

The Perception of Teachers and Students towards Using Myaccounting to Learn Principles of Accounting in Vocational Colleges, Malaysia

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Abstract

Principles of Accounting is a core subject offered to the Diploma of Business Management students in vocational colleges, Malaysia. However, they struggle to understand the concept of accounting because each topic is seen as disconnected from one another and this results in poor comprehension of the subject which can lead to a lack of understanding in related future subjects. Therefore, myAccounting is developed to assist students to connect the missing dots by producing the whole set of accounting reports sequentially, quickly, and correctly. This study aims to describe myAccounting and the perception of teachers and students towards using it in their teaching and learning of the subject. Quantitative data were gathered on the implementation of myAccounting in 47 vocational colleges. The findings showed that myAccounting has assisted students to better understand the foundation of Principles of Accounting, making it easier for them to grasp complex accounting concepts and excel in their upcoming business subjects during their studies. It also helps them recall key accounting vocabulary and report formats which allow them to navigate the world of finance with confidence. As much as teachers are concerned, myAccounting has been found useful as instructional material due to its user-friendly, mobility, and easy accessibility features. It has also reduced teachers' burden in preparing the accounting format repeatedly, and manually. The use of myAccounting can potentially be further extended with the inclusion of the double-entry system.

Keywords: Principles of Accounting, myAccounting, Instructional and Learning Materials, Vocational College

Introduction

Since the COVID-19 virus swept around the world, modern civilization has begun to shift. There is little doubt that this pandemic has impacted a wide range of people, including educators. The COVID-19 pandemic has caused a major shift in the educational landscape, especially increasing the usage of online teaching and learning (Oh et al., 2022). While the pandemic solidified the need for interactive methods, remote learning, and flexible work-life balance, it also ushered in a new era for educators, marked by the transformative potential of the metaverse. This emerging technology promises to reshape the very fabric of education, offering educators exciting avenues to explore (Ratten, 2023). Not to be left behind in facing the challenging pandemic, the educators at Vocational Colleges have responded to the uphill tasks in their delivery methods. They produce learning and facilitation videos using available mobile technology tools such as telephones, cell phones, and laptops (Lassoued et al., 2020). It is found that Vocational College students have problems learning accounting subjects (Tahir et al., 2022). They struggle to understand the concept of accounting because each topic is seen as disconnected from one another. For example, how the cash sales will be seen in the final accounting report. It is a concern for vocational college educators because students' poor understanding of the subject can lead to failure in some related accounting subjects in their course of studies. Besides, students have been observed to take a longer time to recall the basic vocabulary used in accounting and the format of accounting reports. In addition to that, teachers are also seen to spend laborious hours preparing teaching spreadsheets for their daily lessons.

Nevertheless, the positive aspect of the COVID-19 pandemic has prepared the learners to adopt the blended learning approaches used to teach Principles of Accounting. Because of the learners' flexibility, teachers of this discipline might take advantage of the chance to offer a blended learning approach that can enhance learners' comprehension and proficiency in comparison to traditional, mostly teacher-centered techniques (Supramaniam et al., 2022). Hence, the birth of myAccounting innovation comes into the scene. The objectives of this study are to help learners understand the concept of accounting more easily, strengthen their fundamentals in accounting to avoid future complications in their undertaking of future business and accounting subjects, and lessen learners' time to recall the basic vocabulary of the subject and the format of accounting reports. Moreover, teachers can prepare spreadsheets for their daily lessons efficiently.

Literature Review

The myAccounting

MyAccounting is created using Microsoft Excel (Figure 1). The main page lists the records required in a complete accounting cycle: Cash Book, Journal, Ledger, Trial Balance, Financial Statement Before Adjustment, Adjustment, and Financial Statement After Adjustment. A user needs to click on the link of any cycle that he/she wants to use. Then, the user will be taken to the required page. If the user wants to go back to the main page on every page, he/she will have to click on the home button.

A complete template of an accounting record is provided in each corresponding link (Figure 2 - Figure 8). For example, if the user wants to use Cash Book (Figure 2), he/she needs to fill in the transaction details in the template provided. The application will automatically

generate the amount and balance since formulas have been embedded in the template. The automation helps the user to record transactions more easily and obtain the amount accurately. When users or learners have familiarized themselves with the template in myAccounting, it helps them to understand and memorize the Cash Book format.

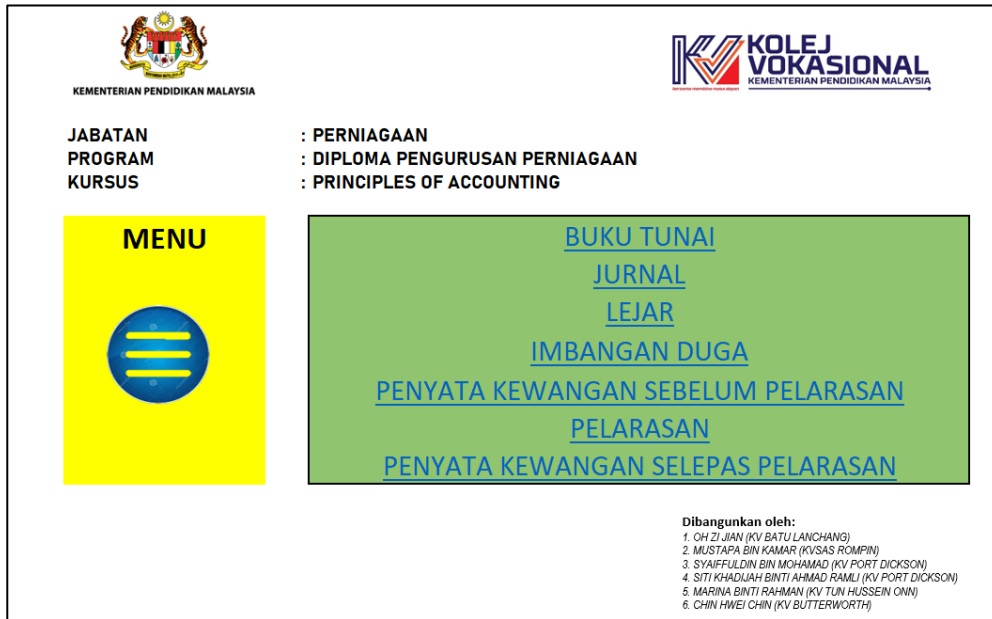


Figure 1: MyAccounting interface.

The screenshot shows a 'BUKU TUNAI' (Cash Book) table. The title 'BUKU TUNAI' is at the top center in large yellow letters. Below it is a 'HOME' button with a house icon. The table has the following columns: Tarikh, Butir, Folio, Dikaun Diberi (RM), Tunai (RM), Bank (RM), Tarikh, Butir, Folio, Dikaun Diterima (RM), Tunai (RM), and Bank (RM). The table is mostly empty, with a few entries at the bottom: '31 Baki h/b' and 'Feb 1 Baki b/b'.

Figure 2: Cash Book

The screenshot shows a 'JURNAL' (Journal) layout. The title 'JURNAL' is at the top center in large yellow letters. Below it is a 'HOME' button with a house icon. The layout consists of several tables:

- Jurnal Am**: A table with columns for Tarikh, Butir, Folio, Debit (RM), and Kredit (RM). It contains entries for Jan 1, 5, and 31, including items like 'Kenderaan', 'Bangunan tanah', 'Mesin dan jentera', and 'Alatan Pejabat'.
- Jurnal Jualan**: A table with columns for Tarikh, Butir, Folio, No. Invois, and Jumlah (RM). It contains entries for Jan 1, 12, 14, and 31.
- Jurnal Belian**: A table with columns for Tarikh, Butir, Folio, No. Invois, and Jumlah (RM). It contains entries for Jan 17, 19, 21, and 31.
- Jurnal Pufangan jualan**: A table with columns for Tarikh, Butir, Folio, No. Nota Kredit, and Jumlah (RM). It contains entries for Jan 19, 23, and 31.
- Jurnal Pufangan Belian**: A table with columns for Tarikh, Butir, Folio, No. Nota Kredit, and Jumlah (RM). It contains entries for Jan 19, 23, and 31.

 There are also some summary rows and a note at the bottom: 'Jika memulakan perniagaan, bukan "Memulakan perniagaan pada tarikh ini"'.

Figure 3: Layout of a Journal*.

*MyAccounting provides five types of journals: general journal, sales journal, sales return journal, purchase journal, and purchase return journal

The screenshot displays the 'LEJAR' accounting software interface with three ledger pages. At the top center is the 'LEJAR' logo and a 'HOME' button. The interface is divided into three main sections, each containing a ledger table:

- Leger Am (L1.1):** A T-account table for 'Akun Modal' (Equity Account). It shows a debit of 25,000.00 and a credit of 29,500.00, with a balance of 4,500.00 on the debit side.
- Leger Pembelian (L1.2):** A T-account table for 'Akun Pembelian' (Purchase Account). It shows a debit of 25,000.00 and a credit of 29,500.00, with a balance of 4,500.00 on the debit side.
- Leger Penjualan (L1.3):** A T-account table for 'Akun Penjualan' (Sales Account). It shows a debit of 25,000.00 and a credit of 29,500.00, with a balance of 4,500.00 on the debit side.

Each ledger table has columns for 'Tanggal' (Date), 'Debit', 'Kredit', and 'Saldo' (Balance). The data is organized into rows for the year 2022 and the month of January.

Figure 4: Ledger**

**Three types of ledgers: general ledger, purchase, and sales ledger

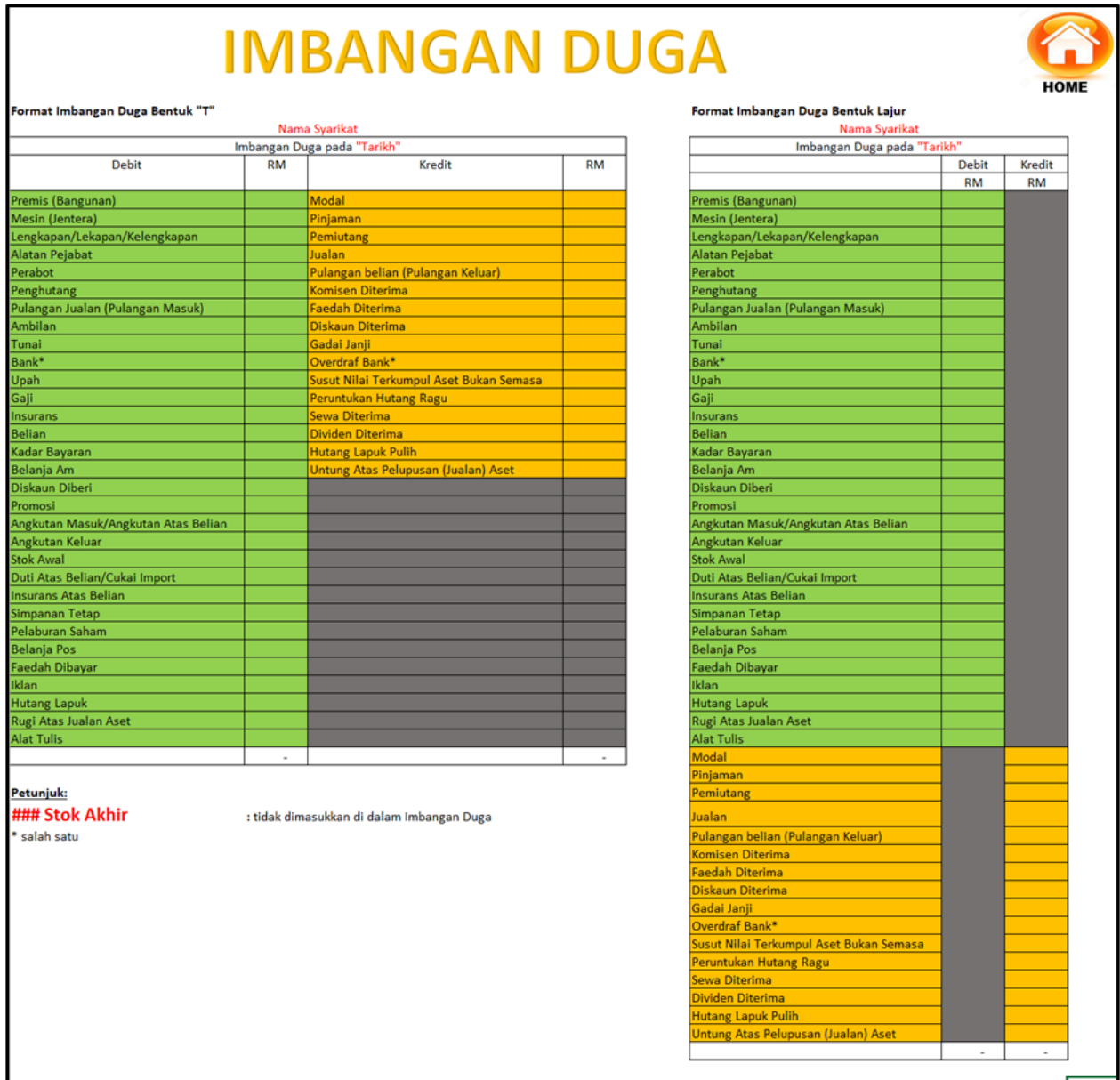


Figure 5: Trial Balance: T-Format and statement form

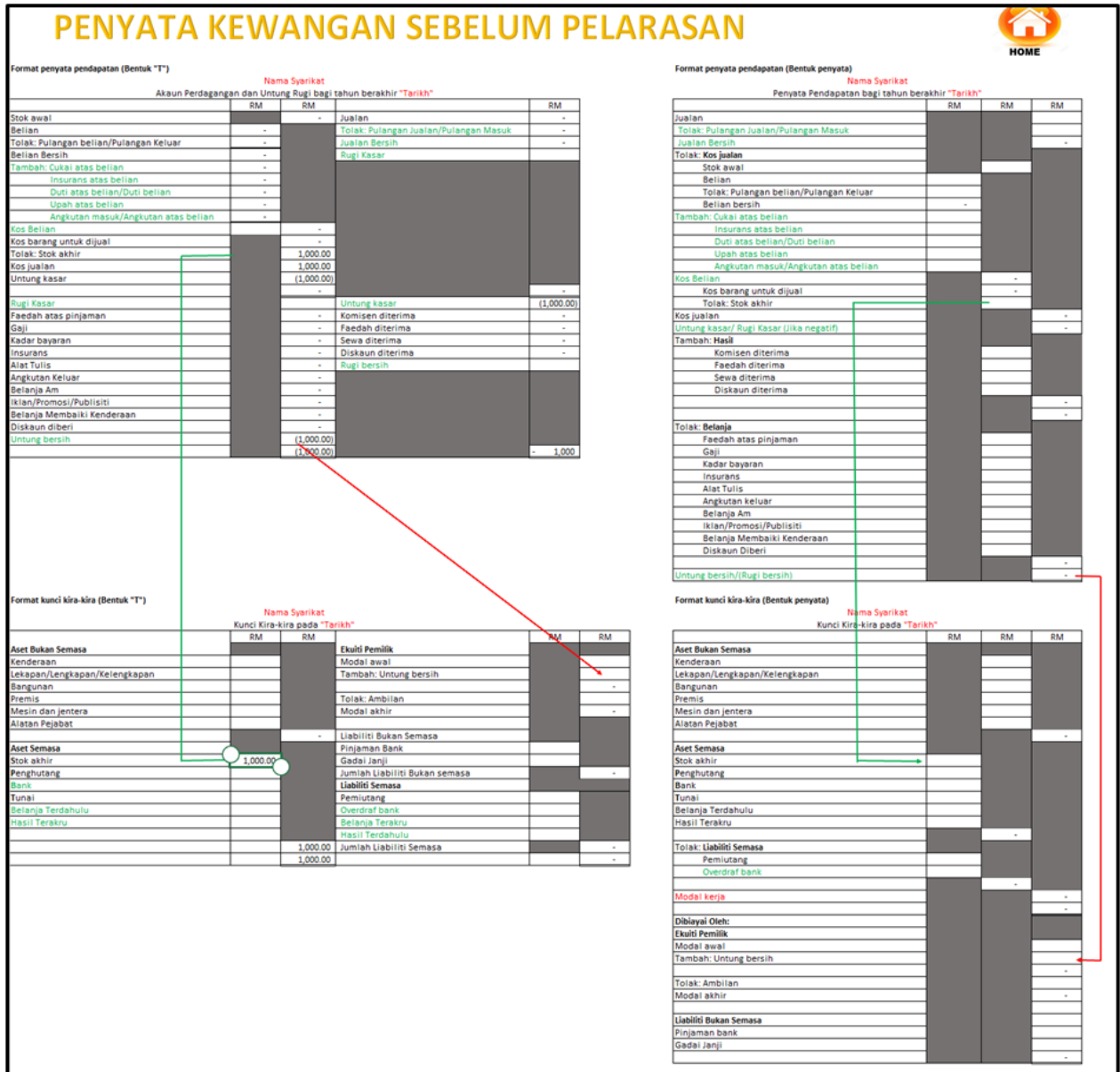


Figure 6: Financial Statement Before adjustment: T-Format and Statement form

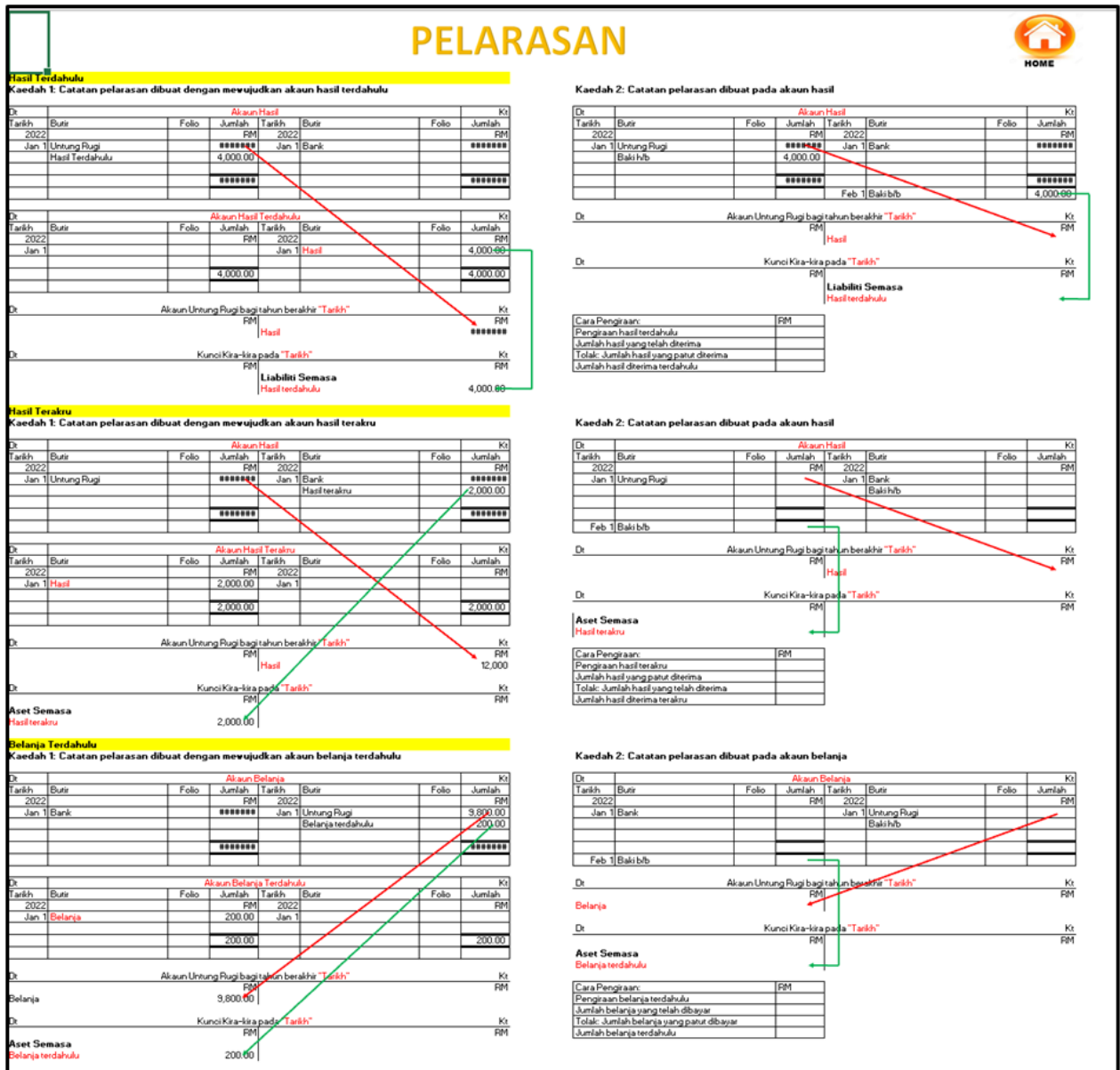


Figure 7: Adjustments

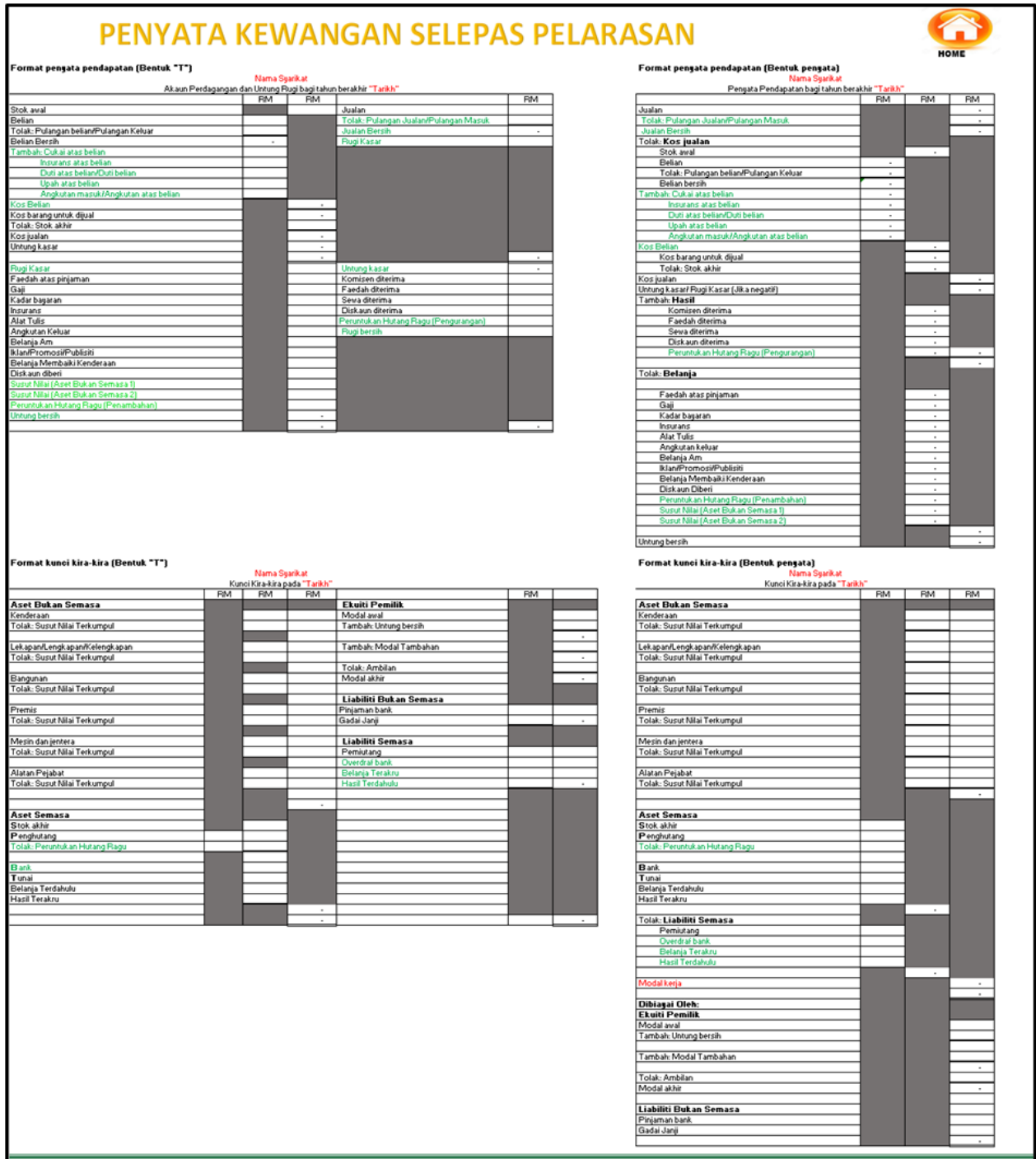


Figure 8: Financial Statement After Adjustment: T-Format and Statement form

Teachers' and students' perceptions towards myAccounting

The integration of technology in learning Principles of Accounting, particularly spreadsheets like Microsoft Excel, has become increasingly prevalent in accounting education. Therefore, developing myAccounting and introducing it to students of Diploma in Business Management in vocational colleges not only familiarizing them to additional digital skills, but they are guided to make connection and realize the relevance of every topic of the subject before they are taken to the final step in completing an accounting cycle. This is where connecting and bridging the dots are believed to occur, which is the objective of the innovation.

However, while its potential to enhance student learning is observed, understanding

teachers' perceptions is also important for the effective implementation of myAccounting. Recent research highlights both the opportunities and challenges associated with using Excel, offering valuable insights for both educators and curriculum developers. Teachers acknowledge the significant potential of Excel in boosting engagement and understanding. Studies have also demonstrated that Excel can provide a visual and interactive platform for manipulating and analyzing data, making abstract accounting concepts more tangible (Borthick & Schneider, 2023). Its flexibility allows teachers to tailor exercises and simulations to specific learning objectives, promoting critical thinking and problem-solving skills (Professor, 2004). Another research suggests that Excel can improve confidence and self-efficacy, as students gain a sense of accomplishment through mastering the software and applying it to real-world scenarios (Poon et al., 2024). Rackliffe and Ragland (2016) point out that Excel can demystify complex formulas and illustrate their practical applications, fostering a more engaging and interactive learning experience. It is also important to note that teachers recognize the importance of Excel proficiency for future employability, given its widespread use in professional accounting settings.

However, incorporating Excel also presents challenges. One major concern is the disparity in students' pre-existing skills, which can lead to frustration and hinder learning for those with limited proficiency (Davis et al., 2017). Additionally, the time commitment required to teach and troubleshoot Excel functionalities can encroach upon valuable class time dedicated to core accounting concepts (Mosbah, 2022). Some teachers express concerns about Excel overshadowing the underlying accounting principles, with students focusing more on mechanics than conceptual understanding (Alan et al., 2020). As King (2022) warn, overemphasis on Excel can lead to "mechanical manipulation" of numbers without a true grasp of their meaning. Additionally, concerns arise about potential inequities, as access to technology and varying levels of digital literacy can disadvantage some students.

To address these concerns and maximize the benefits of Excel, teachers advocate for a balanced approach. Integrating Excel should be done strategically, alongside a strong foundation in theoretical knowledge and critical thinking skills. As Borthick et al (2017) suggest, teachers can use Excel as a tool to reinforce understanding, not replace it. This can involve designing activities that encourage students to analyze data, interpret results, and draw meaningful conclusions, rather than simply rely on the software to generate answers. Additionally, ensuring equitable access to technology and providing adequate support for students with varying digital skills can help mitigate potential disadvantages.

Recent research suggests further possibilities for revolutionizing accounting education with technologies like Augmented Reality (AR) and Internet of Things (IoT) (Zainuddin et al., 2021). Computer-assisted teaching tools and interactive games can also boost knowledge delivery, deepen understanding, and drive better learning outcomes (Ghani & Muhammad, 2016; Alwi et al., 2017; Stainbank et al., 2023). Studies like Muchsini et al. (2023) even demonstrate the potential of spreadsheet design activities in developing students' computational thinking skills.

Ultimately, addressing the challenges and maximizing the benefits of Excel in accounting education requires a multi-faceted approach. This includes providing pre-requisite Excel training, strategically integrating Excel activities into the curriculum, and emphasizing the connection between Excel operations and the underlying accounting principles. By embracing technology while nurturing foundational understanding, educators can equip students with the necessary skills for success in a rapidly evolving digital accounting landscape.

Methods

Research Instrument

Data collection for this study utilized a survey method, recognized for its contributions to accurate data, reduced bias, and enhanced data quality (Creswell, 2015; Sekaran & Bougie, 2010). Quantitative data were gathered from 94 students and 32 teachers from 47 vocational colleges located in Malaysia by using a survey.

Sample

A total of 136 surveys were collected from readily accessible teachers and students in Malaysia vocational colleges through convenient sampling, due to their willingness to participate and the researcher's ease of access (Kivunja, 2015). All responses were voluntary.

Instrument

This study utilized a self-administered survey instrument with 13 questions tailored to the research aims. Divided into two sections, Part A gathered demographic information (2 questions), while Part B assessed perceptions of myAccounting using 11 adapted questions (Oh et al., 2022). A five-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree" was employed for all responses.

Pilot Study

Building upon the concept of reliability defined by Mail and Noordin (2015) and utilizing Sekaran and Bougie's (2010) recommendations, the researchers conducted a pilot study with 30 participants to assess the reliability and fit of the instrument. The Cronbach's Alpha of 0.927 exceeded the acceptable threshold, demonstrating the instrument's strong reliability and ensuring its suitability for the main study.

Data Analysis

Data collected via the questionnaire were subjected to quantitative analysis using SPSS version 26.0 (Statistical Package for the Social Science). The researchers employed descriptive statistical techniques, specifically the calculation of mean scores, to examine the perceptions of students and teachers towards the myAccounting within vocational colleges.

Findings and Discussion

Findings

A total of 136 respondents answered the questionnaires. The analysis of the results has shown in the table as follows.

Table 1

Respondent's demographic

Demographic	Factor	Frequency	Percentage
Status	Student	42	30.9
	Teacher	94	69.1
State	Pulau Pinang	22	16.2
	Perlis	3	2.2
	Kedah	7	5.1
	Perak	10	7.4
	Pahang	19	14.0
	Selangor	4	2.9
	Melaka	10	7.4
	Negeri Sembilan	28	20.6
	Johor	9	6.6
	Kelantan	2	1.5
	Terengganu	1	0.7
	Sarawak	9	6.6
	Sabah	12	8.8
		136	100.0

Table 2

The result of the perception of student and teacher towards myAccounting

	Item	Mean score
1	myAccounting helps me remember the formula in the Principles of Accounting course.	4.64
2	myAccounting helps me remember the financial reporting format in the Principles of Accounting course.	4.59
3	myAccounting helps strengthen the accounting concepts in the course.	4.62
4	myAccounting helps me identify the process of preparing cash books, journals, ledgers, trial balances and financial statements of a company.	4.65
5	myAccounting helps me assess the financial condition of a company by analyzing its financial statements.	4.63
6	myAccounting helps me to recognize the relationship between cash books, journals, ledgers, trial balances and financial statements.	4.63
7	myAccounting has increased my understanding about accounting concept.	4.66
8	myAccounting facilitates the learning and teaching process among students and teachers.	4.62
9	myAccounting helps students remember the commonly used terms in the Principles of Accounting course.	4.63
10	myAccounting helps students produce an entire set of accounting reports sequentially, quickly and correctly.	4.65
11	myAccounting is easy to use.	4.66

"1" = Strongly disagree, "2" = Disagree, "3" = Neutral, "4" = Agree, "5" = Strongly agree

The empirical test shows that the lowest mean was for the question "myAccounting helps me remember the financial reporting format in the Principles of Accounting course."

(mean = 4.59); this could indicate that some students are not finding myAccounting helpful in making them remember the financial reporting format or teachers has not adequately taught students the financial reporting format. On the other hand, there are two questions with the highest mean, 4.66, and the statement is “myAccounting has increased my understanding about accounting concept.” and “myAccounting is easy to use.” (Table 2).

Discussion

Our findings not only echo the observations of Rackliffe and Ragland (2016) regarding improved student understanding and conceptual grasp, but also resonate with Professor (2004) work highlighting the enhanced learning and teaching processes facilitated by certain tools. Moreover, our results corroborate Mosbah’s (2022) insights on the potential for efficient and effective instruction using technology. Furthermore, the encouraging feedback we received solidifies the positive impact of myAccounting, as predicted by numerous scholars. From the early work of Poon et al (2024) emphasizing increased student engagement and confidence, to Borthick and Schneider (2023); Borthick et al (2017) focus on balancing technological integration with core accounting principles, and finally, the recent explorations of Muchsini et al (2023) into the potential of accounting-specific software design for developing computational thinking skills, myAccounting sits firmly within the existing research landscape, validating its efficacy and highlighting its promising future contributions to the field of accounting education.

Conclusion

This study sheds light on myAccounting, an innovative platform designed to transform Principles of Accounting education in vocational colleges. Examining student and teacher perceptions revealed enthusiastic endorsement of the system, with users praising its effectiveness in clarifying challenging concepts. These findings suggest that embracing myAccounting as a part of the teaching and learning process can unlock a more efficient and impactful approach to accounting education.

Contribution of the Study

In the realm of accounting education for vocational colleges, particularly in Malaysia, a persistent challenge lies in students' difficulty grasping disconnected accounting concepts. This research intervenes by introducing "myAccounting," a tool specifically designed to bridge these gaps and foster a holistic understanding of the subject. By meticulously analyzing its impact, the study unveils a multitude of benefits, including enhanced learning outcomes, improved recall of key vocabulary and report formats, and a significant reduction in teacher workload associated with repetitive tasks and manual formatting. These findings not only illuminate a successful approach within the Malaysian context but also contribute meaningfully to the theoretical understanding of connected learning in accounting education, potentially paving the way for broader application across diverse educational settings. Furthermore, the research proposes the integration of the double-entry system into myAccounting as a future avenue for exploration, holding the promise of even more robust learning outcomes and solidifying its position as a valuable tool in the accounting education landscape.

Limitation and Recommendation

While this study provides valuable insights into myAccounting within vocational colleges, future research holds immense potential to broaden its reach and impact. By exploring its application in other educational contexts and refining its features, future researchers can contribute to the development of an even more effective and comprehensive learning tool for students and teachers across various educational settings.

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