

BRIDGING THE GAP BETWEEN BASIC FINANCIAL ACCOUNTING KNOWLEDGE IN HIGH SCHOOL AND HIGHER EDUCATION (COLLEGE)

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Abstract

Observing phenomenon of gap between basic financial accounting learning materials in high school and university levels has encouraged the research team to try and harmonize this knowledge by using sharing method. The aim is to bridge the gap between accounting in high school and basic financial accounting in college. This research, using analytical descriptive method, makes high school teachers as the unit under study who are willing to take part in this program. Sharing through webinars has been held in 2020 and 2021. The activity was attended by 14 SMAs & SMKs with eighteen teachers and one hundred and twenty-eight students. Materials on adjustment entries and fixed assets have been taught, according to requests from teachers. The material is presented in the form of a two-way discussion, while students are given an introduction to the accounting profession. The enrichment of accounting knowledge associated with today's business practices, which can be applied in teaching and learning activities, is recognized by the teachers as very useful. This understanding will form the building of accounting knowledge that students will have in the future.

Keywords: accounting training, accounting subject teacher, high school accounting.

1. INTRODUCTION

The very dynamic changes that occur in the business world are the result of very rapid technological changes (Novita, 2018). The business environment is changing very quickly through changes in business orientation from a domestic scope to a global one. The circulation of traded goods and services, which was originally carried out between companies and domestic consumers, is now carried out between companies and with consumers in other countries (Doupnik et. al, 2020).

The rapid developments in the business world have encouraged accounting experts to develop accounting knowledge so that it is in line with development of business practices. According to Mulyadi (2013), development of business world which is influenced by development of digital technology in the industrial era 4.0 has influenced accounting. Accounting science in this era must be able to handle digital transactions, both trading and turnover of virtual currency transactions, such as crypto currency, or foreign currency transactions globally (Doupnik et. al, 2020). Accounting experts strive to develop accounting science in order to support economic transactions in accordance with today's progress.

Accounting science itself has adapted a little to the industrial era 4.0 because it is influenced by technological advances, as revealed by Mulyadi (2013), that technological advances greatly affect accounting, especially accounting information systems. Some examples of changes in accounting science, for example are the birth of accounting for online trading, taxes for online trading, asset recognition based on fair market value, and the use of computers in accounting (Maharsi, 2000), to carry out accounting in a company, or use the basis of big companies. These accounting materials have been taught in basic accounting courses at universities.

On the other hand, according to teachers, the development of accounting science at high school level has received less attention, even though accounting is a dynamic field of science and constantly adapts to the latest business developments. Teachers, for example, teach material that is no longer up to date. If this happens, the student becomes the disadvantaged party, because there will be a discrepancy in the material regarding accounting taught in high school and in college.

So far, teachers only get information about the outline of material to be delivered in class through syllabus provided by Ministry of Education and Culture. The Subject Teacher Consultation (MGMP) is considered not effective enough to provide information on the development of accounting knowledge. Of course, efforts are required to overcome this. Whereas according to Stauffer (2020), knowledge of basic accounting is the basis for building accounting knowledge.

One way to overcome incompatibility of accounting material above, among others, can be done through equalization of knowledge about basic accounting between teachers and lecturers of basic accounting courses in order to achieve in-line material between high school education and college. This is what triggers the implementation of research on 'How to Bridge the Knowledge Gap on Basic Accounting Materials at the Higher Education Level and in Higher Education'. Based on background described previously, this study emphasize more to discuss further about: differences in basic financial accounting knowledge in high school and college, as well as how to harmonize basic financial accounting knowledge at the two levels.

2. LITERATURE REVIEW

In initial semester of lectures in accounting department, all universities require students to take Basic Accounting courses. As a course taught in the first semester, there is no doubt that this course plays an important and decisive role in delivering students who will study accounting and other related courses at the next stage. As an introductory course, this course is intended to provide basic or fundamental knowledge to students. Therefore, the building of accounting knowledge possessed by students in the future will be greatly influenced by the success of learning this course. Completing this description, on the other hand Wilder (2021), states that the success of students majoring in accounting in various accounting courses is strongly influenced by accounting knowledge acquired since high school. Meanwhile, best accredited colleges (2021) state that to become successful accountants, it is recommended that students, beginning in high school, have taken accounting, finance, and economics subjects as the basis of an accountant's knowledge. Reinforcing this, Davis (2021) states that someone who studies accounting majors will realize that he should study accounting subjects since high school, because it supports his graduation as a better accountant. In line with this, results of Lynn's (2010) study concluded that accounting knowledge of high school students significantly affects success of college studies majoring in accounting.

The purpose of basic accounting course is for students to understand basic concepts of accounting well. Basic concept of understanding accounting according to Weygant et. al

(2012) consists of three main parts, namely assets, liabilities, and equity. Assets are resources owned by a business. Success of learning in this course is influenced by his high school graduation background, whether from social studies or non-IPS. According to Junira et. al (2021), it was stated that students' understanding of basic concepts of accounting differed significantly between those who graduated from the Social Sciences major who understood the basic concepts better than those of the Science major. Meanwhile, according to Hanifah (2016), there is a significant difference in the understanding of accounting between SMK graduates majoring in Accounting and SMA graduates from Social Studies on basic concepts of accounting for assets, liabilities and capital. Shaufani (2021) revealed different research results, namely that there were no differences in students' understanding of introductory accounting courses based on high school science and social studies graduates.

3. RESEARCH METHODS

The method used in this research is descriptive analytic (Sekaran and Bougie, 2017), with research stages carried out as follows: (1) Based on the objectives to be achieved, namely aligning basic financial accounting knowledge in college with in high school. For this purpose, the collection of data and information about material is carried out. Material information in high school was obtained from interviews and questionnaires for high school teachers who teach accounting. (2) The results of questionnaire on high school teachers were then processed and analyzed until it was known what the differences in the material discrepancies were. (3) at this stage, steps are set to overcome the discrepancy between these materials, namely by sharing the latest accounting knowledge with high school teachers who teach these materials. (4) The sharing process carried out consists of steps, namely understanding the needs of the required accounting material, preparing the sharing material module, implementing sharing activities, and evaluating sharing activities. (5) the final stage is to evaluate the participants through distribution of questionnaires distributed after the activity takes place to get feedback.

Data collection technique applied is to collect primary data, which begins with stage of understanding the needs of accounting subject teachers in SMA by distributing

questionnaires to SMAs in Bandung City asking for interest in participating in accounting training and the desired material. Of the 30 SMAs that were contacted, it turned out that only 14 SMA stated that they would take part in this activity. Based on results of the questionnaire, information was obtained that the material desired was quite diverse, including: adjustment entries, fixed assets, inventory, to the use of accounting software. Seeing that the majority of requests were regarding adjustments and fixed assets, 2 modules were made, namely adjustment entries for service companies and trading companies, and the fixed assets module. Sharing activities had been carried out in 2020 and 2021. Secondary data is collected to meet a wide range of material that is appropriate to the needs, for example a high school textbook, namely the Class XII SMA/MA Economic Activity Lens by Nurhadi. The book Financial Accounting with IFRS 4th Edition is used in basic accounting lectures for depreciation and Fixed assets. In addition, material on plants and intangible assets refers to Managerial Accounting 18th Edition book which is also used as teaching material in lectures.

These modules are used as a guide for material to be delivered by facilitator and discussed with training participants. The next stage is the implementation of sharing activities which are carried out in 6 implementation batches according to the availability of time from each school. Sharing activities are carried out through media zoom meeting because it is not possible to hold face-to-face meetings in the COVID-19 pandemic situation.

4. RESULTS AND DISCUSSION

This research was triggered by information from high school teachers who wanted knowledge of basic accounting. The teachers felt that they did not get updated material regarding accounting, which was considered no longer suitable with current conditions of business world, especially in the era of industry 4.0. In fact, accounting is a dynamic field of science. According to Mulyadi (2013), technological advances which have influenced the progress of business world, have influenced accounting science, especially accounting information systems in terms of data processing, internal control, as well as increasing amount and quality of information in financial reporting.

More specifically, lack of updates on accounting materials in high school has led to a misalignment between basic accounting knowledge in college and high school. This gap can be interpreted that accounting materials in high school are not updated with the latest business conditions, giving the impression of being outdated compared to basic accounting materials in universities which always refer to the dynamic development of the business world. For example, updating for valuation of assets based on fair market value, omission of accounting for goodwill, discussion of accounting practices commonly used in companies, and to the most recent is the use of technology in accounting (William et. al, 2018)

Financial Accounting Standards (2020) in Indonesia constantly adapt to the latest business developments (SAK, 2020). So far, teachers only get information about outline of material to be delivered in class through the syllabus provided by the Ministry of Education and Culture. The Subject Teacher Consultation (MGMP) is also considered not effective enough to provide information or development of knowledge about accounting. The teachers are worried that their students will experience difficulties when taking basic financial accounting courses at higher education level.

In addition, delay in the development of knowledge about accounting and the latest issues in accounting has led to the emergence of an understanding that accounting is only limited to recording and clerical calculations to cause accounting looked as a difficult and boring subject. The emergence of issue that accounting profession will become extinct and replaced by technology tends to be ignored by teachers because teachers are not able to explain the future career of the accounting profession and do not understand the reasons why accounting profession will not become extinct. As described by Setyawati (2020), accounting profession will not become extinct, because it is still needed for accurate data input, analysis and decision making on financial reports produced by a company. This description shows that there is a difference in understanding of basic accounting material in higher education and in college. There are 2 main topics of questionnaire that are generated based on the understanding of the accounting material needs desired by high school teachers, namely adjusting entries and Fixed assets. (property, plant and equipment). That's why the team made 2 modules containing the two materials to be shared with the teachers.

Efforts to harmonize basic financial accounting knowledge for high school teachers are carried out through sharing method. During the sharing, teachers who took part in this activity showed great enthusiasm, which was evident from in-depth interactive discussions between participants and facilitators, regarding theory, learning practices at upper levels, as well as common practices in companies. As stated by Maharsi (2000), in the company itself, the implementation of accounting has changed a lot due to the presence of technological changes. This change affects information processing in a company information system. This activity is expected to provide benefits for high school teachers, and become a means to develop knowledge related to accounting as enrichment and teaching materials in high school.

The high school teachers who have participated in this sharing hope that this activity will not stop and can continue. The teachers hope to participate in subsequent activities with different materials, such as inventory accounting or the use of accounting software, or by holding sharing activities with other different schools. The activity ends with an evaluation stage by the participants.

Meanwhile, students who took part in this activity received an explanation about introduction of the breadth of accounting profession. The students seemed enthusiastic to join it. This can be seen from the questions asked about career and future of accountants. In addition, it is also hoped that the reason accounting profession will not become extinct as stated by Setyawati (2020), can open up insight of high school students about accounting profession and encourage students' interest in accounting to be even greater.

The high school participants who took part in this sharing are described in the table below.

Table 1
Training Participant

| SMA | SMAN | SMK |
|-----------------------|----------|--------------------------|
| 1 SMA Yahya | 1 SMAN 1 | 1 SMK Kharisma Nusantara |
| 2 SMA Plus Muthahhari | 2 SMAN 3 | 2 SMK Tegalwaru |
| 3 SMA Santa Maria 1 | 3 SMAN 4 | 3 SMK Sukatani |
| 4 SMA Santa Maria 2 | 4 SMAN 6 | 4 SMKN 1 |
| 5 SMA Santa Maria 3 | | |
| 6 SMA Santa Angela | | |

Sources: Data Processed, 2021

The table 1 above shows that the participants of higher education who took part in this activity were 14 schools, consisting of 18 teachers and 128 students. It is also recorded that 22% of teachers hold master's degrees and the remaining 72% hold bachelor's degrees. The teachers were very enthusiastic about participating in this sharing activity when they asked questions that led to warm discussions, including as shown in Table 2.

Table 2
List of Questions and Answers Discussion Session

| Teacher's Questions | Facilitator's Answer/Discussion |
|--|--|
| 1 Why are adjusting journal entries needed? | Adjusting entries are needed because the information contained in the trial balance is not complete, there are even some accounts whose values are not correct. The presence of practical aspect causes some accounts to have journals that have just been made at the beginning of the period (e.g., prepaid) or at the end of the period (e.g., depreciation). |
| 2 Under what conditions does the company record prepaid insurance costs as expenses? | Actually, the company may choose any method freely, it just needs to be done consistently. Emphasis is placed on recognition as an expense, because the company considers it more important to know the cost. |
| 3 Generally, which method is used by companies in practice, is it prepaid or direct expense? | Companies can choose either method, prepaid or expense, but must be consistent in journalizing. |
| 4 How is the adjustment for inventory at a merchandising company? | With periodic system recording: (1) Dr. Income Summary Cr. Beginning merchandise inventory (2) Dr. Ending merchandise inventory Cr. Income Summary |
| 5 How to journalize accrued expenses? | Example of wages still to be paid: Dr. Wage cost Cr. Wages payable |
| 6 How to journalize accrued income | Dr. Receivables Cr. Income |

| | |
|--|--|
| 7 Why do fixed assets need to be depreciated? | Regarding fixed assets purchased by the company, usually the economic life is more than 1 accounting period. That is, it will generate income for more than 1 period as well. So that in a systematic and rational way, each asset used must bear the costs of using the asset in that period. That is, the cost of purchasing property, plant and equipment is recognized as an asset that will be allocated to costs over its economic life. |
| 8 When are assets depreciated on the straight-line method? | If the asset provides benefits that are almost the same amount every period to the company during the years, the asset can be used to generate income. |
| 9 When are assets depreciated using the declining balance method? | If the asset provides a greater amount of benefits in the initial period, and then the benefits decrease in later periods to the company during the years, the asset can be used to generate income. |
| 10 How to determine the economic life of fixed assets? | The company's experience in the past years can be used; or adapted to Indonesian financial accounting standards. Namely, new buildings can be depreciated for 50 years, used buildings, their economic life is 30 years. Whereas equipment is depreciated over 15 years and automobiles are depreciated over 10 years (PSAK Indonesia: 2020). |
| 11 How to journalize expenses that increase the economic life of an asset? | As capital expenditure on related assets, the journal adds to the value of the asset. For example: Dr. Automobile xxx and Cr. cash xxx. |
| 12 How to journalize Depreciation? | Dr. Depreciation fee xxx Cr. Accumulated depreciation xxx |
| 13 How to journalize accrued income taxes? | Dr. Income tax expense xxx Cr. Income tax payable |
| 14 How to journalize accrued interest? | Dr. interest fee xxx Cr. Interest payable |
| 15 Why is land not depreciated? | Because the land owned by the company as fixed assets is land on which buildings are built, so it is not productive land that directly generates income so it does not need to be depreciated, even the price of the land is getting higher over time. |
| 16 What is the adjusting entry for equipment? | Dr. Equipment costs xxx Cr. Equipment xxx |
| 17 What is the journal entry for the cost of goods sold? | Dr. Cost of goods sold Cr. Merchandise inventory |

| | |
|--|---|
| 18 How to journalize uncollectible accounts? | When using the elimination/backup method Dr. Uncollectible accounts receivable Cr. The elimination of uncollectible accounts receivable |
|--|---|

Source: Data Processed, 2021

Below, results of processing the opinions of participants in sharing activities are described in a tabular form. Information described includes the various impacts resulting from sharing activities compared to the conditions of teachers and students before participating in sharing.

Table 3
The Impact Of Changes That Occur After Sharing Activities

| | Before Sharing Activities | After Sharing Activities |
|---|---|--|
| 1 | High school teachers want to get the latest updates on accounting materials | High school teachers get enriched with the latest material on accounting, especially adjusting entries and fixed assets that can be applied in teaching and learning activities in high school |
| 2 | Teachers and students only understand that accounting only does the recording and calculation process | Accounting students and teachers in high school have increased understanding of the broad scope of accounting, which is not only related to clerical work |
| 3 | Influenced by the issue that the accounting profession will become extinct and replaced by technology | High school accounting students and teachers have an increased understanding of the diverse and sustainable accounting professions |

Source: Data Processed, 2021

Table 3 shows that senior high school teachers have increased knowledge of the subject and scope of accounting, as well as the latest accounting practices in companies. In addition, the knowledge of teachers and students is also increasing regarding the breadth and diversity of the accounting profession, as well as aspects of the sustainability of the accounting profession. This additional knowledge can be applied in teaching and learning activities in schools.

The teachers and students have also given their opinions on the course of the sharing activities with the following results:

Table 4
Results Of Participant Evaluation Of Sharing Activities

| | Evaluation Over | Results Achieved |
|---|---------------------------|-------------------------|
| 1 | Facilitator of Material 1 | Good and very good |
| 2 | Facilitator of Material 2 | Good and very good |
| 3 | Topic delivered | Good and very good |
| 4 | Discussion session | Good and very good |
| 5 | Committee | Good and very good |

Source: Data Processed, 2021

Table 4 shows the results of participants evaluation who rated the facilitators as good and very good, the topics given, the discussion sessions carried out, and the committee during sharing activities.

5. CONCLUSIONS

Based on the results of previous discussion, it appears that the knowledge material of financial accounting in high school is not in harmony with basic accounting knowledge in college. Lack of updates with the latest business conditions on accounting materials in high school causes the impression that accounting studied in high school is outdated when the one in universities are always aligned with the latest advances in the business world. This is the gap that must be overcome to harmonize accounting knowledge material at the two levels, because success of studying accounting in college is influenced by accounting knowledge previously acquired in high school.

In this study, university lecturers have shared to high school teachers the accounting knowledge that relates to the latest business conditions. This is done to address the gap above. The increasing knowledge of teachers about the latest accounting materials can be applied in teaching and learning activities in high school education. It is hoped that the quality of teaching and learning activities in schools related to accounting subjects can increase, and can be sufficient provision for graduates when taking accounting education in college.

Research Implication

Further research that can be carried out, as suggested by the participants, is topics of (1) sharing about inventory materials and accounting software applications; (2) research using different research units; and (3) examine the differences in understanding of basic accounting materials between the SMAs that have been studied.

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