

The Challenge for Accounting Competency Development of Students in Indonesia

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Abstract

This research is one of challenges to boost the higher quality of accounting education in Indonesia. Through the educational experiment in six universities, we tried to measure the level of accounting competency for undergraduate students in Indonesia and find the characteristic toward developing students' ability of accounting to follow the social needs in business, industry and economy. In Indonesia, some efforts of human resource development have been enforced. There are several reasons; the free trade in ASEAN community, (2) raising enrolment in higher education, (3) unemployment of youth, (4) the quality of accounting education. This is a joint activity of Indonesian and Japanese researchers, based on the field study. Because accounting is business language, the higher quality in Indonesia also helps younger people to enrich their life. Accounting education is the front door to access easily and effectively to business and also to get a good job for younger generation. Obviously, accounting education has the social responsibility for younger resource development toward the sustainable economy in Indonesia, being enhancing students' competency; knowledge, skills, or technique in higher education. In this examination, we found the difference of score between group of universities and then the significant characteristic for accounting education in Indonesia.

Keywords: Accounting education, Competency, Human resource development, Financial reporting

1. INTRODUCTION

Currently Indonesia is facing the issue of human resources, because this year, there is demographic bonus happen. Since 2014 when the government of Indonesia announced the national strategy to enhance international human development in higher education, the series of activities are still in progress. The being enforced strategy is affected by several backgrounds. First, Indonesia is one nation of ASEAN members. In 2015, ASEAN Economic Community (AEC) has been established and made people, goods and service on trade within the community of ASEAN countries. In this liberalization of economic activities, companies can efficiently and freely deal with business and people can easily come and go between the countries. Second, the enrolment of students into higher education is increasing. Remarkably since 2013, the population has been getting higher. The 2016 enrolment ratio, 23.8 percent reached to the twice as the ten years before. Despite that, even if students finished the undergraduate program, they fail to seek a job. According to the data of BPS, the unemployment of youth is getting worse. The number of Indonesia is 18.6 percent; the biggest among them of Malaysia, Singapore and other Asian countries. In a meanwhile, the previous researches show that companies often evaluate some of workers from those countries have better accounting competency than Indonesian workers. So, due to the great population of youth in Indonesia, it supposes that the increasing competition of job-seeking within ASEAN would be getting heavier. For younger generation, without mastering and enhancing their accounting competency required from business practice, they would not succeed to work. Because accounting is business language, obviously accounting education has the social responsibility for younger resource development toward the sustainable economy in Indonesia, being enhancing students' competency; knowledge,

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skills, or technique in higher education. And then the higher quality in Indonesia also helps younger people to enrich their life.

2. PRIOR RESEARCH AND BACKGROUND

2.1 Globalization of Accounting Education

Globalization gives changes for accounting education in universities. Using the internet, accounting students can know the contents of IFRS and also learn case studies of global fraudulent activities from firms in other countries. Once they are motivated to study more, they can easily and efficiently get the international articles and books, experience the trend, and understand the different culture hid by accounting issues. This means that globalization is a kind of effects to opens the leaning door for students to enhance accounting competency more newly and higher. Then for educators as researches, it also has stimulated them to try to work globally for good research and good education, attending the increasing international workshop, seminar, and conference. Because accounting is common business language in the world, the value of global accounting education existed in diverse cultures, languages, and social, educational, and legal systems. Accordingly, as McPeak et al. (2012) stated, the globalization of students and educators requires for some equivalent criteria or tools to evaluate their knowledge, skills, and technique.

Generally, all of them are included in accounting competency, when firm's asses' students as human resource. Still more, accounting professional education is needed for such a common standard. International Education Standards (IESs) are the outcome of the discussion for common measurement tool of accounting education and then has been expanding among the boarder. IESs have been set by the International Accounting Education Standards Board (IAESB), which is an independent standard-setting body. They consist of the framework and eight standards. In the 2015 framework, professional accounting education is defined as education and training that builds on general education, and imparts (a) professional knowledge, (b) professional skills, and (c) professional values, ethics, and attitudes. The only trained people followed in such education, could be global accounting professionals to set new international accounting standards and regulations to ensure the reliability of financial reporting.

2.2 Unemployment and Access to Higher Education

However, essentially, global accounting education is not focused just only for professionals. It also has to suppose the scope over developing fundamental competency which is helpful for accounting students to get a job. A few of accounting students could want to become CPA or work at accounting firms. Most students choose to work at any private companies or find a workplace to live, using their trained competency. Chaturvedi et al. 2013 indicated the great relation with workplace performance among managers and workers. Their university diploma is the final step before getting a job for undergraduate or graduate students (Pintrich & Schunk 2002). That's why students are motivated by that. In spite of that expectation, they are exposed to be on the severe competition of job seeking activities. This is the unemployment problem of younger generations. Particularly in Indonesia, this issue has been getting serious. After graduating universities, the number of students in Indonesia fails to find a job. Compared to other ASEAN countries, the unemployment ratio of youth in Indonesia is being at the highly serious level. Figure 1 shows the 2016 youth employment ratio from 18 to 24 age reaches to 18.6 percent, though the total of unemployment was 5.6 percent. This situation is affected by the several effects. As the one of them is higher competitiveness between students from the domestic and from overseas countries.

Since 2015 when the free trade system in ASEAN countries introduced, Indonesian accounting students has faced heavier to job-seeking problem. In the fact, those who graduate universities from Malaysia, Singapore, or other countries is higher educated than from Indonesia and already entered to the younger-job-market in Indonesia. In this, the competitiveness of job seeking has been becoming more serious. Those who majored in accounting in universities relatively need the higher quality of competitive accounting competency. If they cannot get anything, it might be difficult for them to get the opportunity to work. Because education in universities is the bridge to enter the business society, good accounting education is to foster students' competency to overcome the competition in the international job market. On the background, the 2007 agreement for ASEAN Economic Community (called AEC) let those countries consider what the national polices in higher education for human resource development is important. Several years ago, South East countries agreed each other to open the economy. Indonesia is one of the developing counties in the ASEAN and has the biggest number of youth populations. Firms located inside the country do not care the nationality any more, when to hire a person. Thus, more sophisticated accounting knowledge and skills to understand

accounting principles and standards, as well as bookkeeping technique to prepare books for transactions are becoming the significant criteria to overcome severe recruit activities among other countries competitors. The increasing unemployment of younger generation happens among the ASEAN countries as well as countries in other area.

2.3 Higher-Quality Accounting Education

On Higher-quality Accounting Education, the Pathways Commission (2012) proposed the report to attract a bigger number global population of students to the accounting professionals. The report defined high-quality teaching as primarily in terms of educational results (i.e., outcomes). However, it cannot be achieved without student learning outcome. Thus, high-quality accounting education is supposed as a shared responsibility, involving institutional, faculty, and student obligations. Without students' motivation and efforts for learning accounting, we cannot fulfil the educational environment, even if teachers try to engage to work more. How do students attend actively their learning? What can we do for that? For these questions, the important thing is that it could make that maximized on when related people in higher education jointly together toward the good quality. In our field study, we recognized that IFRS education for accounting professionals in universities needed more educational materials and teachers (Saito et.al, 2015). Furthermore, the quality of IFRS education is related to the location of universities and the scale of them. So, when we consider the higher quality of accounting education, we have to distinguish the education for the basic competency from the education for professional competency. For all of undergraduate students, their university diploma, bachelor, is the final step before getting a job. Pintrich and Schunk 2002 pointed the existence of degree as their motivation. Basically, their graduation should be connected to a job, unless some access to the graduate school. In spite of that, almost students, particularly in the primary year, don't imagine their future yet (Saito et.al, 2016).

2.4 Students' Ethic in Accounting Education

Reviewing the existing literature and accounting practice methods, accounting education is also needed to enhance higher quality of accounting students in order to think matters ethically, work on the regulations and rules, distinguish good from bad (Williams & Elson, 2009). Bampton and Cowton 2002 explains we still have the possibility to improve a gap in ethics education in accounting and management accounting, although generally ethics education was suggested in business schools. This phenomenon might be affected by the accounting competencies specifically evaluated to the global business society. Marrero & Brinker 2007 stated that every culture has its own moral and ethical values, which shape the laws and regulations, as well as accounting choices, of that society. Fulmer et.al 2017 insists the significance of accounting students and future accounting professionals to understand how culture impacts ethics, and how to best respond in different scenarios, because of different cultures and ethics. Consequently, as the social role, accounting education in Indonesia has become more important to foster students' accounting competency. The IMA-MAS Task Force proposed an integrated educational framework based on the Pathways Commission (2012). The components are divided into three competencies: foundational competencies, accounting competencies, and broad management competencies. The foundational competencies support the broad management competencies and the specialized accounting competencies (Lawson et al., 2013, 40). Those competencies are needed by all business school graduates. The broad management competencies are for the education of the business professionals, and the accounting competencies are competencies that allow accountants to integrate management and analytical methods. One of four curriculum development recommendations focus on the accounting competency; knowledge, skills, and abilities in an accounting education (Saito, 2016, 21).

For the mainstream accounting curriculum, Tweedie et al. 2013 found the trend to engage on Western ethical theories or ethical thought, not supposed to incorporate international cultural and ethical standards into accounting curriculum to train students from diverse cultures to identify and resolve ethical dilemmas. Recent perpetrators of accounting frauds have higher educational level and that many fraud perpetrators work in an accounting department. Accounting criminals over the world is getting complicated and tricky and it reported in 2016 that for fraud cases, Indonesia had 46 fraud cases of victim organizations, reached to the second largest number in Asian Pacific area (ACFE 2016). Ethical education in accounting should be started in the introductory level rather than in the later semester (Tweedie et al., 2013), because it is very important for students to instill a sense of accountability and care for other stakeholders at the same level of dealing with money and earning it (Al-Htaybat & Alberti-Alhtaybat, 2015). As Jensen 2002 noticed, the current accounting education system in all business-related degree is based on value maximization and stakeholder theory. It might happen that accounting graduates tend to believe that the achievement of profit is the most important.

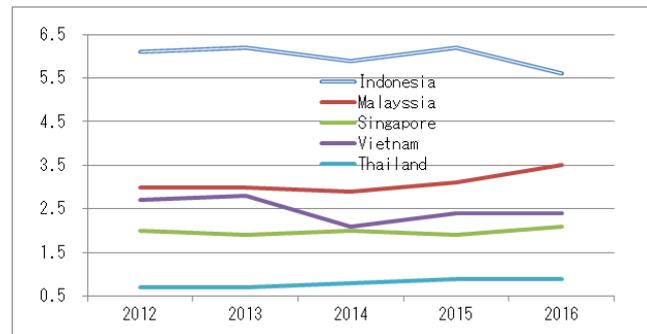


Figure 1: Unemployment of Five ASEAN Countries
Refer to BPS 2017, p.683.

Table 1: IES Framework and Standards

Pronouncements	Contents	Year Issued
Framework	Framework for International Education Standards for Professional Accountants and Aspiring Professional Accountants	2015
IES 1	Entry Requirements to Professional Accounting Education Programs	2014
IES 2	Initial Professional Development – Technical Competence	2015
IES 3	Initial Professional Development – Professional Skills	2015
IES 4	Initial Professional Development – Professional Values, Ethics, and Attitudes	2015
IES 5	Initial Professional Development – Practical Experience	2015
IES 6	Initial Professional Development – Assessment of Professional Competence	2015
IES 7	Continuing Professional Development	2014
IES 8	Professional Competence for Engagement Partners Responsible for Audits of Financial Statements	2016

Refer to IAESB 2017 (<http://www.ifac.org/>).

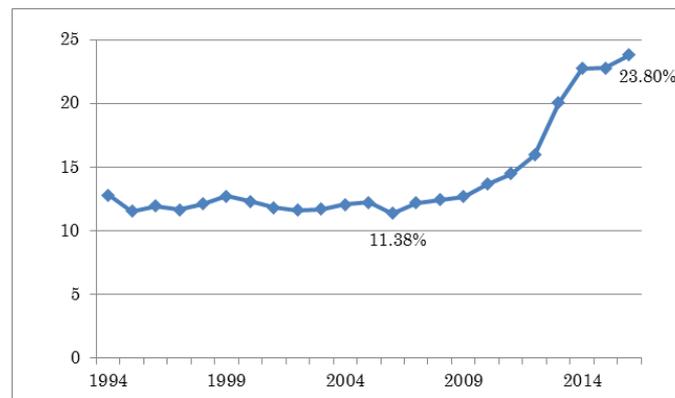


Figure 2: Access to Higher Education in Indonesia (Age 19-24)
Refer to BPS 2017: Education Indicators 1994-2016.

3. THEORETICAL DEVELOPMENT

3.1 Theory

In Indonesia, there is the quality assurance problem of accounting education discussed. In fact, the Minister of Ministry of Research, Technology and Higher Education (MRTHE), Muhammad Nasir announced that the 71-accounting program license had been revoked in 2014 and scheduled more 21 programs in 2015. The purpose is to sustain the quality and avoid manipulation. In addition, he said that program proven to be not effective or efficient and not achieved to study purpose needed to be shut down. Newly, the Indonesian government for higher education has transformed to produce qualified workers. The national strategy focuses on developing the student's competency required by business, industries, and economy. Nowadays, the significance of research and higher education is "Improving industries and innovation in the country." On Accounting Higher Education, the Pathways Commission (2012) proposed the report to attract a bigger number global population of students to the accounting professionals. In that, the definition of high-quality teaching is primarily in terms of educational results (i.e., outcomes) and is supposed as a shared responsibility, involving institutional, faculty, and student obligations (Pathways Commission 2015: 7). However, it cannot be achieved without student learning outcome.

Without students' motivation and efforts for learning accounting, we cannot fulfil the educational environment, even if teachers try to engage to work. In our field study, we recognized that IFRS education for accounting professionals in universities needed more educational materials and teachers (Saito 2015: 96). Furthermore, the quality of IFRS education is related to the location of universities and the scale of them. So, when we consider the higher quality of accounting education, we must distinguish the education for the basic competency from the education for professional competency. For all undergraduate students, their university diploma, bachelor, is the final step before getting a job. In this point, Pintrich & Schunk 2002 pointed the existence of degree as their motivation. Basically, their graduation should be connected to a job, unless some access to the graduate school. In spite of that, almost students, particularly in the primary year, don't imagine their future yet (Saito et al, 2016).

In past researches, we compared the motivation of students to learn accounting in several countries: USA, Japan, and Indonesia. We didn't find the differences between countries and gender. Meanwhile, several researchers pointed out, the lower level of Indonesia accounting technicians or workers, is one of the significant factors for students to fail to get a job and for firms to hire person. Although the majority of firms in Indonesia is categorized in Small Medium Enterprises (SMEs), the managers didn't always finish some training of accounting (Haryani 2012). Or the SMEs do not implement even the bookkeeping system (Kurniwati et al. 2013). Relatively, this situation might be somewhat resembled to the lower level of accounting technician in Indonesia than other ASEAN countries (IAI 2016). The boost-up over the country is being the significant mission to the sustainable economy toward the future. And, surely younger people would find a job without losing their way for life. Or at least it would prevent them from some criminal activities. Because accounting is business language, the basic skill, technique and knowledge is helpful for people, company, and business.

3.2 Hypothesis, Method and Sample

Followed on these studies, it is considered that the government policy for accounting education might be one of significant factor to boost the students' accounting competency. If so, compared with other ASEAN countries, in Indonesia what is the change to foster accounting students now? Or the educated level is getting better before? Essentially, the effect of education for students is said to be affected by leaning environment, such as textbook, materials, teacher guideline, curriculum, and university policy. Students learn a variety of topics and items in each accounting class. Those classes are based on universities' curriculum. For example, a student from A university might have not always learn same topic at all, compared with a student from B university. Even if in same university there are different class, teacher, and personality. Such a lot of different environment might cause to affect students' motivation and good understanding.

In a meanwhile, if two students entered same university and started to learn accounting at the same time, both of their own skill for accounting might resemble after the period when they try to study step by step, because the diploma and curriculum policies determine how to instruct for students as well as to the target for their learning. In the view of management, University always must mention the reputation to foster diligent students and to serve good education by the society. The good reputation and evaluation is the factor to increase future students. It is natural that students' accounting competency (knowledge, skill, and technique) would be characterized by university policy after several years to learn accounting, and the knowledge will be different for each each item. For instance, one students from a university might be more understand in goodwill than others . Thus, we develop the two hypotheses as follow:

H1: There is difference students' competency among universities.

H2: The understanding of each student among financial report items is different.

This is a global collaboration study and an academic challenge, jointly enforced by researchers from Indonesia and Japan. To measure students' basic accounting competency, we prepared the basic examination in bahasa (show Appendix) for undergraduate 3rd students of Indonesia. And then, we showed it for the secretariat of the Indonesian accounting technician certification in BNSP (Badan Nasional Sertifikasi Profesi) to confirm the suitability for undergraduate in Indonesia. After some revises reflected by her comments, our proposal examination was decided in this experiment. It consists of twenty questions, which are shown by Figure 3. This study is cooperated by 6 universities; Trisakti, Mercubuana, Pamulang, Diponegoro, Islam Bandung, and Syarif Hidayatullah State Islamic University Jakarta where are in Java. Number of samples data is 245 from those 3rd students. Figure 4 indicates the distribution of total score. We found the minimum score for correct answer is four as well as maximum score is sixteen. In this experiment, one score means a correct answer per question. So, when all of questions is correct answers, it should be total score 20. Although we also tried other easier

experiment for 1st students, this paper excludes that. We targeted to recognize good and not good field of students' basic competency in accounting, analysing the marked samples for students to answer. Through this experiment, we suppose there might the difference of accounting competency (total score) between universities, because originally a variety of students' accounting competency has good and not good expertise. To verify these results by the statistical view, we use the ANOVA test. ANOVA, a parametric test, is the means of two or more independent groups to determine whether there is statistical evidence that the associated population means are significantly different. Table 4 shows the descriptive and the result of ANOVA by universities.

question	1	principle	8	bad debt expense	15	loss of impairment
	2	liability classify	9	assets classify	16	contingent profit
	3	purpose of financial reporting	10	trial balance	17	goodwill
	4	meaning of assets	11	depreciation	18	post closing
	5	effect on b/s	12	accrued liability	19	correction journal
	6	posting journal	13	cost of sales	20	gross profit
	7	bank reconciliation	14	cash value of bonds		

Figure 3: Type of Questions



Figure 4: Distribution of total score

4 DISCUSSION

4.1 Total Score between Universities

As shown in the table below, the first hypothesis which stated, "There is a difference in students' competencies among universities" is supported. The correlations indicate that the dimensions are valid with a significance at the 0.001 level (2-tailed) and a high score ($p > 0.05$). The different variation of percentage of correct answer affects total score. There was a significant effect of score at the $p < .000$ level of the following condition [$F(5, 239) = 10.30, p < .000$]. This means that there is the difference of total score between those six universities. This implies the possibility that depends on the characteristic education policies between universities, although we know each student has their own competency in natural. Supposed that most of 3rd students already mastered the accounting subjects, we expect that students would understand the basic theory, technical words, and procedures of accounting and bookkeeping, if there are any typical trends to educate students for accounting in each university. Expectably, by this empirical test, the difference of total score among university group was showed. Furthermore, the mean is in the range from 6.870 to 10.180.

Table 2: Descriptive and ANOVA between universities

	N	Mean	Variance	Std.Dev
trisakti	39	9.900	2.280	0.365
pam ulang	49	10.180	2.759	0.394
mercubuana	30	6.870	1.995	0.364
diponegro	30	9.970	1.608	0.294
islam bandung	48	9.880	2.393	0.345
islam	49	10.140	2.102	0.300
total	245	9.640	2.480	0.158

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	266.049	5	53.21	10.3	0.000
Within Groups	1234.62	239	5.166		
Total score	1500.669	244			

4.2 Financial Statement's Items

In second hypothesis, we test the difference of understanding for each financial report's item among students in six universities. We ask some questions to test the understanding. We thought that students would easily or not to answer per items based on the level of their competency which is affected by university curriculum or policy. We draw the graphic for correct answer, and as shown in figure 3, there is trends for correct answer. Students with good education might be reach higher score than others for each. The accounting students' competency could be affected by different learning environment, such as member of class, teachers, and class specified curriculum. Curriculum is the ultimate important for students to form their skill or knowledge for learning. Besides that, students with higher passionate get more motivated to learn than others. The good score of basic skill of accounting is good signal about efforts that they had done in the past. Students can answer correctly, because they continually practice to solve the case problems. We believe without any exercise, it is difficult to choose the right answer even for simple question. Particularly, accounting and bookkeeping competency is so-called an accumulation for past efforts supported by their enthusiasm. In a meanwhile, the memory-worked students tend to get how many units they take during semester. Some of students don't care the purpose of financial reporting and don't want to consider the reason for how the preparation of financial statements is significant for the outside party. Such a motivation-less learning in accounting class sometimes disturb their essential learning.

In this ANOVA, we got the interesting implication. Except for question no.3 and 11, Hypothesis 2 is supported [$p < .000$]. As Table 4 shown, there are any score's differences among those six universities. But, we could not find any differences for two questions, number 3 and 11. Question no. 3 is the *purpose of financial reporting* and question no. 11 is for *depreciation*. In spite of different learning environment and student's ability among universities, the results do not show the same trend for correct answer. In this test, we thought the teaching method influence on ability's students in Indonesia. It also shows that the *purpose of financial reporting* and *depreciation* topic are not as important as others in accounting class in Indonesia. Moreover, we worry about the competence of financial statement preparer if they did not know well how recognize some transactions. The less competencies preparer, the lower financial report quality. The fraudulent financial report may be also come from this circumstance. In another word, to increase financial report quality, we need give much attention to accounting education, especially curriculum, teaching method including practices to answer any questions type. In the near future, accounting graduates in Indonesia will compete with others, based on above result, we know that our students have limitation on some accounting material, such as depreciation, goodwill etc., so it need to revise curriculum, to increase their competencies including knowledge and skill.

Table 3: Descriptive and ANOVA by questions

		N	Mean	Variance	SD
q1	total	245	0.22	0.418	0.027
q2	total	245	0.84	0.363	0.023
q3	total	245	0.84	0.363	0.023
q4	total	245	0.24	0.426	0.027
q5	total	245	0.80	0.401	0.026
q6	total	245	0.32	0.467	0.030
q7	total	245	0.82	0.385	0.025
q8	total	245	0.30	0.460	0.029
q9	total	245	0.47	0.500	0.032
q10	total	245	0.87	0.342	0.022
q11	total	245	0.34	0.474	0.030
q12	total	245	0.36	0.480	0.031
q13	total	245	0.87	0.338	0.022
q14	total	245	0.64	0.480	0.031
q15	total	245	0.12	0.324	0.021
q16	total	245	0.44	0.498	0.032
q17	total	245	0.69	0.462	0.030
q18	total	245	0.16	0.363	0.023
q19	total	245	0.56	0.498	0.032
q20	total	245	0.38	0.486	0.031

		Sum of Squares	df	Mean Square	F	Sig.
q1	Between Groups	4.319	5	0.864	5.386	0.000
	Within Groups	38.334	239	0.16		
	Total score	42.653	244			
q2	Between Groups	4.572	5	0.914	7.937	0.000
	Within Groups	27.534	239	0.115		
	Total score	32.106	244			
q3	Between Groups	0.998	5	0.2	1.249	0.287
	Within Groups	38.202	239	0.16		
	Total score	39.2	244			
q4	Between Groups	3.701	5	0.74	4.361	0.001
	Within Groups	40.569	239	0.17		
	Total score	44.269	244			
q5	Between Groups	3.41	5	0.682	4.554	0.001
	Within Groups	35.79	239	0.15		
	Total score	39.2	244			
q6	Between Groups	7.048	5	1.41	7.305	0.000
	Within Groups	46.119	239	0.193		
	Total score	53.167	244			
q7	Between Groups	2.269	5	0.454	3.205	0.008
	Within Groups	33.829	239	0.142		
	Total score	36.098	244			
q8	Between Groups	3.93	5	0.786	3.937	0.002
	Within Groups	47.719	239	0.2		
	Total score	51.649	244			
q9	Between Groups	3.508	5	0.702	2.919	0.014
	Within Groups	57.447	239	0.24		
	Total score	60.955	244			
q10	Between Groups	5.325	5	1.065	10.957	0.000
	Within Groups	23.23	239	0.097		
	Total score	28.555	244			
q11	Between Groups	1.558	5	0.312	1.397	0.226
	Within Groups	53.323	239	0.223		
	Total score	54.882	244			
q12	Between Groups	22.367	5	4.473	31.688	0.000
	Within Groups	33.74	239	0.141		
	Total score	56.106	244			
q13	Between Groups	6.232	5	1.246	13.799	0.000
	Within Groups	21.588	239	0.09		
	Total score	27.82	244			
q14	Between Groups	4.436	5	0.887	4.104	0.001
	Within Groups	51.67	239	0.216		
	Total score	56.106	244			
q15	Between Groups	2.177	5	0.435	4.448	0.001
	Within Groups	23.391	239	0.098		
	Total score	25.567	244			
q16	Between Groups	8.588	5	1.718	7.906	0.000
	Within Groups	51.918	239	0.217		
	Total score	60.506	244			
q17	Between Groups	8.089	5	1.618	8.798	0.000
	Within Groups	43.951	239	0.184		
	Total score	52.041	244			
q18	Between Groups	2.629	5	0.526	4.264	0.001
	Within Groups	29.477	239	0.123		
	Total score	32.106	244			
q19	Between Groups	13.194	5	2.639	13.362	0.000
	Within Groups	47.198	239	0.197		
	Total score	60.392	244			
q20	Between Groups	7.306	5	1.461	6.93	0.000
	Within Groups	50.392	239	0.211		
	Total score	57.698	244			
Total score	Between Groups	266.049	5	53.21	10.3	
	Within Groups	1234.62	239	5.166		
	Total score	1500.669	244			

5. CONCLUSION

In this joint study, we examined the accounting competency of Indonesian students and found the differences of among universities. We found the different score of each question item among universities. The statistic results, using ANOVA test, show that there is difference of total score between groups of universities [F (5, 239) = 10.30, p < .000]. We could not deny that the different policy for accounting education somehow might affect students' answer. Furthermore, interestingly, another implication for hypothesis 2 shows obvious evidence to find two items without differences between universities. The items questions are *purpose of financial reporting*

and *depreciation*. Although we didn't consider this result before this test, we analyzed the curriculum in universities of Indonesia might not always treat importantly both of issues in accounting class. The ANOVA alone does not tell us specifically which means were different from one another. To determine that, we would need to follow up with multiple comparisons (or post-hoc) tests. We hope even there are naturally differences among students in expertise and knowledge, but educational process can enhance student competences in the near future. In Indonesia, although some countries also face to, there is a seriously big issue of human resource development. Particularly, how we enhance the quality of accounting education is the global problem. In this study, we tried to measure the current level of accounting competency of undergraduate students in Java, Indonesia. However, Indonesia has many universities and we have a limitation to the number of research samples. We only develop twenty questions in this experiment, in future, we will develop more.

Like the current problem of accounting competency development in Indonesia, Japan used to experience before the half of twenty century. The extremely rapid in the past and now of the country needed the development of accounting and bookkeeping system and also those who were qualified as accounting technicians and professionals. Even ordinary business persons also needed to work at private firms to do activities for getting income and raising sales. The more the country developed, the more people needed higher accounting competency. That is based on the preparation of financial statements and reliability of financial reporting in the global market. Not only the set of accounting regulation and guidelines, but also the boost-up accounting expertise of workers and professionals were required. Specifically, the growth of professional qualification examination system of accounting and bookkeeping contributed to the enhancement of accounting competency. There are some kinds of types known over the country; for general persons including university students, senior high school students, global and international practice. Everyone can challenge to take the examination whenever he or she wants. Passing the exam gives the qualification for person, depending on level and the certification of the accounting qualification is significant criteria effectively evaluated as the level of accomplishment for all life. Students challenge to get that during their school life or those who graduated university sometime take the certification, because it helps to seek for a job or get higher salary. In Indonesia, the resembled professional qualification systems for accounting technician as Japan, has been exist, however, the system in Indonesia is just on the edge of innovation. The board to qualify the accounting technician skill is BNSP (Badan Nasional Setifikasi Profesi).

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APPENDIX: EXPERIMENT FOR UNDERGRADUATE STUDENTS IN INDONESIA

- The limitation of accounting is choosing the method which give the least probability in asset and profit disclosure:
 - Matching principle
 - Materiality
 - Conservatism
 - Monetary unit assumption
- Which of the following accounts is classified into current liabilities?
 - Notes receivable
 - Salaries payable
 - Equity
 - Inventory
- These are the purpose of financial reporting, except:
 - Giving useful information for investing and financing decision
 - Giving information of economic resources, claim and the changes
 - Giving useful information for future cash flow
 - Giving information of liquidation value
- Cost which is expensed for future benefit in short time will disclosure in balance sheet:
 - Current asset
 - Current liability
 - Fixed asset
 - Long term liability
- Java Co. paid creditors for the balance. The effect of this transaction was to:
 - Decrease an asset, increase equity
 - Decrease an asset, decrease a liability
 - Increase an asset, increase a liability
 - Increase an asset, decrease another asset
- Jones Company bought merchandise for US\$ 2,000 cash. Indicate the journal into which the transaction should be entered.
 - Purchase journal
 - Sales journal
 - Cash payment journal
 - Cash receipt journal
- The reason for bank reconciliation is:
 - Deposit in transit
 - Check with not sufficient fund
 - A and B right
 - A and B wrong
- ABC firm estimate allowance for doubtful accounts with sales percentage method. If credit sales US\$ 38,000 and percentage uncollectible accounts is 1% of credit sales, and the balance of allowance for uncollectible accounts is US\$ 150, then the bad debt expense for this year is:
 - US\$ 380
 - US\$ 530
 - US\$ 230
 - US\$ 150
- Asset in balance sheet is classified as:
 - Current asset, long term asset: building, plant and equipment and intangible asset
 - Current asset, long term investment, building, plant and equipment and other asset
 - Current asset, long term investment, tangible asset and intangible asset
 - Current asset, long term investment: land, building, plant and equipment: intangible asset and other asset
- A trial balance can detect the errors are:
 - Double journalizing or posting an entry twice
 - Posting to an improper account
 - Failing to record the whole entry for a transaction
 - All of the above
- Indofood firm buy equipment in January 1, 2015 with US\$ 40,000, salvage value US\$ 1,000 and useful life is 5 years. Accumulated depreciation on December 31, 2016 is:
 - US\$ 15,600

