

## A Case Study on Polytechnic Mukah towards the Effectiveness of “HABA” Technique in Accrual Accounting Adjustment

(Kajian Kes di Politeknik Mukah terhadap Keberkesanan Teknik “HABA” dalam Pelarasan  
Perakaunan Asas Akruan)

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### **Abstract**

The purpose of this research is to examine the effectiveness of the *HABA* technique in improving students' academic performance and strengthening the knowledge and skills of the students on performing the accrual accounting adjustment. This research is designed by adopting the quasi-experimental pre-test and post-test method. The questionnaire has been distributed to first-semester accounting students who took a basic accounting course. The descriptive statistic was used for the data analysis. Referring to the result, it shows that there is a significant improvement in students' achievement after applying the *HABA* technique based on the grading system. Most of the students also agreed that this technique can strengthen their knowledge and skills for the preparation of accrual accounting adjustment. Therefore, in conclusion, it is proven that the *HABA* technique is significant to boost students' performance and eventually mole students' knowledge and skills in the accrual accounting adjustment.

**Keywords:** Accrual accounting adjustment, *HABA* technique

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## INTRODUCTION

Looking at the syllabus for Fundamental of Accounting (FoA) course or also known as basic accounting, Diploma of Accountancy and Business Study share the same syllabus structure. This course has five main subtopics which journal entry (J.E), double entry (D.E), cash book (C.B), trial balance (TB), financial statement with adjustment (Adj.) or commonly known as adjustment. For the first three subtopics, it will be tested in continuous assessment known as Test 1 while the other two in Test 2. According to the syllabus, both programs have a specific assessment for the preparation of financial statements with accrual basis adjustment. It is also a compulsory question that will be tested during the final examination. But starting June 2019, the syllabus has changed and the only syllabus for Diploma Accountancy remained.

Based on the survey being conducted, 74.1% of the students from the Diploma of Accountancy do not have any accounting background during secondary school. Taking into consideration the current scenario, the course lecturer takes a proactive approach by introducing a fun learning teaching method using the *Hasil Akru Belanja Akru (HABA)* technique. The idea of fun learning was taken from Simon, Johny Wan, and Stephen Ko (2019) where interactivity and performance of the students can be enhanced through interactive and collaborative approaches rather than the traditional method.

Then this research was conducted to examine the effectiveness of the *HABA* technique to improve students' achievement in accrual basis adjustment. Besides, this research has also been performed to examine the effectiveness of the *HABA* technique to strengthen the knowledge and skills of the first-semester accounting students of Polytechnic Mukah in performing accrual basis adjustments. Through these two objectives, it is hoped that the research can contribute to the application of new learning and teaching technique for basic accounting courses.

### PROBLEM STATEMENT

Subtopic financial statement with adjustment is actually a combination of two accounting process which is adjustment and preparation of financial statement. During a lecture for this subtopic, the lecturer found that students have difficulties to understand the concept of adjustment. Most of the students were unable to solve the questions given. The problem was getting even worse when the lecturer proceeded to the final stage of subtopic which is the combination of adjustment and financial statement. It is because these two processes are interrelated and it is the continuing process of technical accounting skills in preparing full financial statements. This scenario has been portrayed in Test 2 marks where there is significant drop in students' performance as compared to Test 1. The percentage of students' achievement for grades A and B drastically dropped meanwhile the percentage of students failed which is grade E and F significantly increased.

Through this result, it reflects the difficulties faced by the students to perform the accrual basis adjustment. These issues synchronized with Paul and Kerry (2019) where accrual accounting is found to be hard and difficult to perform. It required knowledge and technical skills to practice the accrual accounting. According to Sylvia, Eko, and Roekhuudin (2018), accrual basis is difficult compared to a cash basis because it applied a distinct rule of knowledge in preparation of the statements. Then, referring to Sabrina, Laura, and Benedetta (2018), the gaps between skills and knowledge have created confusion for applying accrual accounting. Then the issues of confusion need to be solved through proper enhancement of skills and knowledge.

## RESEARCH OBJECTIVES

This research is conducted with two main objectives which are

- (i) To examine the effectiveness of *HABA* technique in improving students' performance on accrual basis adjustment.
- (ii) To examine the effectiveness of *HABA* technique in strengthening students' knowledge and skills on accrual accounting adjustment.

## **LITERATURE REVIEW**

Accounting consists of two types of basis which are cash basis and accrual basis. Referring to Nancy (1994), the cash basis is defined as where the revenue and expenses are recognized when the actual cash is received or payout. Meanwhile, the accrual basis is where the recognition of revenue took place when it was earned and expenses when it was incurred. In the current accounting environment, businesses and organizations used accrual accounting basis rather than a cash basis for the preparation of their financial report. It is because the accrual concept meets the matching accounting principle. (Edward, James, & Lorne, 2016).

Besides, according to Adriana and Irvine (2018), the accrual accounting approach has several advantages which include the completeness of records, better planning tools, providing reliable management and decision making instruments. Jelena, Vesna, and Tatjana (2019) added that accrual accounting provides a better measure of the sustainable fiscal policy condition rather than cash accounting. In contrast, Sabrina et al. (2018) pointed out that, the cash accounting approach is not sufficient to assure the suitable control over organizational performance.

Unfortunately, the accrual basis is not easy to understand and implement. According to Adriana et al. (2018), accrual accounting is far too complex in many aspects. The construction of the basis is also complicated. It is because in some European countries, there is ambivalence on the implementation of the accrual basis. (Reichard & Van Helden, 2016; Jelena et al, 2019). Furthermore, according to Yosra and Yosra (2019), the accrual basis is too high in quality and its standards are too sophisticated. It required adequate training programs for the professional to develop their skills and expertise.

Since the professional also has difficulties in understanding the knowledge and perform accrual basis accounting, the issues are even worse for university students. Referring to Sabrina et al. (2018), universities have highlighted the issues on lack of knowledge on accrual accounting among the students is due to the inability of the students to coordinate the basic fundamental of accrual accounting which is the accounting equation. Moreover, the students are also unable to identify the revenue and expenses due to lack of knowledge and skills on the affirmation of most accrual criteria.

## **RESEARCH METHODOLOGY**

### RESEARCH DESIGN

This study used action research model by Kemmis, Stephen and Mc Taggart Model (1988) where this model used pre-observation approach as to identify the related issue, the possible action plan, the selected action is taken, observe and analyze the collected data and lastly make a reflection as to examine the result on the effectiveness of the intervention that been applied. According to Toquero (2020), action research is defined as research that been conducted by one or more personnel to solve an issue or to gather some useful information for local practices.

Besides, Latif, Sari, and Riyadi (2017) added that the action research is crucial for educators to improve their evidence-based teaching practices, where it will be a helpful

tool for them to search for a possible solution on their real based problem in school. It is because the solutions to action research will enable the educators to improve the instruction while simultaneously improve students learning process. Lastly, Latif et al. (2017) also added that the action research was considered as a viable and realistic effort for educators to examine their instructional strategy, the pedagogical method used and event their curriculum programme.

The purpose of this research is to examine the improvement of students' achievement and knowledge strengthen on conducting the accrual basis adjustment through the *HABA* technique. The researcher uses quantitative technique since it can provide significant valuable insight as for rearranging reality and discourses it while reducing the personal bias (Savela, 2018) for the data collection and run statistical data analysis to understand and interpret the trend of the result.

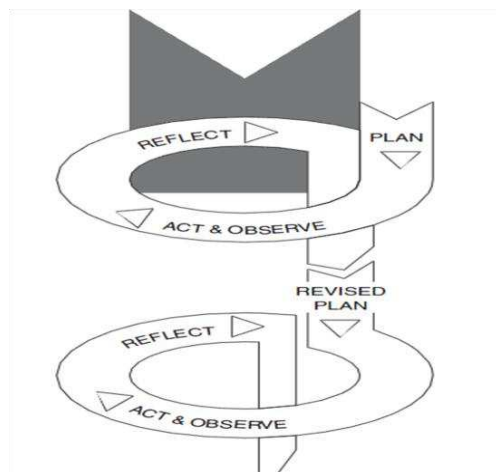


Figure 1. Basic Phase of Action Research (Kemmis, Stephen, & McTaggart, 1988)

During the planning phase, as referred to in Figure 1, the researcher found that the students have difficulties to understand and perform the accrual basis adjustment. Then the researcher thought of another learning method that might help the students on these issues which is through the *HABA* technique. Then, under the act and observe phase, the researcher will explain to the students how to use and derive the *HABA* technique. After that, the researcher will observe the students' progress on the adjustment of the accrual basis after using the technique. Lastly, the researcher will perform a reflection to access students' performance after applying the technique. If there are any weaknesses spotted by the researcher, then an adjustment in the planning stage needs to be done and the process will continue.

#### RESEARCH POPULATION AND SAMPLING

The study subject consists of 31 first-semester accounting students from Polytechnic Mukah from two different academic sessions, the June 2018 Session and the June 2019 Session for comparison purposes. The students were selected based on the name list that has been generated from *Sistem Pengurusan Maklumat Pelajar* (SPMP) where the first 31 students from the list are selected automatically.

The students have been selected without been looking into other specific criteria such as their academic qualification, gender, or their secondary school background. It is because to avoid bias in the sample. The result of Session June 2018 will be the pre-intervention result, while Session June 2019 will be the post-intervention result.

## RESEARCH PROCEDURE

As to examine whether the *HABA* technique can improve student achievement in accrual basis adjustment, the pre-test and post-test have been performed to see the differences in student performance before and after applying the *HABA* technique. Meanwhile, as to examine the effectiveness of the *HABA* technique on strengthening the knowledge and skills of the students in conducting accrual basis adjustment, the questionnaire has been distributed to all respective respondents and the result has been analyzed by using a descriptive statistical approach. The details of the procedure on how to use the *HABA* technique are as follow:

- (iii) The lecturer needs to ensure that the students can recognize and categories five basic types of account which are asset, liabilities, equity, revenue, and expenses.
- (iv) The lecturer needs to explain to the students the concept of accrual and prepaid accounting, which includes the terminologies used in *Malay* language.
- (v) The lecturer will show to the students on how to construct or derive the *HABA* table.
- (vi) The lecturer will guide the students on how to use the constructed *HABA* table and applied it to their accrual basis adjustment.

## **ACTION PERFORMED**

### DERIVE *HABA* TECHNIQUE

To derive *HABA* technique, students will be guided by the course lecturer to construct the *HABA* table as follows:

- (i) Construct table consist of two columns and three rows.
- (ii) Fill in the first row with the following acronyms which is CA in first column and CL in second column. Whereas, second row with HA in first column and BA in second column.
- (iii) Then, from the "*HABA*" acronyms above, derive the following acronyms for the blank space in third row. Bring down the letter "H" from top left column in second row to bottom right column in third row and bring down letter "B" from top right column in second row to bottom left column in third row.
- (iv) Then, replace letter "A" in the second row with letter "D" in the third row.
- (v) Then, your *HABA* table will look like this:

| CA | CL |
|----|----|
| HA | BA |
| BD | HD |

Legend:

CA: Current Asset; CL: Current Liability

HA: *Hasil Akru* (Accrued Revenue); BA: *Belanja Akru* (Accrued Expenses)

BD: *Belanja Dahulu* (Prepaid Expenses); HD: *Hasil Dahulu* (Unearned Revenue)

Figure 2. *HABA* Table

### APPLICATION OF *HABA* TECHNIQUE

- (i) After constructing the *HABA* table as above, students are required to understand the adjustment that need to be done.
- (ii) Students need to identify the account involved and its original category of the adjustment transaction.
- (iii) Convert the original category into *Malay* language whether *Belanja* (B) or *Hasil* (H).
- (iv) Identify the overall transaction whether it falls under accrual or prepaid transaction.
- (v) Convert the overall transaction into *Malay* language whether it is *Akru* (A) or *Dahulu* (D).

- (vi) Identify the combination of acronyms by referring to the table that has been derived.
- (vii) Lastly, refer to the classification of account in the first row whether it CA or CL by looking in which column the combination of acronyms falls.

#### Example of Application of HABA Technique

*Situation 1:* The ADS Sdn. Bhd. has additional information of an outstanding utilities bill amounting to RM 700 until closing accounting period on 31 December 20X0.

#### *Steps applying HABA Technique:*

- (i) Construct *HABA* table as Figure 2.
- (ii) Identify the account involved and its original category where in this example the account involved is utilities and original category is expenses.
- (iii) Convert the category (expenses) into *Malay* language which is *Belanja* (B).
- (iv) Identify the overall transaction and in this situation it is about outstanding utilities which meant accrual transaction.
- (v) Convert the accrual into *Malay* language which *Akru* (A).
- (vi) Then, the combination of acronyms is "BA".
- (vii) Based on the *HABA* table, "BA" falls under column CL which is current liability. Therefore, Accrued Utilities will be presented under Current Liabilities in Financial Position.

## **RESEARCH FINDINGS AND DISCUSSION**

### RESULTS

Based on the statistical result below, there are significant differences in students' performance on accrual accounting adjustment before and after implementing the *HABA* technique. The *p*-value for both assessments, Test 2, and Final examination is significant at 1%. Then it is proven that the *HABA* technique can improve students' performance on accrual accounting adjustment. Besides, the mean for the post-test results is higher which is around 82 to 90 percent compared to the pre-test which is only 60 to 67 percent. It has also been supported by the standard deviation result that shows the dispersion of the result after implemented the *HABA* technique is smaller compared to before implement the *HABA* technique.

Table 1. Statistical analysis result

|                    | Continues Assessment Test 2   |                                | Final Examination             |                                |
|--------------------|-------------------------------|--------------------------------|-------------------------------|--------------------------------|
|                    | Session June 18<br>(Pre-Test) | Session June 19<br>(Post-Test) | Session June 18<br>(Pre-Test) | Session June 19<br>(Post-Test) |
| <i>p</i> -value    | 0.00002*                      |                                | 0.00003*                      |                                |
| Mean               | 60                            | 82.10                          | 67.32                         | 90.13                          |
| Median             | 58                            | 86                             | 73                            | 94                             |
| Standard Deviation | 22.409                        | 17.182                         | 24.811                        | 14.939                         |

*Note.* \*Significance at the level of .01

Figure 3 below shows the results of the pre and post-test that have been implemented for Test 2. It shows that there is a significant increase of 34.4% in students' performance that achieved grade A (A+, A, and A-) and a 17.91% increase in students' achievement in grade B (B+, B, and B-) categories. Therefore, in total, there is about 52.31% increase in students' achievement for grade A and B after implementing the *HABA* technique. In contrast, there is a drastic drop in the percentage of students' performance for grade C+ to grade F. Based on the result in Figure 3, it shows that this technique, was able to eliminate almost all grades achievement from grade C+ and

below. Based on percentage, the drop in grade C+ to grade F from session Jun 2018 to session June 2019 is about 94.19%.

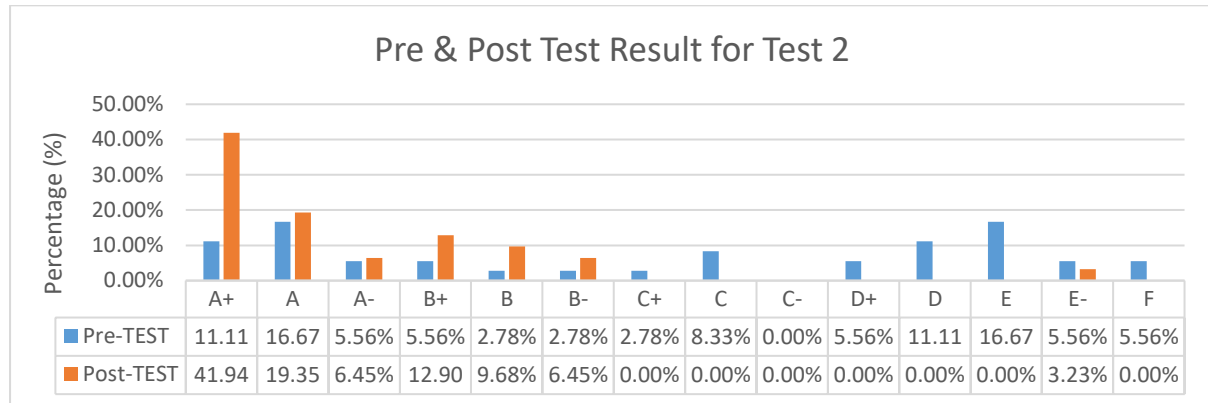


Figure 3. Pre & post test result for Test 2

Figure 4 below shows the results of the pre and post-test that have been implemented for the final examination for both academic sessions. The result shows that there is a huge significant increase in students' performance in session June 2019 compared to session June 2018 that achieved a grade A (A+, A, and A-) which is about 132.25%. On the other hand, there is a huge drop in students' achievement for grade B+ to F which is about 94.86%. Again, it shows that the implementation of the *HABA* technique is able to transform the students from moderate and poor categories to good and excellent categories.

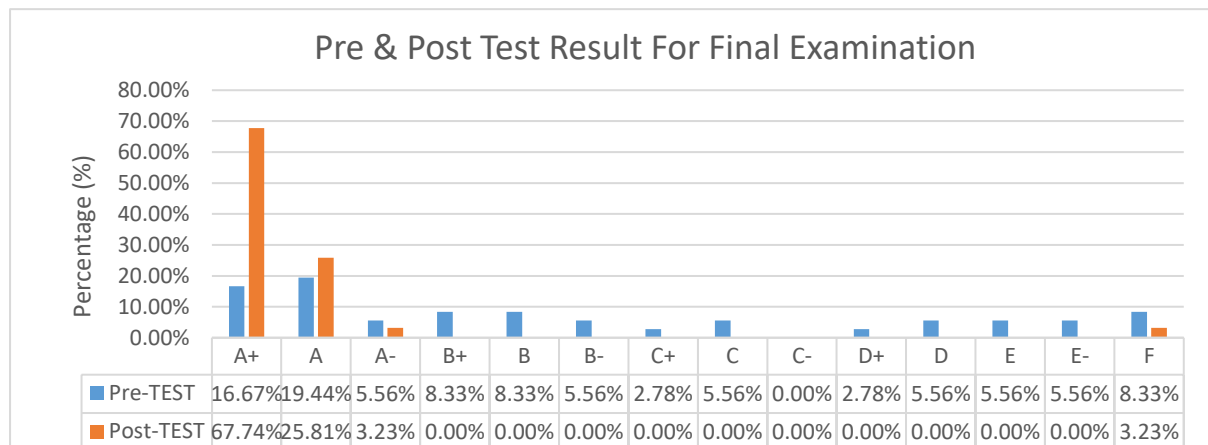


Figure 4. Pre & post test result for final examination

Table 2, 3, and 4 below show the summary of statistical result on the effectiveness of the *HABA* technique for strengthening the knowledge and skills on accrual basis adjustment. Besides, based on the questionnaire that been distributed to the respondents, generally, it shows more than 60 percent of the respondents agreed that the accrual basis adjustment is the most difficult and confusing topic to understand. Meanwhile, more than 70 percent of the students agreed that the *HABA* technique was able to help them in solving the accrual basis adjustment difficulties while strengthening their knowledge and skills on the respective topics.

Based on the respondents' responses in table 2, 53.7% of the students agreed that the basic accounting is considered as hard. This result is synchronize with the data gathered where 74.1% of the respondents do not have accounting background during secondary school. For them it is hard to understand the concept and considered as new input for the respondents to absorb.

Table 2. Level of difficulties for basic accounting course

|   | Knowledge of matter   | Result (%) |      |          |      |
|---|---|------------|------|----------|------|
|   |   | Very Easy  | Easy | Moderate | Hard |
| 1 | How do you grade the level of difficulties for basic accounting course during your diploma level? | 0.0        | 5.6  | 40.7     | 46.3 |
|   |   |            |      |          | 7.4  |

Table 3 shows the level of difficulties results among the subtopic for the basic accounting course. It shows that 68.5% of students agreed that the adjustment topic considered the most difficult topic to understand. Besides, 50% of the students agreed that the topic is the most confusing topic to be performed.

Table 3. The level of difficulties among subtopics of the basic accounting course

|   | Knowledge of matter  | Result (%) |      |     |     |      |
|---|--|------------|------|-----|-----|------|
|   |  | J.E        | D.E  | CB  | TB  | Adj. |
| 1 | Which of the following part of your FoA syllabus you found it difficult to understand? | 1.9        | 13   | 9.3 | 7.4 | 68.5 |
| 2 | Which of the following part of your FoA syllabus you found it confusing to perform?    | 7.4        | 16.7 | 13  | 13  | 50   |

Note.

J.E: Journal entry; D.E: Double entry; CB: Cash Book; TB: Trial balance; Adj.: Financial statement with adjustment

FoA: Fundamental of Accounting

Table 4 tabulated the result of the effectiveness of the *HABA* technique in strengthening the knowledge and skills on accrual basis adjustment among the students. Based on the result, it shows that 77.7% of the students agreed that the technique is a helpful tool for them to perform the accrual basis adjustment. Furthermore, 75.9% of the respondents agreed that with the technique, it is faster to perform the accrual basis adjustment and lastly 74.1% of the respondents agreed that the technique is really helpful in strengthening their knowledge and skill on accrual basis adjustment.

Table 4. Statistical result on the effectiveness of *HABA* technique for strengthening knowledge and skills on accrual basis adjustment

|   | Effectiveness of technique  | Result (%)       |             |         |         |
|---|---|------------------|-------------|---------|---------|
|   |   | Not very helpful | Not helpful | Neutral | Helpful |
| 1 | Does <i>HABA</i> technique helpful in performing your accrual basis adjustment?                                   | 0                | 0           | 22.2    | 33.3    |
| 2 | Is it time saving while using <i>HABA</i> technique in solving your accrual basis adjustment?                     | 0                | 0           | 24.1    | 35.2    |
| 3 | Do you felt <i>HABA</i> technique helpful in strengthening your knowledge and skills on accrual basis adjustment? | 0                | 0           | 25.9    | 27.8    |
|   |   |                  |             |         | 46.3    |

## REFLECTION OF THE RESEARCH

According to the feedback from the respondent in Table 5, most of them agreed that the technique is not only a helpful tool for them, but it also enables them to understand better for the adjustment subtopic. It can be shown that 81.5% of the respondents is willing to share the knowledge of the *HABA* technique to others especially in performing the accrual basis adjustment while 79.6% of them suggested that the other lecturer can



use, or expand the knowledge of the *HABA* technique for other accounting courses. Their willingness and suggestion have portrayed the effectiveness of the *HABA* technique.

Table 5. Result on preservation of knowledge on *HABA* technique

| Preserve knowledge |  | Result (%)        |          |         |       |                |
|--------------------|--|-------------------|----------|---------|-------|----------------|
|                    |  | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
| 1                  | Would you suggest the other lecturer to apply <i>HABA</i> technique for other accounting courses?                      | 0                 | 0        | 18.5    | 24.1  | 57.4           |
| 2                  | Would you willing to share the knowledge of using <i>HABA</i> technique to others in solving accrual basis adjustment? | 0                 | 1.9      | 18.5    | 22.2  | 57.4           |

## RECOMMENDATIONS AND CONCLUSION

### FUTURE RECOMMENDATIONS

From the research being conducted, the implementation of the *HABA* technique is able to improve students' performance and strengthening the knowledge and skills in performing accrual basis adjustments. However, this study was conducted only on Accountancy students because of the changes in syllabus structure in June 2019. Therefore, it would be plausible to expand the research on the Business Study and Secretarial Science students. It is because we can assess in detail the level of adaptation of the technique on the Business Study and Secretarial Science students.

### CONCLUSION

Based on the results above, it proves that the implementation of the *HABA* technique in teaching methods is able to improve students' performance in the basic accounting courses especially on the massive increment in grade A (A+, A, & A-) achievement that shows the quality of students' performance. Besides, it also proves that this technique is able to help in decreasing the percentage of students who fail previously which in grade E and F to almost zero. Therefore, it can be concluded that the *HABA* technique is able to improve students' performance in basic accounting courses among first-semester accountancy students of Polytechnic Mukah. It is also supported by the *p*-value where the improvement of students' performance is significant at 1%.

The implementation of the *HABA* technique was also able to effectively strengthen the knowledge and skills of the accounting students on the accrual basis adjustment of basic accounting courses. According to the statistical result above, most of the respondents agreed with the statement and the technique also found to be helpful for them to solve the accrual basis adjustment.

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