-19 and IDI 37-Female-4th Year-21 shared that they only use printed textbooks if they can't find what they need online. This was in accordance with Awashreh (2025) stated. Based on him, the continuous emergence of digital learning was associated with improvements on student's learning speed. The same reason why in some instances, they only read the printed book if they have time to do so. Additionally, students discussed situations where they use printed textbooks. IDI 40Female-4th Year-21 and IDI 16-Female-2nd Year-19 stated that traditional learning materials can best be used in learning concepts for the first time to strengthen the foundation on accounting topics and principles.

In David Kolb's Experiential Learning Theory, it explains why students perceive materials differently. Learning materials should be well-suited to the students 'learning cycle (Kolb, 1984). This learning cycle is what the stakeholders or faculty noticed when they were interviewed regarding their perspective about student's usage of printed materials. Based on their years of experience in teaching, they noticed patterns on student's performance when using traditional textbooks. According to KII-Participant 2, she noticed that accountancy students used their textbooks a lot of time, particularly in answering problems. Those same students were also the ones who were able to pass the exams and get high scores. Additionally, KII-Participant 1 said that students' books have a lot of written notes on it and some even have damages because of too much use. Similarly with what Cuyag (2024) has stated. Students were allowed to learn, write, and annotate in their preferred ways using their own printed textbooks. This shows that despite the emergence of digital learning materials, the use of printed resources should not be replaced.

Theme 2: Usage of Digital Learning Materials

The majority of the students, specifically 49%, described their usage of digital learning materials as "often" in studying accounting core subjects and principles. Shown on the figure below is the frequency counts and percentage distributions regarding how often they use these materials.
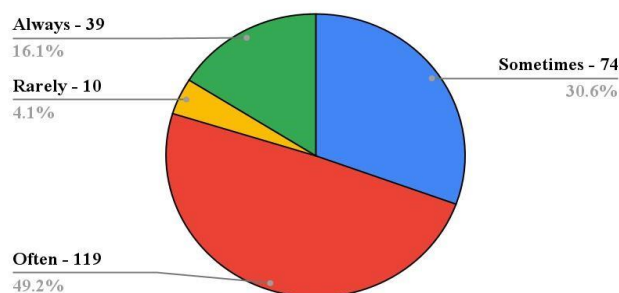

Figure 8. Usage of Digital Learning Materials

Digital learning materials serve as alternative resources that supplement printed textbooks. According to IDI 05-Female-1st year-18 and IDI 35-4th year-24 this is where the practice problems can be found which can be used to test the understanding of the topic from the book. In addition, IDI 04-Male-1st year-18 and IDI 33-Male-4th year-21 stated that they use digital learning materials like PDFs and video lectures which are only supplementary to the printed textbooks. This selective use emphasizes the role of digital learning materials as a supporting tool to the traditional learning method rather than replacing it entirely.

Accordingly, these materials are only used when textbooks are insufficient and unclear. The students IDI 18-Female-2nd year-20, IDI 25-Female-3rd year-21, and IDI 28–Female-3rd year-20 elaborated specific situations in which they resort to using digital learning materials in studying. Their most common instance is when there is a lack of explanations in printed textbooks, prompting them to seek digital resources as an additional reference that helps them to better understand the topic.

Moreover, during the examination period, the use of digital learning materials strengthens topic understanding and enhances readiness for assessment for a quick review of key concepts, which further aligns with John Sweller's Cognitive Load Theory which, mentioned that learners could have limited working memory that overwhelms when presented with too much information. IDI 23-Female3rd year-20, IDI 24-Female-3rd year-20, IDI 25-Female-3rd year-21 and FGD 3- Participant 3Female-3rd year-20 said this is where students can find summaries and reviewers like practice sets, flashcards, and test banks that contains condensed essential information which helps reduce extraneous cognitive load.

Lastly, digital learning materials are viewed to offer convenience and flexibility for reinforc-

ing learning outside of the traditional environment such as when they are in transit or riding public transportation. IDI 13-Female-2nd year-19, IDI 08-Male-1st year-18, and IDI 38-Male-4th year-21 stated that they used it when they were in jeepneys, tight places or whenever studying on the go. This finding coincides with Haleem et al. (2022) that further stated that digital materials are more accessible, portable, and accessible to the students.

Table 2: Summary of Themes on the Frequency and Context of Learning Materials Use

THEMES	CODES	NARRATIVES
1. Usage of Printed Textbook	Often Used, Lessons in the Curriculum, Studying Concepts for the First Time,	"...it is required by the professors..." (IDI 39Female-4th Year-21) "...it has the closest reference I have, considering the basis of the professor's lessons." (FGD 2-Participant 2-Female-2nd Year20) "...offers more detailed discussion, good for advanced reading... (IDI 33-Male-4th Year-21) I
	Advance Reading, Better Foundation, Study Pattern	only use printed textbooks if I can't find what I need online." (IDI 20-Female-2nd Year-19) "...use printed textbooks when learning the concepts for the first time and I have ample time." (IDI 37-Female4th Year-21) "When I read a topic for the first time..." (IDI 16-Female-2nd Year-19) "...when studying a topic for the first time." (IDI 40-Female-4th Year-21) "...I do advanced reading..." (FGD 3Participant 2-Female-3rd Year-20) "...they really are answering problems from the book... (KII-Participant 2) "...written notes and some of those even have damages... (KII-Participant 1)
2. Usage of Digital Learning Materials	Supplementary Material, Technology, Other Resources, Textbooks are Insufficient and Unclear, Examination Reviewer, Used in Transit	"...only as supplementary study resources..." (IDI 05-Female-1st year-18) "...just additional or supplementary." (IDI 04-Male-1st year-18) ...The video discussions are just supplementary for me. (IDI 33-Male-4th year-21) "...if it is not elaborated much in the book... I also look for other references online." (IDI 18-Female-2nd year-20) "When I'm not satisfied with the book, ...I watch video lectures there." (IDI 28-Female-3rd year-20) "...I search for other references." (IDI 25-Female-3rd year-21) "...during the review period." (IDI 35-Male-4th year-24) "...Only during exams..." (FGD 3-Participant 3 Female-3rd year-20) "...that's where I get reviewers or other resources." (IDI 24-Female3rd year-20) "...for things like flashcards and test banks." (IDI 23-Female-3rd year-20) ...even when I'm traveling, it can be accessible quickly. (IDI 13Female-2nd year-19) "In pretty tight places like in jeepneys..." (IDI 08-Male-1st year-18) "When I need quick access, ...when studying on the go or outside." (IDI 38-Male-4th year-21)

Research Objective 3: Examine the perceived advantages and disadvantages of using digital and printed textbooks in learning accounting core subjects.

The preference and perceptions of students on using printed textbook and digital learning materials are shaped by their exposure to the distinct benefits and challenges of each format. This section presents the advantages and disadvantages of these two learning materials perceived by students. Printed textbooks are often valued for their detailed structure, skill-developing format, accessibility, reliability, alignment with classroom instruction, and ease of annotation. However, students also perceive several challenges of using it including high cost, outdated information, lack of portability, and content that is either overly complex or condensed. On the other hand, digital textbooks are perceived to offer convenience, accessibility, clarity, flexibility, and effective learning supplement. However, in using digital learning materials, students face challenges like distraction, inaccessibility, information overload, inaccuracy, difficulty in finding exact content, eye strain, and screen fatigue.

Theme 1: Perceived Advantages of Printed Textbook

According to the survey, interview, and group discussion conducted, many students preferred printed textbooks because of their perceived benefits. Based on the study, the following advantages were identified:

More detailed. Students emphasized the traditional textbooks' capacity to offer more complete and up-to-date explanations of essential accounting concepts and principles. According to IDI 20-Female-2nd year-19, the advantage of using printed textbooks is its completeness and accuracy. Respondent IDI 22-Female-3rd year-21 claimed that printed textbooks provide a broad foundation for learning.

Skill developing. Furthermore, the utilization of printed textbooks was viewed by students as a way to develop crucial academic abilities like problem solving and critical thinking. IDI 22-Female3rd year-21, in fact stated that reading from a printed textbook helps learners hold information for a long period of time, grasp lectures better, and stay motivated while studying. This is in accordance with the Felder-Silverman Learning Style Model, which confirmed that the teacher's knowledge of the student's preferred learning style is central in the effectiveness of the holistic learning process, thereby enhancing comprehension and engagement. IDI 24-Female-3rd year-20 believed that printed textbooks fit her learning style, enabling her to browse, annotate, and study in ways that promote meaningful learning and long-term retention.

Accessible and reliable. The participants likewise highlighted how dependable printed textbooks are given its availability, with or without internet connectivity (IDI 05-Female-1st year-18). The participants also observed this modality as easier to use than soft copy files, as prolonged use of digital materials can lead to strain in the eyes (IDI 25-Female-3rd year-21; IDI 26-Female-3rd year20).

Alignment with classroom practices. Students also mentioned that printed textbooks serve as an assistant during in-person lectures, especially when the discussions are lifted from textbooks. The participants also elaborated that professor design quizzes and exams based on textbook information (IDI 28-Female-3rd year-20).

Moreover, a faculty member of the Accountancy Department in the state university also believed that answering problems from the textbooks is part of their students' training in preparation for the board examination. KII - Participant 03 stated that "With printed materials, there's no choice. You really have to look at the problems in books because that's what comes out in board exams. Many accountancy students are more comfortable writing on printed materials. The exam is printed, so you also have no choice. Accountancy is probably the only course with typical textbooks."

Good for annotations. Lastly, the students answered that a textbook that can function as a note-taking pad is helpful in the learning and knowledge retention. Students revealed that they like the provision to freely highlight, underline, or write key concepts and information read on physical copies that can further boost learning (IDI 11-Female-2nd year-19).

Overall, the findings of this research are consistent with numerous studies which

suggest and emphasize that printed textbooks are useful, especially if the objective is to learn concepts that are highly technical and require critical thinking. Participants in this study, like those in Soe (2024), Li and Wang (2024), and Baker and Driscoll (2022), believed that printed textbooks are more comprehensive, reliable, and useful in facilitating deep understanding, critical thinking, and long-term retention.

Theme 2: Perceived Disadvantages of Printed Textbook and Students' Coping Strategies

The discussion highlights that many of the students preferred printed textbooks due to their perceived advantages. However, in spite of these advantages, students also pointed out several disadvantages of using printed textbooks in studying:

Cost-intensive. According to students, buying textbooks can be a financial burden, which is why students are always looking for a way to ease this financial strain. IDI 04-Male-1st year-18 emphasized that the high cost of having printed textbooks results to be a financial burden for their family. Similarly, IDI 11-Female-2nd year-19 stated that this challenge also influences them to consider the availability and affordability of digital learning materials. During the interview with key informants, particularly with KII-Participant 1, it was discovered that the cost of printed materials can be a significant challenge for most of the students with buying multiple books for each semester. To cope with this challenge, students mentioned how digital learning materials became a practical choice for them. This challenge led the students to explore alternative solutions, relying on digital resources that are often more affordable and accessible.

Outdated. Given that the new book editions' publication and distribution take a lot of time, students have no choice but to end up using outdated books. The statement of another student reflects how outdated information from printed textbooks can affect the quality of their learning as well as the accuracy and relevance of the concept being studied (IDI 26-Female-3rd year-20). To be able to overcome this challenge, students source out digital learning resources where they can find an updated edition

of the books or an updated information about the topic that they are studying. These findings were based on the statement of IDI 26-Female-3rd year-20 and FGD 4-Participant 3-Female-4th year21.

Bulkiness. With the weight and bulk of accounting books, many of the students find it challenging to carry several books at once. According to IDI 05-Female-1st year-18, since a printed textbook is necessary for her classes, carrying bulky textbooks often causes physical strain. The bulkiness hinders students' flexibility in learning. Students emphasized how carrying printed textbooks can be inconvenient, particularly while commuting, in rainy conditions, and when passing through crowded places (IDI 11-Female-2nd year-19). These statements demonstrate the limitations of physically carrying printed textbooks especially in a situation where there are a limited space and mobility. In order to overcome such disadvantages, many of them find a way by creating their own notes or reviewers and by using digital devices where learning resources can also be accessed. According to FGD 4-Participant 3-Female-4th year-21, this challenge can be addressed by using digital material most often while relying on textbooks when necessary. While some of the students use digital learning materials to overcome these challenges, some of them adapt and become more resourceful and organized in handling and using printed textbooks. These findings were based on the statement of IDI 33-Male-4th year-21, which stressed that using big bags and clipboards is useful to organize reviewers and lecture notes.

Fragility. Students expressed concern about the fragility of textbooks during daily commutes. Some of their books can easily be teared up and bent which makes it less durable in the long run. According to IDI 31-Female-4th year-22 and IDI 34-Female-4th year-21, the increased usage of printed textbooks makes them more prone to damage with its poor quality. The use of printed textbooks requires students to be cautious and more conscious of its proper handling to maintain its quality and durability. To address this, students invested in school supplies like clear books, expandable folders and envelopes to properly organize learning materials and prolong the life of their books. As

mentioned by IDI 34-Female-4th year-21, "I organize them… I have clear books, an expanding folder, and envelopes where I place them, so that in case I need to bring them, I don't have to carry them loosely.".

Content complexity. Printed textbooks often present complex details with lengthy discussions. As one student stated "I find it difficult to process the concepts." (IDI 02-Male-1st year18), "It also makes me sleepy because the discussions are so long." (IDI 31-Female-4th year-22). This indicates how the complexity of textbooks can hinder the comprehension and drive of the students to fully understand the concepts in the textbook. Students also stated how the volume or thickness of the book overwhelms them (IDI 29-Female-3rd year-21), which sometimes causes them to feel bombarded with information as the thickness of the book intimidates them. In overcoming these challenges, many of them use online platforms to help them simplify and reduce the complexity of details from the book, stating "When the discussion is too long, I just use the reviewers I previously made or go online." (IDI 31-Female-4th year-22). Digital learning materials have become their supplementary source as one of the students mentioned that to overcome these disadvantages, they rely on online resources such as TikTok and Facebook reels (IDI 08-Male-1st year-18).

Excessively condensed content. Students perceived printed textbooks as "excessively condensed" since the information presented to them is too limited and often lacks detailed explanations. Students stated that although a lot of important concepts are included, many textbooks do not provide the step-by-step discussions or elaborated examples, making it difficult for them to fully understand the lessons. According to IDI 05-Female-1st year-18, over simplified textbooks require extra efforts to understand. In some instances, the over simplification becomes the source of confusion as to where a particular idea originated. Another student stated that the content of printed textbooks is limited compared to digital materials (IDI 10-Male-1st year-18). IDI 07-Female-1st year18 and IDI 06-Female-1st year-18 also emphasized how condensed information causes them to need more "self-understanding" to be able to deeply understand the topic. Other students also noted that these versions of textbooks often limit practice demonstrations (FGD 3-Participant 3-Female-3rd year20). Students cope with the insufficient explanations by looking for additional information online. One student stated that words and concepts are listed down to achieve greater familiarity (IDI 09-Male-1st year-19). Similarly, IDI 18-Female-2nd year-20 and FGD 2-Participant 2-Female-2nd year-20 emphasized the need for digital learning materials "to fill in the gaps" found in printed textbooks. As digital resources provide a more vivid and step-by-step explanation that are often missing in condensed printed textbooks, these factors led students to rely on digital materials.

Grounded on these findings, the accessibility, flexibility and convenience of digital learning resources are the reason why students use it as their practical alternative when they face difficulties in using printed textbooks. The study of Haleem et al. (2022) resonates this idea, which emphasizes that students perceive digital materials as convenient and accessible. Student's reliance on digital learning resources as their primary coping strategy aligns with the observations of Alaku and Okpala (2022) who noted that education is incomplete without digital learning materials, given the fact that digital resources make education more accessible, making learning more effective and flexible.

Theme 3: Perceived Advantages of Digital Learning Materials

Many students favored digital learning materials due to their perceived advantages. According to the results of the survey, interviews, and group discussions, the following advantages were identified:

Convenient. Students noted that digital learning materials are very useful for visual learners who love the ability to quickly discover information and use the capability to highlight key ideas (IDI 13-Female-2nd year-19).

Accessible. Furthermore, the portability and accessibility of many materials in a single device facilitates studying for students with limited time for studying due to inevitable, personal circumstances. One respondent

described it as very convenient to access and is helpful for students who may lack time accessing learning materials (IDI 33-Male-3rd year-21). This convenience promotes greater flexibility and efficiency for students who are struggling with building better study habits.

Moreover, digital learning materials allow students to access and review content and information at any given time and place through the use of a variety of devices, websites, and platforms (IDI 15-Male-2nd year-20). Students also reported that these materials enable them to review content more quickly, especially when they are outside or need to review immediately (IDI 16Female-2nd year-19). IDI 25-Female-3rd year-21 also stated that digital learning materials are mostly offered free.

Clear. Additionally, many students enjoy using digital learning materials as they offer clarity with complex concepts students are having trouble to understand. Online video lectures, tutorials, and other resources can assist explain key accounting concepts more effectively than a single printed textbook. According to IDI 22-Female-3rd year-21, digital learning materials make the foundation of concepts learned in textbooks clearer. IDI 08-Female-1st year-18 also claimed that for digital materials, the advantage is that students will acquire the ability to gain wider knowledge.

Flexible. Digital learning materials are also extremely flexible to students' individual learning requirements and preferences. Students highlighted capabilities like undoing mistakes, printing, and using online annotation tools (IDI 19-Male-3rd year-19).

Effective learning supplement. Lastly, students agreed that internet resources offer additional contents that printed textbooks do not. These include practice demos, summaries, and elaborations to better reinforce learning. According to IDI 24-Female-3rd year-20, digital learning materials offer more practical problems that hones abilities and skills as well as retention on lessons since most online materials give important summaries of notes. Students can also access additional exercises and test banks to enrich knowledge and skills (IDI 27-Female-3rd year-20). Furthermore, digital materials such as YouTube and Scribd are enablers of effective knowledge expansion,

concept reinforcements, and the acquisition of useful information to support prior knowledge (IDI 37-Female4th year-21; IDI 29-Female-3rd year-21. However, while digital learning materials are important alternatives, students still view them as supplements to traditional printed textbooks (IDI 28-Female3rd year-20).

Overall, the findings of the study clearly support the students' preference for digital learning materials due to its convenience, accessibility, flexibility that further boosts understanding. participants supported the study of Haleem et al. (2022) and Okpala and Alaku (2022), that digital learning materials allow them to study whenever and wherever they want, making learning more flexible and efficient, especially for students with limited time and demanding academic schedules.

Theme 4: Perceived Disadvantages of Digital Learning Materials and Students' Coping Strategies

The findings showed that although digital learning resources have numerous benefits for students, students still experience some challenges that influence their learning experiences. Based on the interviews and FGD responses, the following disadvantages were identified:

Distraction. participants indicated that digital learning materials also bring distractions to students when studying. Because the platforms they use to gain access to learning resources are also found on the same devices where students can gain access to entertainment platforms and social media, making learning harder for them. This finding was based on the experiences shared by IDI 13-Female2nd Year-19 and IDI 32-Female-4th Year-21, who emphasized that constant internet access and a digital environment full of multiple "side quests" hinders their review, influencing students to focus their attention away from learning materials to non-academic platforms like Facebook, TikTok, and Instagram. To cope, the participants said that concentration while studying digitally can be achieved through the use of various strategies, both behavioral and technological. Technological, because IDI 01-Female-1st Year-19 shared that they make use of widgets like "Do Not Disturb" and apps that

block access to unrelated platforms. Behavioral, because discipline and proactive planning were also found as keys to avoid distraction. FGD-P3-Female-3rd Year-20 emphasized proactive planning through downloading learning materials in advance while IDI 32-Female-4th Year-21 said, "Discipline. I mean, in accountancy, you really need self-discipline. You must know what you should do, avoid those things. If you're going to study, then study." This finding aligns with John Sweller's Cognitive Load Theory (1988), which describes how digital distractions impose extra cognitive loads that overload the working memories of students. Rather than concentrating their mental resources to understand accounting concepts, the students are confronted with dividing their attention, leading to less concentration in students, reduced study efficiency, and slow learning sessions.

Limited accessibility. The participants mentioned that access to digital learning materials relies heavily on internet connection, battery life of digital devices, and sometimes, students' financial capability to avail platforms that require payment to open documents. This response was brought up repeatedly throughout the interview, where students shared that, without internet connection, their studying becomes limited to only downloaded learning materials. This is further explained by IDI 04Male-1st Year-18, as he said that students' limited access to the internet hampers their capacity to study above what they have saved on their devices. Other participants also added that some learning materials are accessible only online or through premium accounts, making them inaccessible for students with a limited budget. This concern was also raised during the FGD, where students emphasized that subscription requirements restrict which materials they can use for studying. Thus, students who depend on such learning materials, experience limitations that were not of their own choice, making their learning less consistent and sometimes more difficult, as compared to when using offline resources or printed textbooks. To cope, students reported making the most of whatever resources were available to them. In the case of some partici-

pants, this involved relying on stable home internet connections, as IDI 11-Female-2nd Year-19 further explained, "WiFi is really the main way to overcome it" adding that, without it, access to digital learning materials would not be possible.

Information overload, inaccuracy, and difficulty finding exact content. Another major disadvantage highlighted by the participants, concerns information overload, inaccuracy of contents, and the lack of suitable materials that match their lessons. Most of the students reported that the process of looking for digital information was extremely time-consuming and exhausting in the sense that they had to piece together information from different sources. IDI 05-Female-1st Year-18, said that students find it hard to locate online materials because the process is the same as working on a puzzle, where they struggle to look for materials that exactly fit the topic they discuss in class. This was further supported by, IDI 08-Male-1st Year-18, explaining how too many learning materials can cause one to be confused, given that there are so many things to learn from online resources, while IDI 31-Female-4th Year-21, added, "doomscrolling... I get overwhelmed because you have so many accessible materials." This could also be justified through John Sweller's Cognitive Load Theory (1988), where he emphasized how the working memories of students would be severely affected with too much unstructured information delivered to them at once. In order to avoid being burdened with too much information from the internet, the participants identified accessing credible sources for support and consulting professors, friends, and classmates for guidance as a means to alleviate this problem (IDI 09-Male-1st Year-19, IDI 18-Female-2nd Year-20). They also benchmarked alongside other students to know which topics to prioritize. For example, IDI 31-Female-4th Year-21 stated, "I ask my classmates which themes they prioritized which might possibly come out. With that, I use it as a reference. Then the less important themes are for last-minute study. Benchmarking."

Eye strain and screen fatigue. Many of the participants indicated that it makes them phys-

ically uncomfortable to use digital learning material for an extended period. Some of the students have actually claimed to have struggled with eye strain and headaches, as they had been spending a lot of time staring at the screens of the devices they used. They felt that the number of hours they spend reading on the screens affects their eyes, making it difficult for them to study. One of the participants even said that because of the discomfort, "instead of understanding the topic, it just gets more confusing" (IDI 16-Female-2nd Year-19). The physical discomfort prevalent in digital studying also limits the hours that a student can use for learning, thereby cutting into their productivity and contributing to burnout. These accounts reveal that such long screen time for students significantly affects their comfort and concentration, making digital learning challenging for many. To cope, students engage in some digital wellness strategies. Many students highlighted how taking breaks is important, for instance,

IDI 16-Female-2nd Year-19 reported that she stops during long study sessions to rest her eyes. Others modified screen settings, activated eye-protection modes, and even established a pattern of switching between using digital materials and printed materials.

Based on the results, it is evident that the use of digital learning resources in accounting is not only affected by the availability of technology, but also the nature of the topic being studied and the nature of the learning process. The issues that have been highlighted in this theme point to the fact that digital learning materials may not be effective for initial learning as compared to traditional textbooks, especially in topics like accounting that involve a heavy amount of information. This observation is consistent with the findings of Baker and Driscoll (2022), who revealed that new technologies are not always effective, compared to traditional learning materials, in handling subjects related to accounting.

Table 3: Summary of Themes on the Perceived Advantages and Disadvantages of Printed Textbooks and Digital Learning Materials

THEMES	CODES	NARRATIVES
1. Perceived Advantages of Printed Textbook	More Detailed, Skill-developing, Accessible and Reliable, Alignment with Classroom Practices, Good for Annotations	"…complete and contain all the information I need" (IDI 20-Female-2nd year-19) "…complete with concepts as foundation for learning" (IDI 22Female-3rd year-21) "…they hold information for a long time and I study more effectively with them." (IDI 22-Female-3rd year-21) "…provide more sources and fit my learning style, making it easier to browse, annotate, and study effectively." (IDI 24Female-3rd year-20) "…almost all information you need about the specific topic are all there na in the printed pages. It saves me time and energy because you save yourself the hassle of looking for information… because it is discussed there na." (IDI 05-Female-1st year-18) "…easier to use since the book is right in front of me, and I can focus better without digital distractions." (IDI 25-Female3rd year-21) "…easier to read, unlike soft copies that strain my eyes." (IDI 26-Female-3rd year-20) "…it is where most of the major subject exams come from." (IDI 28-Female-3rd year-20) "You really have to look at the problems in books because that's what comes out in board exams. Many accountancy students are more comfortable

THEMES	CODES	NARRATIVES
		writing on printed materials. The exam is printed, so you also have no choice. Accountancy is probably the only course with typical textbooks." (IDI 03Female-1st year-19) "...many accountancy students are more comfortable writing on printed materials..." (KII-Participants-03) "...you can write directly on them, because some students rely on writing or having a physical copy to help them learn." (IDI 11-Female-2nd year-19)
2.Perceived Disadvantages of Printed Textbook and Students' Coping Strategies	Cost-intensive, Outdated, Bulkiness, Fragility, Content Complexity, excessively condensed content	"...it can be expensive for a middle-income family like mine..." (IDI 04-Male-1st year-18) "Another disadvantage is the cost of books—sometimes it's easier and cheaper to buy a digital copy compared to the physical book." (IDI 11-Female-2nd year-19) "...it is expensive, especially textbooks for Accounting students..." (KII-Participant 1) "There may be parts that are sometimes not updated... Some updates have not yet been included in the latest book available." (IDI 26-Female-3rd year-20) "...I use digital platforms to search for updated releases." (IDI 26-Female-3rd year-20) "Combine printed books with updated digital references." (FGD 4-Participant 3-Female-4th year-21) "Studying with physical books means it's really a hassle to carry them around... carrying them around feels like a low-key workout." (IDI 05-Female-1st year-18) "...you cannot always access or bring them. For example, when commuting, sometimes it's too cramped so you can't really use the book. Or when it's raining, you can't study while holding an umbrella." (IDI 11-Female-2nd year-19) "I use digital materials most often. I only bring books when they are really needed." (FGD 4-Participant 3Female-4th year-21) "I used a big bag and at the same time clipboards for printed reviewers to keep them organized." (IDI 33-Male-4th year-21) "...It's prone to damage and easily deteriorates if you're careless." (IDI 31-Female-4th year-22) "It easily gets damaged, it's more prone to destruction..." (IDI 34-Female-4th year-21) "I organize them... so that in case I need to bring them, I don't have to carry them loosely." (IDI 34-Female-4th year-21) "The explanations in books are really detailed. ...I find it difficult to process the concepts." (IDI 02Male-1st year-18) "...when the book is thick, it gets tiring to read..." (IDI 29-Female-3rd year-21) "It also makes me sleepy

THEMES	CODES	NARRATIVES
		because the discussions are so long." (IDI 31-Female-4th year-22) "...I use online sources—even just from reels and TikTok..." (IDI 08-Male-1st year-18) "...one word that describes it for me is 'condensed.' ... sometimes you really need to put in the effort to understand..." (IDI 05Female-1st year-18) "...limited compared to digital materials where there are many videos and additional content available." (IDI 10-Male-1st year-18) "...you really need more selfunderstanding when you open the book.... Sometimes the book doesn't explain enough, and the problems at the end of the chapter are different from the simple examples taught in class." (IDI 07Female-1st year-18) "...you're the one who has to understand everything on your own..." (IDI 06Female-1st year-18) "...problems are limited..." (FGD 3-Participant 3-Female-3rd year-20) "...what I do is list down the words or concepts I don't know, then I search them afterwards..." (IDI 09-Male-1st year-19) "...some books do not explain everything... so I still need digital sources to fill in the gaps." (IDI 18-Female-2nd year-20) "...we really need to refer online to digital materials to fill in the gaps for things we don't yet know or understand." (FGD 2Participant 2-Female-2nd year-20)
3. Perceived Advantages of Digital Learning Materials	Convenient, Accessible, Clear, Flexible, Effective Learning Supplement	"...highlight using an iPad pen which makes studying convenient." (IDI 13-Female-2nd Year19) "Convenient to carry and at time if you're time constraint, video lectures can be helpful..." (IDI-33Male-4th Year-21) "... they are easier to use because the book is right in front of me..." (IDI-15Male-2nd Year-20)"I can access digital materials more quickly, especially when I'm out and need to review right away." (IDI 16-Female-2nd Year-19) "...easier to access and the information is quicker to find compared to flipping through a textbook." (IDI 18-Female-2nd Year-20) "...free to use online while having to give more resources to learn from." (IDI 25-Female-3rd Year-21) "...complete concepts as foundation for learning..." (IDI-22-Female-3rd Year-21) "...you can gain wider knowledge because it's not limited to just one (or two) textbooks." (IDI 08-Male-1st Year-18) "...flexible because I can undo mistakes, print them, and use online annotation tools" (IDI 19-Male-2nd Year-19) "...offer more practical problems that hones my skills and retention on lessons because

THEMES	CODES	NARRATIVES
		most online materials give important summarized notes so you can remember the lesson easier." (IDI 24-Female3rd Year-20) "…many problems you can encounter on test banks where you can expand your knowledge." (IDI 27-Female-3rd Year-20) "…effective in terms of reinforcing concepts and gaining second-hand information since it gives a viable accounting concept." (IDI 37-Female-4th Year-21) "Digital learning materials like YouTube and Scribd offer me less work since I don't need to read a lot and it gives the summary of the lesson." (IDI 29-Female-3rd Year-21) "…offers what traditional textbooks can't give, but for me it is just an alternative. (IDI 28-Female-3rd Year-20)
4.Perceived Disadvantages of Digital Learning Materials and Students' Coping Strategies	Distraction, Limited Accessibility, Information Overload, Inaccuracy, and Difficulty Finding Exact Content, Eye Strain and Screen Fatigue	"…even if I turn on Do Not Disturb, I still end up checking the messages I receive." (IDI 13-Female2nd Year-19) "It's really prone to distractions and there are so many side quests you can do…" (IDI 32-Female-4th Year-21) "There are apps and widgets online that you can use to avoid distractions." (IDI 01-Female-1st Year-19) "Discipline. I mean, in accountancy, you really need self-discipline…if you're going to study, then study." (IDI 32-Female-4th Year-21) "…. I also download the materials I really need in case I'm outside." (FGD 3-Participant 3-Female-3rd Year20) "Not having internet access is a big disadvantage…" (IDI 04-Male-1st Year-18) "There are materials that you can only access online." (IDI 11-Female-2nd Year-19) "It's hard to find digital materials that are 'exact'… you need to piece together the information like some sort of puzzle." (IDI 05-Female-1st Year-18) "After studying, I list down the things I don't know, then I just search for them." (IDI 09-Male-1st Year-19) "I think we can also ask our professors about what we should really follow because they're more knowledgeable about it than us students." (IDI 18-Female-2nd Year-20) "It really hurts my eyes… instead of understanding, it just gets more confusing." (IDI 16-Female-2nd Year-19) "I don't just continue studying non-stop. I take breaks…" (IDI 16-Female-2nd Year-19) "I adjust screen settings, study offline when possible, and limit distracting apps." (IDI 38-Male-2nd Year21) "Rest and adjust screen settings." (FGD 4Participant 6-Female-4th Year-22)

THEMES	CODES	NARRATIVES
		"Doomscrolling… I get overwhelmed because you have so many accessible materials." (IDI 31Female-4th Year-21) "A student can get overwhelmed… because there are so many topics. (IDI 08-Male-1st Year-18) "I ask my classmates which topics they prioritized that might come out. With that, I use it as a reference… Then the less important topics are for last-minute study. Benchmarking." (IDI 31-Female-4th Year-2)

Research Objective 4: Understand students' preferences toward digital and printed textbooks in studying accounting core subjects.

Carefully examining the students' perceptions and preferences regarding the learning materials they use, helps determine what actually drives their choice and decisions in academic settings and provides insightful information on how various learning resources facilitate or impede learning. This section presents how effective printed textbook and digital learning materials as perceived by students, their overall preference, and how factors such as accessibility and convenience, learning efficacy and performance, learning style and habits, classroom and instructional influence, distraction control, and purpose- specific choices influence their choices.

Theme 1: Perceived Effectiveness of Printed Textbooks and Digital Learning Materials

In the survey conducted to the entire population, students were asked if they find printed textbooks and digital learning material effective. The figure below shows a full analysis of the responses.
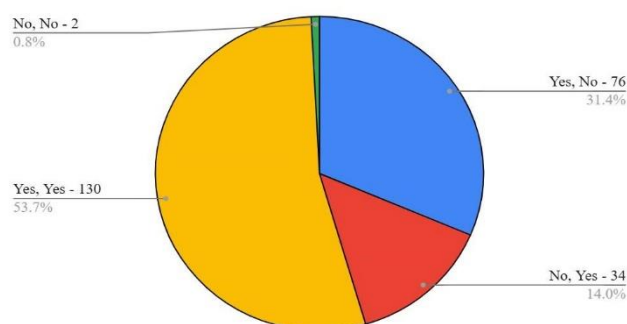

Figure 9. Students' Perceived Effectiveness of Printed Textbook and Digital Learning Materials

From this figure, it can be seen that a total of 206 out of 242 students find printed textbooks effective in studying core accounting subjects, in which 76 students (31.40% of the whole population) find only printed textbooks effective and find digital materials ineffective. On the other hand, 164 out of 242 students think that digital materials are effective, in which 34 students (14.05% of the whole population) find only digital materials effective and find printed textbooks ineffective. Half of the population finds both learning materials effective in studying core accounting subjects while 2 students (0.83% of the whole population) thinks that both learning materials are not effective in studying core accounting subjects.

Theme 2: Overall Preference and the Factors Influencing it

Throughout the analysis of the surveys, in-depth interviews, and FGDs conducted, a pattern concerning students' selection of learning materials emerges. The figure below offers a clear analysis of the students' preferred learning material.
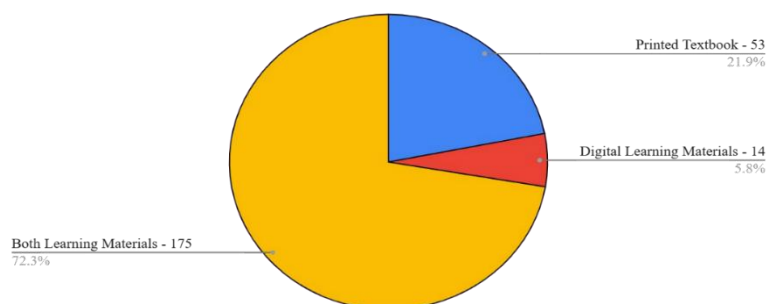
Figure 10. Overall Preference of Students

Underlying Factors Influencing Students' Preference

Aside from the contextual influence of the demographic profile of the participants, students are also influenced by different factors on why they prefer using printed textbook, or digital materials, or both learning materials. Students shared the major factors that influenced them on their preferred choice of learning materials:

Accessibility and Convenience. Students often emphasized that digital resources enable them to access information at any time and from any location, facilitating their studies despite the demands of their busy schedules and academic obligations. This convenience was particularly significant for participants who preferred quick information retrieval or required flexible study arrangements. "Digital learning materials can be accessed anytime and anywhere if all of your devices have the copy to the materials given that there is internet connection available which makes it flexible as there is no need to limit which subjects to study" (IDI 37- Female- 4th year- 21).

However, when talking about availability, given that digital materials often require internet connection and technological devices, some students also prefer traditional textbooks considering this factor. To support this, a student argued during one of the FGDs that "With a traditional textbook, there is no need for battery / WIFI so I can use it for long study sessions and keeps me uninterrupted. It is also easier to skim and scan pages, if ever there's a specific topic I need to review, it is easier to flip books from one page to another than to scroll down electronic files" (FGD 4- Participant 3- Male4th year- 21). However, in the in-depth interview

conducted with a faculty member of the Accountancy Department of the state university, availability was also emphasized as a factor that influences students on choosing the learning materials to use. The respondent further stated, "For me, it is the availability of resources, because some students don't have the capacity to buy books or gadgets for learning use." (KII - Participant 1)

Learning Efficacy and Performance. The extent to which students can understand, retain, and apply accounting concepts is for sure one of the factors that students consider in choosing their preferred learning material. Students have a mixed preference, talking about the effectiveness of the learning material in helping them understand core accounting topics. A student who preferred digital learning materials mentioned during an FGD that, "I answered "digital" as my most preferred. When reading books, I don't immediately understand. So, I rely on videos, like those of Sir Will, Sir Brian, Sir Chua. They explain concepts more deeply than books" (FGD 2- Participant 6- Female- 2nd year20). In the same FGD, another student stated that, "Books are hard to follow for processes, but videos help me analyze. They're more convenient" (FGD 2, Participant 3- Male- 2nd year- 23)

On the flip side, a student during an interview said that, "I think the benefits of having a physical textbook outweighs or justifies the cost for me. If I could have all the information I need in studying for my major subjects in one place and it's actually effective in helping me study, minus the hassle of having to look for pieces to complete the puzzle, then paying Php 520 for it is worth it for me" (IDI 5- Female- 1st year- 18). This idea was affirmed by one of the

stakeholder's interviews stating that, "I might be old school but I think printed textbooks help students understand accounting lessons more." (KII- Participant 2)

Learning Style and Study Habits. Students' preferred learning materials are also influenced by their learning style and study habits, or how they absorb and interact with course content. Most of the students said that they are visual learners who understand concepts and computations better when they are presented in diagrams, visual computations, highlighted concepts, and annotations. Certain students characterized their learning style as one that steers clear of extensive readings or materials rich in text. As a result, they opted for digital resources that provide brief explanations, summaries, or alternative formats such as videos and visual aids. "In topics involving problem solving, I understand the process better if I get to watch how it is being solved" (FGD 3, Participant 5- Female- 20). A student during an interview likewise said, "I prefer digital learning materials mainly because I don't like long readings." (IDI 36- Male- 4th year- 21)

However, some still resort to using printed textbooks since it fits their study style. "Overall, I will still choose printed textbooks as my most preferred learning materials since having the physical copy really works for my study style" (IDI 33- Male- 4th year- 21). Related to Felder-Silverman Theory, some students who are visual learners prefer printed textbooks where annotation is much easier. "Overall, I still prefer traditional printed textbooks because I'm more of a visual learner. They make it easier for me to browse, annotate, and study effectively, which helps make learning easier for me compared to digital materials" (IDI 14- Male- 2nd year- 19). Similarly, a student said, "I prefer textbooks more since I'm not a fan of listening or watching videos, I usually read to understand topics." (IDI 8- Male- 1st year- 18)

Classroom and Instructional Influence. The instructional practices in the classroom are also one of the major factors which influenced students' preferred learning materials. Several students mentioned that their choice of materials depends on what their professors required them to use, the way their professors conduct discussions, and the structure of examinations or performance tasks they usually give. For them, the learning materials used and set by their professors as an instructional basis is what they often perceive as effective for they can see the effects on their actual academic performance.

When instructors rely heavily on printed textbooks, solved illustrations, and physical handouts, students felt it necessary to adopt the same format in order to prevent confusion and ensure consistency with lesson delivery. This reliability offered a sense of clarity and continuity, particularly in subjects that necessitated step-by-step calculation. A clear example was explained by one of the students stating that, "Just like I said earlier, our professors follow a textbook-based approach, since most of their exam questions and lecture points come from the book. They may also add different problem scenarios, but the core is still the same as what's written in the textbook. And because those are also the only ones discussed in class, it helps me avoid confusion if I'm going to rely on using digital materials" (IDI 3- Male- 1st year- 19). For the same reason IDI 5- Female- 1st year- 18 stated, "Overall, I prefer printed textbooks. One of the main factors that influenced my choice is that my professor requires textbook-based materials."

Technology-Related Factors. Some students pointed out technology-related factors that lead them to prefer using traditional learning material or printed textbooks over digital learning materials. Their common arguments are mainly regarding their comfort level, exposure to gadgets, and perceived health effects. "For me personally, I also try to limit my exposure to gadgets because they distract me a lot, including the radiation and screen time. Having a printed textbook helps me avoid both distractions and excessive gadget exposure while studying" (IDI 4- Male- 1st year- 18). For the same reason, IDI 30- Female- 3rd year- 20 said that, "I prefer traditional textbooks in studying since it doesn't offer radiation to my eyes and I learn from it more than digital learning materials."

Distraction Control. Aside from the effects of too much exposure to radiation, students also see the high risk of distraction when using

digital learning materials. Many students argued that they cannot study long when using digital devices because they get easily distracted with other applications. This indeed has a significant effect on students' academic performance. According to McCoy (2020), digital distractions can cause students to miss lessons, lose focus, or even distract others. They emphasized that using certain formats – mostly traditional learning materials, helps them focus on studying without worrying about getting distracted. According to IDI 10- Male- 1st year-18), "Overall, my most preferred learning material is printed textbooks because I can focus more and avoid distractions. Printed textbooks support my long-term learning better compared to digital materials." The same thing was mentioned by FGD 2- Participant 4 - Female- 2nd year- 19, "For me, I get distracted easily. When I review textbooks, I can put away my gadgets. With digital, I can't avoid notifications, and I end up checking them."

Purpose-Specific Choices. Students highlighted that their preferred learning materials actually depend on the specific task or goal they need to accomplish. Students choose and utilize a range of learning resources (such as textbooks, digital environments, peer interaction, and external media) in challenge-based learning contexts based on their study objectives and the particular contextual demands of the task. This shows that material use is intentional and context-dependent rather than haphazard or passive (Pepin & Kock, 2021). This explains why most students who prefer using printed textbooks use it because they are used by their professors in class recitations and this is also where professors mostly get exam questions too. So, to have a good academic result, they follow the same structure and materials their instructors use.

However, some students, mostly from higher year levels, actually care more about whether they really understand the concept rather than just knowing the answers to the possible questions during exams. Some of them have the mindset of not settling to what the textbooks only give, instead searching for additional resources that can broaden their understanding of concepts. "Overall, I prefer textbooks since all the information is there like the formulas I need and problems to solve and I understand it more there but using digital learning materials helps in understanding and getting extra knowledge" (IDI 21- Female- 3rd year- 20). Meanwhile, some students like IDI 31- Female - 4th year- 21 prefer digital "Overall, I prefer digital in terms of reviewing as of the moment but printed for the foundation of topics."

Most students however, prefer not to choose or settle with only one format. "I pick both since I use textbooks for foundation learning but it is not really that complete in information so I also use digital learning materials to broaden my knowledge on the subject" (IDI 27- Female- 3rd year- 20). According to KII-Participant 2, "I think students who use textbooks tend to learn better based on what I observe in years of teaching. But some students who watch videos on YouTube of professors teaching are more ready in recitations because I think they already gained some information from what the professor from the video taught". The same thought was expressed by another key informant who stated that, "The best way for students to understand accounting is blended. Everything should be balanced, no one should exceed, nothing should lack, because both printed and digital have pros and cons." (KII- Participant 3).

Table 4: Summary of Themes on the Students' Perceptions and Preferences on Learning Materials

THEMES	CODES	NARRATIVES
1. Perceived Effectiveness of Printed Textbooks and Digital Learning Materials	Effective, ineffective	

THEMES	CODES	NARRATIVES
2. Overall Preference and the Factors Influencing it	Accessibility and Convenience, Learning Efficacy and Performance, Learning style and Habits, Classroom and Instructional Influence, Distraction Control, Purpose-Specific Choices	"...can be accessed anytime and anywhere..." (IDI 37- Female- 4th year- 21) "...there is no need for battery / WIFI so I can use it for long study sessions..." (FGD 4- Participant 3- Male- 4th year21) "students don't have the capacity to buy books or gadgets..." (KII - Participant 1) "...They explain concepts more deeply than books" (FGD 2Participant 6- Female- 2nd year- 20) "...They're more convenient" (FGD 2, Participant 3- Male- 2nd year- 23) "...benefits of having a physical textbook outweighs or justifies the cost for me..." (IDI 5Female- 1st year- 18) "...printed textbooks help students understand accounting lessons more." (KIIParticipant 2) "... it makes accounting easy for me through step-by-step solving and explanation..." (IDI 8- Male- 1st year- 18) "I understand the process better if I get to watch how it is being solved" (FGD 3, Participant 5- Female- 20) "I don't like long readings." (IDI 36- Male- 4th year- 21) "...works for my study style" (IDI 33- Male- 4th year- 21) "I'm more of a visual learner" (IDI 14- Male- 2nd year19) "I'm not a fan of listening or watching..." (IDI 8Male- 1st year- 18) "...exam questions and lecture points come from the book" (IDI 3- Male- 1st year- 19) "...professor requires textbook-based materials" (IDI 5- Female- 1st year- 18) "...depends on the professor's teaching style..." IDI 13- Female- 2nd year- 19 "...limit my exposure to gadgets" (IDI 4Male- 1st year- 18) "...doesn't offer radiation to my eyes" (IDI 30- Female- 3rd year- 20) "...I can focus more and avoid distractions. Printed textbooks support my long-term learning better compared to digital materials." (IDI-10-Male-1st Year-18) "I get distracted easily..." (FGD 2- Participant 4 - Female2nd year- 19) "...extra knowledge" (IDI 21- Female3rd year- 20) "Overall, I prefer digital in terms of reviewing as of the moment but printed for the foundation of topic." (IDI-31-Female-4th Year-21) "...broaden my knowledge" (IDI 27- Female- 3rd year- 20) "I think students who use textbooks tend to learn better.." (KII-Participant 2) "...should be balanced..." (KII- Participant 3)

Conclusion

The findings of the study concludes that the state university accountancy students clearly prefer to use both printed textbooks and digital learning materials, highlighting the importance of blended learning strategy in boosting their comprehension in their accounting subjects and academic achievement. For the students', printed textbooks were more detailed and accessible but it is costly and susceptible to damage. On the other hand, digital materials are convenient and flexible but they are prone to distraction and inaccuracy. Although each type of content has advantages and disadvantages of its own, students frequently noted that combining the two makes it easier for them to comprehend accounting principles and review information more effectively and efficiently. According to the Felder-Silverman Learning Style Model, the learning process can be carried out more effectively if student's learning materials will be selected based on their preferences maximizing comprehension and involvement. This supports the findings of the study, wherein accountancy students showed distinct impressions in relation to their chosen learning materials. This preference emphasized the importance of knowing which learning style works best for each student as this greatly affects their perception. Traditional and digital learning materials both offer a viable way for students to learn. It may not provide a similar level of effectiveness for all accountancy students, majority of them still chose to utilize both. Ultimately, the study concludes that neither traditional nor digital learning materials alone can fully meet the needs of accountancy students. Digital learning materials are important tools for convenience, clarification and supplementation while traditional textbooks remain the primary source of learning for students, particularly in foundational concepts. Most students have made a strategic strategy of using both learning materials in a complementary manner wherein one is used for a purpose that the other can't do, and vice versa. This is also how students cope up with the disadvantages and weaknesses of their preferred learning materials.

Recommendation

Students. (1) Employ the integrated learning method, which utilizes traditional textbooks for gaining fundamental knowledge of intricate accounting subjects and then supplements with technology for improved retention and understanding. (2) Create personal digital reviewers to decrease textbook dependency despite their heaviness, ensuring necessary learning materials are not overlooked. (3) Exercise the habit of cross-referencing information from print materials and online resources to ensure that the explanations given are not obsolete or misleading.

Professors & Instructors. (1) Use a diverse teaching approach that caters to the diverse learning styles and preferences of students. (2) Use digital learning sources as an effective supplementary resource for students' learning. (3) Deliberately evaluate the quality and potential of the books they prescribe to students; the chosen material should have a balance between providing comprehensive knowledge and maintaining accessibility among accounting students.

Accountancy Department. (1) Consider establishing a borrowing-textbook or rental program to address the financial burden on learners because the high cost of printed textbooks was identified as a major disadvantage in the study. (2) Ensure timely distribution of new issued accounting standards to the students, considering that accounting standards keep changing from time to time. (3) Improve campus facilities such as study areas with charging stations and internet accessibility to better accommodate students' increasing reliance on digital resources.

Digital Content Creators. (1) Produce or construct digital content that complements printed textbooks. (2) Provide learning material that is user-friendly and accessible, ensuring that the information they provide does not confuse or overwhelm students with excessive information or oversimplify content. (3) Integrate both style approaches while maintaining the alignment of the content of the standard that is accurately used in textbooks to avoid contradiction from what is in the book but serve as a reliable supplement for students to use.

Textbook Authors. (1) Development of Accounting textbooks at appropriate complexity to explain concepts in detail with examples, exercises, and gradual learning formats. (2) Incorporate such features as the use of visual aids, summaries, and linkage to multimedia for different learning styles.

Future Researchers. (1) Add to the scope of the study to verify if the results can be reproduced in different institutions. (2) Using a mixed methods design to examine how students' perceptions affect their outcomes. (3) Focus on a specific core accounting area to investigate the influence of subjects' complexity levels on the materiality of effectiveness. (4) Investigate what role various kinds of digital academic resources (such as video lectures or web reviewers and interactive platforms) play in students' experiences of the academic content

Acknowledgement

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