

Developing an Accounting Textbook Using Collaborative Learning and IFRS for Senior High School Students in Indonesia

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ABSTRACT

The 2013 curriculum mandates the importance of collaborative learning designed to educate students to be more productive, creative, and innovative with a high level of affective skills. Collaborative learning can be manifested in the form of a textbook. This research is aimed at developing an accounting textbook in accordance with the mandate of the 2013 curriculum. The selected model is IDI which consists of three main phases: defining, developing and evaluating. The methods chosen are interview, observation, and document review which are analyzed qualitatively. The research was conducted in 4 senior high schools in Malang. The finding shows that at defining phase, there is a need to develop an accounting textbooks using collaborative learning and corresponding to the new accounting standards, namely IFRS. Therefore, at the developmental phase, we construct a prototype book ready to be evaluated. The result of evaluation phase shows that the textbook is valid on the overall aspects including the content, the presentation, the graphic, and the language, with an average percentage of 93.7%.

1. Introduction

The changes in curriculum and the consequences that occur after the implementation of new policy is always interesting to be observed. The 2013 Curriculum was launched in the mid of 2013 by the Indonesian governments a replacement of curriculum at educational unit level (KTSP). The 2013 Curriculum is directed to reshape the quality of human resources to be more productive, creative, innovative, with a high level of affective skills (Permendikbud 54 2013). The curriculum also emphasizes the experience of learners to work in a network through collaborative learning.

Collaborative learning is defined as a term to describe various processes by which students engage in peer learning in pairs or small groups (Herkert, 1997). Lakey (2010) states that "... To learn, people need to revise and review their conceptual framework, try a new skill, unlearn an old prejudice, admit there's something they do not know...They need a group and/or a teacher that supports them ". This indicates the importance of a collaborative approach to learning.

Manifestations of collaborative learning can be realized in the form of textbooks used as a teaching material in the learning process. Textbooks may include collaborative activities. Textbooks used in schools mainly contain subject matter and exercises, therefore, students are less able to develop their creativity. Nowadays, it is expected that textbook contains not only the material and exercises, but also learning objectives, assessment system, as well as the process of learning itself.

The effectiveness of collaborative learning has been demonstrated in several studies. Terenzini et al. (2001), for example, concluded that active learning and collaborative learning are more effective than the traditional approach in improving the skills and achievement of student learning. Research by Sudarman (2008) also obtains similar results. Collaborative learning has a higher contribution to enhance learning than the conventional one. One of the methods is small-group discussions which build an interest by engaging students in the creation of theoretical knowledge. This also provides students with good opportunities for practicing analysis and interpretation of theories. Most students who complete the course are able to express high levels of engagement and interest in studying theory and practicing the theory through the understanding of social

reality (McDuff, 2012). The benefits of collaborative learning in online collaboration research have been conducted by many scholars (for example Krutka, et al., 2014; Wright, 2010; Mills & Chandra, 2011; Lee, 2010). These studies report the reasons why collaborative learning should be promoted in order to achieve the expected competencies.

Economics is a compulsory subject in senior high school which is practically embedded with the teaching of Accounting. Accounting material has a unique characteristic which is perceived as systematic and procedural. Therefore, Teachers tend to use conventional approach in which learning activities start from 'explaining' and 'asking students to do exercise individually'. This might not be true, since the 2013 Curriculum articulates that teachers are expected to facilitate students to learn collaboratively.

In accounting education, there is a set of rules to prepare financial statements called standard. IFRS (International Financial Reporting Standards) is the latest accounting standards to replace the previous standard, namely GAAP (Generally Accepted Accounting Principles). IFRS is used to prepare financial statements that can be accepted globally. If a country implements this standard, the report presented might be acceptable, recognized and understood by countries all over the world. "Indonesia's commitment is to support IFRS as the globally accepted accounting standard and to continue with the IFRS convergence process" (IFRS Foundation, 2015). The problem occurred when accounting materials in senior high school books are not designed in line with IFRS. This raises a gap between theories in school with the actual accounting practices.

A textbook developed in this research is a printed book. Although previous research in several schools in Malang (e.g. Irafahmi & Andayani, 2012; Andayani, Irafahmi & Sulastrri, 2012; Irafahmi, 2010) showed that teachers and students believe that computer technology is crucial to enhance learning, the biggest barrier to integrate computer technology is the facility. This was triggered by the imbalance ratio between the number of computers and the amount of students. Thus, this study focuses on the development of non-digital textbooks that are low-cost but effective to create collaborative learning in the classroom.

The results of this developmental method will be an effort: (1) to implement the 2013 curriculum, and (2) to fulfill the need to adapt an accounting textbook in senior high school level which is in line with IFRS. Further the urgency of this study can be described as follows: (a) K-13 mandates the importance to involve students to learn collaboratively. Through the development of accounting textbook-based collaborative learning with IFRS, a centralized individualistic learning process will gradually be transformed into a creative learning process; (b) To create collaborative learning environment, teachers have to gather diverse ideas of collaborative learning activities. Development of textbook-based collaborative learning accounting with IFRS can be used as a reference/guideline/source of inspiration for teachers to design collaborative learning activities. The absence of similar books on the market makes the development of the book in this study is a necessity; (c) developing such book is expected to promote student centered learning. Collaborative learning allows students to work together in solving problems. Students who are less interested in learning will be more motivated by their peers. Within a group, they will come up with a new idea. Affective level of students will also be improved in collaborative learning where students have mutual empathy and respect to others' opinions.

2. Methods

The study employs a research-and-development design which is used to develop and validate educational products (Borg and Gall, 1983). While there are many instructional models, we chose IDI (Instructional Development Institute) as an approach to develop the product. IDI is a systems approach that includes three phases: defining, developing and evaluating (UCIDT, 1973).

Four senior high schools in Malang agreed to participate. These schools have their own unique characteristics. School A is a public school which is targeted by the government to implement the 2013 Curriculum. Unlike School A, School B is a public school that has not been targeted to implement the curriculum. School C and School D share the same characteristics as they are private religion-based schools. School C has implemented the curriculum while school D plans to implement it in the following year.

The data was collected by in-depth interview, observation and document review. Interviews were conducted to accounting teachers and students. Observation was conducted to capture teaching practice and learning facilities in the classroom/school, while the document review was used to understand the lesson plan. Data analysis was performed simultaneously with data collection through several stages starting from the process of collecting the data, classifying the data into the same units, data reduction, data presentation and conclusion or data verification.

3. Results and Discussion

We describe and discuss the result based on the three main phases in IDI instructional design model: defining, developing, and evaluating. Firstly, we set out the results in defining phase in which we categorize into four analyses: the 2013 Curriculum, accounting teaching and learning in the classroom, students' characteristics, and learning facilities at schools. Secondly, we describe how to develop the textbook based on many considerations in the defining phase. And lastly, we perform the evaluation phase where we made a validation and revision of the textbook.

3.1. Defining Phase

3.1.1. Analysis of the 2013 Curriculum

The government claims that the 2013 Curriculum is an improvement to the previous one. Although the pilot implementation of this curriculum has been done since mid-2013, optimism about the success of this curriculum is diverse. Based on the interviews and observations, we have identified several constraints which can be described as follows.

First, there were some constraints in preparing lesson plan (RPP) which is derived from the 2013 Curriculum syllabus. In contrast to KTSP syllabus, K-13 syllabus replaces SK (competence standard) to KI (core standard). If SK includes competence standard to achieve in each lesson, KI includes 4 aspects underlying the development of basic competence. The aspects are religion, attitude, skills and knowledge, as well as the application of skills and knowledge. It appears that the government, through the K-13 intends to strengthen the spiritual and moral character of students. Table 1 shows some examples of core competence in Economic syllabus.

Table 1
Core Competence in Economic Syllabus (Permendikbud 70 2013)

KI 1	Understand and practice the teachings of religion
KI 2	Understand and practice honest behavior, discipline, responsibility, caring (mutual assistance, cooperation, peace); polite, obedient and proactive; also come up with a solution to the various problems; interacting effectively with the surrounding environment and nature; as well as placing themselves as a reflection of a nation in the association world.
KI 3	Understand, implement, analyze and evaluate knowledge, concepts, procedures, and metacognitiveness based on curiosity over science, technology, arts, culture, and humanities. Likewise, apply the knowledge of a specific field of study according to their talents and interests to solve the problem.
KI 4	Able to process, make a reason, present, and create in the realm of concrete and abstract associated with the development of the learned at school independently, effectively and creatively, and are able to use the method according to the rules of science

One part in the lesson plan is learning scenarios. K-13 syllabus requires teachers to embed the scientific approach within learning scenarios. Scientific approach consists of five activities which comprise: observing, asking, exploring, associating, and communicating (Permendikbud 65 2013). Accounting teachers at 4 schools expressed difficulty in describing the scientific approach in the lesson plan and in actual learning process.

“It was said that the 2013 curriculum makes the teacher’s job easier than another curriculum. In fact, we are even getting more trouble with K-13. Then we still need to make lesson plans and so on and so on.... despite Mr. Nuh’s (the education minister) statement that teachers do not have to bother for the lesson plan...” (Interview, teacher A)

“As class X has been tested using the new curriculum, we have to change the format of lesson plan to be in line with the new syllabus. Well, we experience difficulty... Especially for implementing the scientific approach... We don’t really understand.” (interview, teacher B).

Although the syllabus (Table 2) has listed five stages of scientific approach, it is too general. Teachers should make the details of each stage in the lesson plan as a guide for teaching and learning activities. Several teachers admitted that they asked some practicing teachers to create the lesson plans.

“Sometimes I felt somewhat guilty to practicing teachers, looks like I bully them.... I told them, “Please make a lesson plan according to the new curriculum, then I will replace your name to mine....” (Interview, teacher D)

Table 2
Scientific Approach in Accounting Syllabus

Basic competence	Main Material	Learning process
3.3 describing accounting as an information system	Accounting as an information system:	Observing: Reading the definition of accounting, users of accounting information, characteristics, quality of accounting information, basic principles of accounting, fields of accounting, accounting profession and ethics of the accounting profession, from financial statements and other relevant sources
3.4 presenting accounting as information system	<ul style="list-style-type: none"> • Definition of accounting • Users of accounting information • Characteristics of users of accounting information • The quality of accounting information • The basic principles of accounting • Fields of accountancy 	Asking: Asking questions and discussing to clarify the definition of accounting, accounting information users, accounting information quality characteristics, the basic principles of accounting, fields of accounting, accountancy profession and the professional ethics of accountants

Basic competence	Main Material	Learning process
	<ul style="list-style-type: none"> • Accounting profession • Accountant Ethics 	<p>Exploring: Gathering data and information about definition of accounting, accounting information users, accounting information quality characteristics, the basic principles of accounting, fields of accounting, accountancy profession and the professional ethics of accountants, from relevant sources</p> <p>Associating: Analyzing information and data regarding the definition of accounting, accounting information users, accounting information quality characteristics, the basic principles of accounting, fields of accounting, accountancy profession and the professional ethics of accountants</p> <p>Communicating: Presenting results of analysis in the written form regarding accounting as an information system</p>

According to the interview, teachers seemed to be pessimistic to apply a scientific approach during the lesson. One teacher stated that he would integrate scientific approach only if the students were familiar with it. He expected that students with sufficient background would conduct such approach since they had experience from their previous study (i.e. since junior high school).

“Scientific approach... Well, actually we can implement it. However, the students are not familiar with the approach. They have never observed, asked...etc when they were in junior high school. They used to be given direct answer by their teacher. Therefore, it is rather difficult for them to apply the approach.” (Interview, teacher D)

Teachers at targeted-schools who have implemented the K-13 for at least a year state that scientific approach is time-consuming.

“It’s a matter of time. Students will have to observe... etc. But it took a long time. As a teacher, I have to conduct assessment and report the result three times each semester. The teacher is required to assess children up to the minimum standard. If students are given time to observe etc... The progress of each student will depend on their reasoning abilities... Most students are left behind... It’s time consuming...” (Interview, teacher C)

When the interview is confirmed with the lesson plan, it appears that the teachers at those schools have made lesson plans derived from the K-13 syllabus, while teachers at non-targeted schools have not made such a lesson plan. The further document review shows that the lesson plan has not fully complied with the demands of the 2013 curriculum. Teachers are not clearly describing the activities performed on the stages of the scientific approach, which is observing (what is observed), asking (who should ask), exploring (what is explored and how to explore), associating (how to associate), and communicating (how to communicate). Therefore, when we observe the actual learning activities in the classroom, the learning scenarios do not reflect the lesson plan which should be integrated with scientific approach.

Another obstacle faced by schools/teachers regarding the implementation of the K13 is a matter of teaching materials. Any changes to the curriculum will be followed by the changes in teaching materials. The government has promised to supply the textbook. Textbook for each lesson consists of two types, namely the teacher handbook and student handbook. The government policy to supply the textbook is actually against the nation objective to create professional teachers. An indicator to be a professional teacher is to be able to develop teaching materials based on their teaching context. The government argued that this policy is to eliminate the circulation of unstandardized books made by teachers. The governments promises to provide the textbook in 2013, however, it did not match with the expectations. When it was confirmed to school, all accounting teachers being interviewed said that they were uncertainty of the availability of accounting textbook under K-13.

Economics books from the government is unlikely to come quickly. Whereas, the new academic year has begun... (Interview, teacher C).

The government has planned to supply books K-13, but in fact there is no book appears. Nothing... (Interview, teacher A).

So far we have not seen the books. So we're not sure whether the books fit our need or not.... (Interview, teacher B).

So far the textbooks available for senior high school level are history book, Indonesian language, and mathematics as seen on Permendikbud 71 2013. It seems that the government prioritize the availability of fundamental books. It is predicted that the upcoming books available are science books. Accounting/economics

books, according to the teachers' perception, seemed not under our government priority.

When teachers were asked whether they would develop their own accounting textbook, they stated their views as follows.

"I don't really understand the substance of the curriculum...Then how can I develop a book?..." (Interview, teacher A)

"For what purpose should I create a book? I am afraid the content is not in line with the curriculum. The government has planned to supply the book. Let me just wait. I used the old book while awaiting the new one..." (Interview, teacher D).

For students, textbook is a provision of basic knowledge. It is a learning tool that supports learning (Kurniawan, 2006: 2). Therefore, teachers should not only rely on the government's books, but they need to also develop their own textbooks, which according to Prastowo (2012) this should be in line with these following criteria: (1) paying attention to the curriculum by way of analyzing it, (2) determining the title of the book in accordance with the competency standards that will be developed, (3) designing books that outline the complete contents of the book and covering all aspects needed to achieve that competence, (4) collecting reference as writing materials, (5) writing a book tailored to the age and readers experience, (6) evaluating the results by re-reading the books, (7) improving the writing becomes prominent, and (8) providing illustrations, tables, diagrams proportionally.

3.1.2. Accounting Teaching Practices

The 2013 curriculum requires students to be active, creative, with high levels of affectiveness. Teachers are expected to employ learner-centered approach of learning. Learning is a process of interaction among learners, educators, and learning resources in a certain environment which puts the students as a source of learning (Sanjaya, 2008: 78). Some of the teachers were not sure whether they had applied learner centered approach as what they articulated in these following excerpts.

"Hmm...It's a little bit hard to say. I begin the learning in class by explaining, giving the task, controlling their attitude during the task, and giving homework. Is that teacher centered or learner centered?..." (Interview, teacher D).

"Firstly, I explain the concept, then I link the concept into real world experience. Then I ask students, whether they understand or not..." (Interview, teacher A)

The interviews above indicated that teachers have facilitated students to complete the tasks individually. In fact, this approach is not accordance with K-13. Learning activities should be started from 'observing', followed by 'asking, exploring, associating, and communicating'. Teachers tend to use conventional approach in which learning activities start from 'explaining'. When confirmed by classroom observation, all accounting teachers did start their teaching by 'explaining' for nearly half of the available time then instructing students to do exercise.

"Come on student A...Please do the task number one on the blackboard. Student B..You are the next.. Student C...What's your opinion? Do you agree with your friend's answer?"

This is contradictory to the principle of new curriculum that requires students to learn in a collaborative atmosphere. To enhance collaborative learning, Johnson, et al. (2012: 60) suggest that study group assigned by teachers should: have a clear positive interdependence, encourage mutual learning through face-to-face activities, perform a reasonable portion of work, and evaluate the effectiveness of working together. Collaborative learning may use some existing learning models. Johnson et al. (2012: 76-78) provide examples of the models, such as Group Investigation (GI), Teams Games Tournament (TGT), Student Team Learning Achievement Divisions (STAD), and Cooperative Integrated Reading and Composition (CIRC).

In relation to the current accounting standards (IFRS), it is the K-13' demands to relate the teaching of science and technology with some working practice. When teachers were asked whether they have adopted the current accounting standards, they answered as follows.

"No..We haven't used IFRS. I think it just does not make sense to students in senior high school..." (Interview, teacher D).

"A couple days ago, I introduced it to students. When I say 'equity'..They asked 'what's equity'? They have known this term as 'modal' instead of 'equity'. As they keep asking, I prefer to use the old term..." (Interview, teacher C)

"I think it's impossible to use IFRS in the regular classroom. I have tried to apply it on non-regular classroom consisting of students who prepared for a competition..." (Interview, teacher B).

IFRS is a set of standards created by the International Accounting Standards Board (IASB), which is an international standard-setting body in London (Ankarath et al, 2012: 2). IFRS is used to prepare financial

statements that can be accepted globally. If a country implements the standard, the financial report will be acceptable, recognized and understood by countries around the world. Some aspects of accounting textbook adapted to IFRS were expected to provide insight to students about the current accounting world.

What is interesting to observe is, even though the curriculum requires updating science and technology in learning, the use of old accounting terms that are not in line with IFRS continue to appear on the National High School Exam (UN). For example, the use of the terms “harta, utang, modal” instead of using specific terms like “aset, kewajiban, ekuitas”. This is the main reason why teachers reluctant to introduce new accounting standards to students. Further, accounting books on the market are still using the old terms.

3.1.3. Students' Characteristics

One of the main requirements in instructional design is teachers' knowledge/understanding of the students' characteristics. These characteristics may include an entry behavior, learning style, interests, socioeconomic background, personality, and age.

In terms of age, the average age of high school is 15-18 years old. With regard to psychology, this age belongs to adolescence (12-21 years) which is a transitional period between the time the lives of children and future adult life. Adolescence is often known as a time of selfishness (ego identifies) when the individuals are doing things according to their interests.

Teaching material can be grouped into printed materials and non-printed materials. Printed materials include textbook, worksheet, booklets, pamphlets, and other word processed documents, while non-printed materials may include any digital materials such as audio, visual and multimedia (Heinich, Molenda, Russell & Smaldino, 2002). When researchers asked students, whether they prefer printed or non-printed book, they expressed a desire to use a printed version.

“I Like a printed book. It's easier. The digital version hurts my eyes. I am a game lovers actually...But for learning purpose, I like the printed book. Games are colorful and full of motion while the book is monotonous...So useless to convert books into a digital version.”

“I prefer printed material. Most of the teacher's explanation is not occurring in the textbook. So by using printed book, we can add some notes there. Much more difficult to add notes in electronic book.”

Students' statements are similar to those of teachers

“Multimedia has no effect here. Students in this school are not attracted while teacher using multimedia. When they don't want to study, multimedia, or any other tool will not grab their attention.” (Interview, teacher B)

“The digital version is too risky. Students are not equipped with the facilities. We cannot push them to have it.” (Interview, teacher A).

In terms of learning styles, a high school student who is the subject of the research tends to easily absorb visualized information. They claimed to be easier to remember information that is in the form of a chart or image that is explicitly visualized. It becomes signs or guidance to the development of teaching materials that are designed as attractive as possible, highlight chart or image that is relevant to the material being taught.

Socioeconomic background of students is quite diverse. Of the 10 students interviewed, 6 students admitted to have a laptop/computer, while the rest does not have a laptop/computer. At one religion based high school where most of students are 'mondok' (a term for students who live in Pondok pesantren), they are not allowed to bring electronic devices such as laptops, HP, and other devices both at Pondok and at school. Therefore, textbooks become a major reference for them to study.

Prior knowledge of accounting students at class X is trifling. Accounting is not taught in junior high school. Given the entry knowledge of students is limited, accounting needs to be introduced in depth at the beginning of textbooks, with interesting presentation and motivate students to learn accounting.

Characteristics of students in terms of personality are diverse. Of the 10 students interviewed and observed, five students seemed to have an extrovert personality characterized by sociability, active speech, spontaneous fun, and friendly. Three students were identified to be introvert, shy, difficult to express an opinion spontaneously, but they had a good self-control. Two students had personality traits of neurosis with anxious, tense, accompanied by physical symptoms such as sweating and nervous. The 2013 curriculum expects students to be more creative, innovative, productive and comfortable for working collaboratively. Given the fact that there is always a class of students with introverted and neurotic personality, individual learning approach is actually destructive. Therefore, it is necessary to provide a textbook to guide teachers in doing collaborative learning.

3.1.4. Learning Facilities

Based on the interviews and observations, the schools have sufficient number of learning tools, such as a library, wifi, and LCD in the classroom. Unlike other schools that do not allow their students to use the gadget

during the learning process, one school reported that students are free to use the gadget in the classroom.

“Gadgets are okay to be used in the classroom. Students might access Facebook or anything else, that depends on their ability to filter information.”

This view is different from other schools which prohibit the use of gadgets.

“It’s absolutely prohibited. The laptop is okay, others are not. Gadgets potentially disturb the learning process. Therefore, students are restricted to bring mobile phone.”

When the learning facilities are adequate, the development of textbook should provide opportunities for students to enrich knowledge through learning resources beyond the book. This can be done by inserting an instruction in textbooks such as "gather some following information on the internet and analyze.." or "go to Koperasi (cooperatives) at our school, and observe how the managers of Koperasi record receipts and expenditures..".

In terms of the availability of textbooks, all schools stated that they did not require students to buy books A or B. However, students would typically use books used by teachers. In one school, the teacher asked the students to borrow accounting books from the library just before the class begins. As the ratio of books in the library with students is 1: 2, a half number of students did not get the books.

The results of defining phase can be summarized in the following table.

Table 3
Summary of Needs Assessment at Defining Phase

No.	Ideal conditions	Factual conditions	Solution
1	K-13 requires students to learn a collaborative atmosphere in order to become a person who is active, creative, innovative.	Individual approach, teacher starts the lesson by explaining and asking students to do exercise individually	A textbook containing collaborative learning activities
2	K-13 requires the use of scientific approach which includes five phases, respectively ranging from observing, asking, exploring, associating, and communicating	Teachers express difficulties to describe a scientific approach in lesson plan and in actual learning process.	A textbook containing a sample of lesson plan equipped with scientific approach.
3	Textbooks will be supplied by central government	There is no accounting textbook available	Developing a textbook in line with K-13
4	K-13 requires learning that follows the pace of science, technology and real work situation. In terms of accounting is the use of IFRS.	Teachers are reluctant to use IFRS as the accounting terms revealed at National exam remain the same with the old standard.	A textbook containing contemporary knowledge of accounting by giving an introduction to the accounting terms suitable with IFRS without eliminating the old terms
5	K-13 requires the integration of ICT into teaching and learning	The printed book is more favorable than digital book	A textbook that allows students to explore other learning resources (internet, libraries, etc.) and combined with interactive media.

3.2. Development Phase

3.2.1. Instructional Analysis

Instructional analysis is the process of outlining the general competence and special competence logically and systematically. Instructional analysis in the development of teaching materials should: (1) determine various kinds of materials to achieve general competence that has been set out, (2) clarify the link between competences, (3) enable to determine the starting point to write learning materials as well as the learning process, and (4) enable to estimate time to teach and the level to master a competence. The outcome of instructional analysis is an instructional chart.

Figure 1
Instructional Chart for Basic Competence
“Accounting as An Information System”

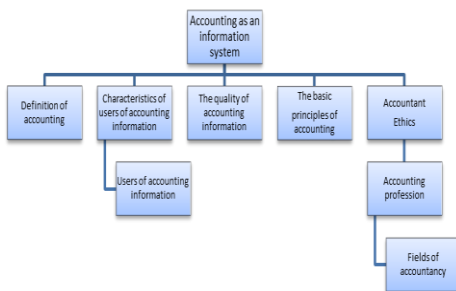


Figure 2
Instructional Chart for Basic Competence
“Basic Accounting Equation”

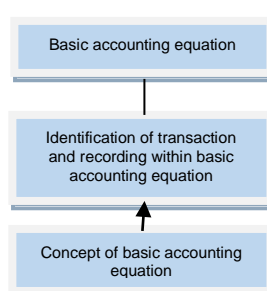
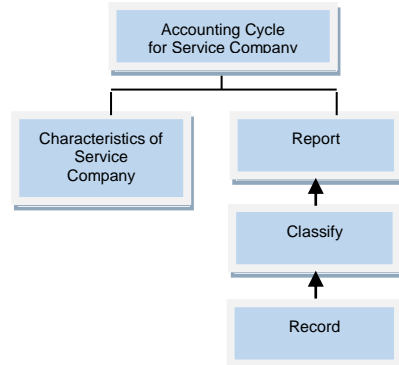


Figure 3
Instructional Chart for Basic Competence
“Accounting Cycle for Service Company”



A textbook which was developed refers to the Basic Competence 3-8 (K-13 syllabus- Permendikbud 64 2013) which can be summarized in three groups, namely: (1) Accounting as an information system, (2) Basic Accounting Equation, and (3) Accounting Cycle in Services Company. The results of the analysis can be seen in the following instructional charts.

3.2.2. The Design of Collaborative Learning Activities

Collaborative learning activities are designed so that students are able to collaborate, interact and exchange information with their colleagues. This is an important effort to: (1) create a student-centered learning environment, (2) allow students to become active participants in the learning process, (3) develop critical thinking skills and problem solving, (4) foster a culture of mutual respect and support among students and teachers, and (5) encourage the growth of a solution to a problem from different angles.

Collaborative learning requires teachers to modify the learning objectives of the original delivery into knowledge construction by students through learning in groups. Teachers also need to modify the learning activities that correspond to collaborative learning.

Here's an example of the design of collaborative learning activities that have been prepared by adapting some collaborative learning models such as jigsaws, group investigation, two stay two stray, Number Head Together, and Think Pair Share.

Figure 4
Collaborative Learning Activity:
Numbered Heads Together

Kegiatan Pembelajaran 4.3
• Nilai karakter bangsa: rasa ingin tahu, gemar membaca, komunikatif

(Adaptasi Model Numbered Heads Together)

Lakukan sesuai perintah berikut!

Analisis Kasus

- Buatlah kelompok secara heterogen beranggotakan 5 siswa.
- Setiap siswa dalam kelompok mendapatkan nomor yang berbeda.
- Kemudian bacalah wacana di bawah ini dan analisislah bersama kelompokmu tentang:
 - Siapa saja pihak yang terkena dampak dari kecurangan Enron yang melebihi-lebihkan labanya tersebut?
 - Apa sajakah hal-hal yang mempengaruhi besarnya laba? hubungkanlah dengan kecurangan yang dilakukan oleh Enron!
- Setelah melakukan analisis bersama kelompok, pastikan semua anggota kelompok memahami dari hasil analisis tersebut.
- Guru memanggil salah satu nomor siswa, dan nomor yang dipanggil mewakili kelompok mereka untuk melaporkan hasil analisis kelompok mereka. Kelompok lain menanggapi dan memberi tanggapan atau sanggahan.
- Guru bersama siswa membuat kesimpulan hasil diskusi.

Figure 5
Collaborative Learning Activity:
Two Stay Two Stray

Kegiatan Pembelajaran 2.1
• Nilai karakter bangsa: kreatif, komunikatif, toleransi

(Adaptasi model two stay two stray)

Lakukan sesuai perintah berikut!

- Buatlah kelompok yang beranggotakan 4 orang siswa.
- Setiap siswa berkumpul dengan teman sekelompoknya untuk mendiskusikan tentang:
 - Contoh perusahaan jasa yang ada disekitar tempat tinggal atau sekolah. Minimal menyebutkan 3 contoh.
 - Alasan mengapa perusahaan tersebut termasuk dalam perusahaan jasa.
 - Sebutkan transaksi apa saja yang mungkin dilakukan oleh perusahaan tersebut.
 - Identifikasi jenis bukti transaksi yang mungkin dibutuhkan dari masing-masing transaksi yang telah disebutkan.
- Setelah selesai mengerjakan, dua orang dari satu kelompok menjadi tamu kelompok yang lain.
- Dua orang yang tinggal dalam kelompok bertugas membagikan hasil kerja dan informasi kepada tamu mereka.
- Kemudian tamu kembali ke kelompok mereka sendiri dan melaporkan temuan mereka dari kelompok lain.
- Kelompok mempresentasikan hasil kerja mereka di depan kelas.
- Masing masing siswa membuat kesimpulan dari hasil presentasi.

3.2.3. Writing the Textbook

The textbook manuscript is organized in the appropriate instructional chart described above. The manuscripts are compiled in 5 chapters: Accounting as Information Systems, Basic Accounting Equation, Recording Phase for a service company, Summarizing Phase for a Service Company, and Reporting Phase for Service Company. Since Basic Accounting Equation is easier to be integrated with recording phase, the manuscript is redesigned into 4 chapters: Accounting as Information Systems, Recording Phase for a service company, Summarizing Phase for a Service Company, and Reporting Phase for a Service Company.

The features of the textbook are: instructions for use, competency to be achieved by students, concept maps, learning activities, description of materials, accounting insight, a summary of the material, individual evaluation, assessment sheets, a sample to complete accounting cycle in a service company, glossary, bibliography, index, and an answer key attached.

3.2.4. Designing Textbook Layout

Figure 6
Textbook Layout

Karakteristik Buku Ajar	
1. Terpapar persiapan kompetensi yang harus dicapai pada setiap awal bab, sehingga siswa mengetahui kompetensi apa yang harus dikuasai!	
2. Amplop materi yang menarik disertai gambar, bagan dan ilustrasi untuk mempermudah pemahaman siswa.	
3. Disediakan Wawasan Akuntansi yang menambah wawasan siswa tentang dunia akuntansi.	



There are several factors to consider when designing textbook layout: book size, paper type, and font size and type. The size of the book depends on the content and target audience. The size of the selected book is A4 (210 x 297 mm) with a vertical form bound on the left side. While the paper type selected is HVS 70g size. Type of font is Calibri 11pt size. The color, illustrations, and tables are made simple but attractive.

3.3. Evaluation Phase

Validation aims to ensure the feasibility of the product -. Validation is done by two parties, namely academia and practitioners. An academic in this case is an accounting lecturer who administers a financial accounting course thus could give judgment on the content of textbooks mainly concerning with of the latest adaptation of accounting standards. While practitioners in this study were high school accounting teachers. They are the potential users of the textbooks in the context of actual learning. Validation instrument is a questionnaire covering four aspects of feasibility elements, namely content, presentation, graphic and language feasibilities.

The textbook obtains a percentage of 93.7% and has fulfilled the valid criteria. Summary analysis of the overall validation can be seen in Table 5.

Table 5
Summary of Overall Analysis, Validation

No.	Group Ratings	Percents	Remark
1.	Average validation by academics	97,4%	Valid
2.	Average validation by practitioners I	89,1%	Valid
3.	Average validation by practitioners II	94,7%	Valid
	Average	93,7%	Valid

The final product puts students to work in groups, discussions, present the results, complete the task together, debate and other activities which support individual to help with each other in learning. This is consistent with the 2013 curriculum that expects learning activities to be carried out collaboratively in order to create an active learning. Collaborative learning may also increase curiosity (Lakey, 2010: 39).

The material is presented in accordance with the current accounting standard. Presentation of the material in accordance with IFRS is important for students in order not to learn an outdated concept.

4. Conclusions

This paper has described three phases to develop an accounting textbook. The phases are defining, developing, and evaluating. At defining phase, we obtained an overview of: (1) the 2013 Curriculum, (2) accounting teaching practice at school, (3) student characteristics, and (4) learning facilities. Based on the analysis, it is known that there is a need to develop an accounting textbook which is in line with the 2013 Curriculum and integrated with collaborative learning and IFRS principles. In development phase, we obtained: (1) instructional chart, (2) the design of collaborative learning activities, (3) the manuscript of textbooks, and (4) the design of textbook layout. Upon completion of the design phase, we obtained a prototype textbook ready to be evaluated. At evaluation phase, we validate the textbook to academics and practitioners. Based on validation and revision, it is found that the textbook has met the valid criteria with an average percentage of 93.7%. Some suggestions from the validator have been followed up by revision of the product. Upon completion of this phase, the entire phases of the research and development have been completed. It is suggested to further examine its effectiveness to improve the learning performance.

References

- Andayani, E.S., Irafahmi, D.T., Sulastri, 2012. Pengembangan bahan ajar matakuliah praktikum pengantar akuntansi dengan program microsoft visual basic. *Jurnal Pendidikan Akuntansi* 1 (1), 14-22.
- Ankarath, N., Mehta, K. J., Ghosh, T. P., Alkafaji, Y. A., 2012. *Memahami IFRS: Standar Pelaporan Keuangan Internasional*. Jakarta: Indeks.
- Borg, W. R., Gall, M. D., 1983. *Educational Research: An Introduction* 4th edition. New York: Longman Inc.
- Heinich, R., Molenda, M., Russell, J.D., Smaldino, S.E., 2002. *Instructional Media and Technologies for Learning*. New Jersey: Merrill Prentice Hall.
- Herkert, J. R., 1997. Collaborative Learning in Engineering Ethics. *Science and Engineering Ethics* 3 (4), 447-462. DOI: 10.1007/s11948-997-0047-x.
- Irafahmi, D. T., 2010. The complexity in adopting new technological program in education. *Jurnal Ilmu Pendidikan* 17 (2), 94-100. DOI: 10.17977/jip.v17i2.2627
- Irafahmi, D. T., Andayani, E. S., 2012. Pengembangan bahan ajar akuntansi berbasis komputer untuk SMK program keahlian bisnis dan manajemen se-Kota Malang. *Jurnal Pendidikan Akuntansi* 1 (2), 83-90.
- IFRS Foundation, 2015. *IFRS Application Around the World Jurisdictional Profile: Indonesia*. Available Online: <http://www.ifrs.org/Use-around-the-world/Documents/Jurisdiction-profiles/Indonesia-IFRS-Profile.pdf>

- Johnson, D. W., Johnson, .R T., Holubec, E. J., 2012. Collaborative Learning: Strategi Pembelajaran untuk Sukses Bersama. Bandung: Nusamedia.
- Kementerian Pendidikan dan Kebudayaan, 2013. Peraturan Menteri Pendidikan dan Kebudayaan Nomor 54 Tahun 2013 tentang Standar Kompetensi Lulusan Pendidikan Dasar dan Menengah.
- _____, 2013. Peraturan Menteri Pendidikan dan Kebudayaan Nomor 64 Tahun 2013 tentang Standar Standar Isi Pendidikan Dasar dan Menengah.
- _____, 2013. Peraturan Menteri Pendidikan dan Kebudayaan Nomor 65 Tahun 2013 tentang Standar Standar Proses Pendidikan Dasar dan Menengah.
- _____, 2013. Peraturan Menteri Pendidikan dan Kebudayaan Nomor 70 Tahun 2013 tentang Kerangka Dasar dan Struktur Kurikulum Sekolah Menengah Kejuruan/Madrasah Aliyah Kejuruan.
- _____, 2013. Peraturan Menteri Pendidikan dan Kebudayaan Nomor 71 Tahun 2013 tentang Buku Teks Pelajaran dan Buku Panduan Guru untuk Pendidikan Dasar dan Menengah.
- Kurniawan, K., 2006. Handout Mata Kuliah Menulis Bahan Ajar/Ilmiah. UPI: FPBS, (Online), (<http://file.upi.edu/Direktori/FPBS>), diakses 3 Februari 2013.
- Krutka, D. G., Bergman, D. J., Flores, R., Mason, K., Jack, A. R., 2014. Microblogging about teaching: nurturing participatory cultures through collaborative online reflection with pre-service teachers. *Teaching and Teacher Education* 40, 83-93. DOI: 10.1016/j.tate.2014.02.002.
- Lakey, G., 2010. *Facilitating Group Learning: Strategies for Success with Diverse Adult Learners*. San Francisco: Jossey Bass.
- Lee, O., 2010. Facilitating Preservice Teachers' Reflection Through Interactive Online Journal Writing. *Physical Educator* 67 (3), 128-139.
- McDuff, E., 2012. Collaborative Learning in an Undergraduate Theory Course: An Assessment of Goals and Outcomes. *Teaching Sociology* 40 (2), 166-176. DOI: 10.1177/0092055X12437968.
- Mills, K. A., Chandra, V., 2011. Microblogging as a Literacy Practice for Educational Communities. *Journal of Adolescent & Adult Literacy* 55 (1), 35-45. DOI: 10.1598/JAAL.55.1.4.
- Prastowo, A., 2012. *Panduan Kreatif Membuat Bahan Ajar Inovatif*. Yogyakarta: Diva Press.
- Sanjaya, W., 2008. *Pembelajaran dalam Implementasi Kurikulum Berbasis Kompetensi*. Jakarta: Kencana Prenada Media Group.
- Sudarman, 2008. Penerapan Metode Collaborative Learning untuk Meningkatkan Pemahaman Materi Mata Kuliah Metodologi Penelitian. *Jurnal Pendidikan Inovatif* 3 (2), 94-100.
- Terenzini, P. T., Cabrera, A. F., Colbeck, C. L., Parente, J. M., Bjorklund, S. A., 2001. Collaborative Learning vs. Lecture/Discussion: Students' Reported Learning Gains. *Journal of Engineering Education* 90 (1), 123-130. DOI: 10.1002/j.2168-9830.2001.tb00579.x.
- UCIDT, 1973. *Instructional Development Institute Model*. Syracuse: the University Consortium for Instructional Development & Technology
- Wright, N., 2010. Twittering in teacher education: reflecting on practicum experiences. *The Journal of Open, Distance and e-Learning* 25 (3), 259-265. DOI: 10.1080/02680513.2010.512102.