

# **Improving Quality of Distance Learning Experience and Students' Progress Through Formative Evaluation**

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## **Abstract**

Distance education requires a continuous assessment of distance teaching materials. The consideration for evaluation is essential to enhance the quality of learning. In addition, the evaluation contributes to promote effective and constructive distance learning. This research outlines the issues and challenges faced to understand distance teaching materials effectively. The research objective is to examine learning effectiveness for distance students understand the objectives intended through formative evaluation. Formative evaluation is considered as an integral part of effective learning experience and students' learning progress. This research conducts a formative evaluation which collects data from a survey, interviews, and academia literature. The assessment has three stages which are one-on-one review, small group reviews, and field trials.

**Keywords:** formative evaluation, open university, distance education, quality assurance, instructional design

## **Introduction**

Each of teaching materials designed as a self-contained teaching materials, meaning that the teaching materials are described in detail to help students learn independently. Independent learning expected from the course is different from autodidact study that did not have a guide and paperwork structured. Universitas Terbuka is fully aware of the development of science, therefore teaching materials supplied should be updated according to the cases that developed and open to criticism and constructive suggestions. This is important as distance education has to pay considerable attention to “empathy, responsiveness and reliability as routes to satisfaction which leads to persistence and or retention. While issues related to assurance and tangibility are not problematic at present, nevertheless assuring that procedures are improved and maintaining available facilities will augment the quality of services” (Sembiring, 2015, p 8). The distance education and tutors involved are advised to reflect on the aspects of satisfaction as “a guide to the persistence and or retention to uphold its mission of making higher education open to all through flexible quality education” (Sembiring, 2015, p 9)

Criticisms and evaluation of teaching materials are expected and needs to be responded well as a manifestation of the dynamics of concern for quality education. Culture of criticism itself needs to be built among lecturer and tutor at the Open University as well as gain feedback on the teaching materials from distance students.

Teaching materials course Introduction to Accounting / EKSI4115 has been published since 2009 and is used for the entire students of Accounting and Management class with heterogeneous background. Students have a wide variety of different characteristics ranging from demographic differences, motivation, learning patterns, and the level of understanding regarding the content of the lessons. The variety of students' preferences and learning styles should be "incorporated as an integral part of the mechanism for designing and reviewing study programmes" (Li Kam Cheong, 2014, p 44). According to the Ministry of Education (2008), the contents of the module must have an adequate organization of learning materials; use instructional methods; use simple language and easily understood; and organizing the layout and appearance of good writing, in order to equalize the uniform understanding of basic science as a foundation reinforcement to take courses and deepening of Accounting in advanced semesters.

Based on the results of interviews conducted on students who took the course of EKMA4115 these students experienced difficulty in understanding EKMA4115 teaching materials, so they decided to join the face to face tutorials (FTFT).

Students who follow FTFT tend to gain better understanding of the material and are able to obtain the score of A and B. However, students who do not follow FTFT tend to earn grades C and D even scored E. Here are the results of student learning that taking courses EKMA 4115 at the time of registration year 2012 semester 1 and 2.

Tabel 1. Results of student learning to the subject EKMA4115 in 2012.1-2012.2

Registration Period	Total students	Participants of FTFT			Participants of non FTFT		
		Participants	% of grade A and B	% of grade C, D and E	Participants	% of grade A and B	% of grade C, D and E
20121	153 students	71 students	77,5 % (55 students)	22,5% (16 students)	82 students	12.2 % (10 students)	87,8 % (72 students)
20122	172 students	95 students	73,7% (70 students)	26,3% (25 students)	77 students	20,8 % (16 students)	79,2% (61 students)

**Source:** Student records system and application FTFT accessed December 10, 2013

Table 1 shows that students who attend FTFT have the greater opportunity to earn an A and B (median 75.6%) of the students who do not follow the FTFT (average 16%). This is because face-to-face tutorials with tutor play an important role in helping students to understand their courses (Mulyasa, 2005). The difference percentage of results is big and becomes the main

reason for conducting this study. This may indicate that the teaching materials EKMA4115 were not designed to be self-teaching materials. The teaching materials both in print and non-print form containing educational content with the theory of pedagogy need to facilitate self-learning learners (Supaman et al, 2013). In addition, the urgency of this study refers to a system of distance education based on the independence of the students in line with the Rector Decree No. 3747 / UN31 / 2013 dated June 28, 2013 article 3 that the value of supporting subjects that are scores FTFT or online tutorials will be calculated the contribution of its value against the value of the end of the course only if the value of final exam reaches  $\geq 30$ . The effectiveness of distance learning is measured by the examination process and its satisfaction was related to higher GPA results (Saxon and Wanjohi, 2014).

Based on the description, this research attempts to examine teaching materials self-prototype for Introduction to Accounting / EKMA4115 in accordance with the formulation of competencies that must be mastered, and the corresponding development of science accounting current and in accordance with the concept of instructional design through evaluation of the effectiveness of instructional materials and enrichment methods. This is conducted as the anticipation of the failure phenomenon about the variety of understanding of students that have an impact on students' achievement in subsequent semesters where course of EKMA4115 is the basic concept of accounting. It is important to note that the key aspects in facilitating students' choices to learn require a learner-centred approach, the role of resource-based learnings as well as delivery methods (Tucker and Morris, 2012).

Distance learning need to provide learners with the opportunity to accommodate a learning experience based on students' needs and preferences (Demetriadis and Pombortsis, 2007). In addition, the urgency to conduct continuous quality improvement will comply to the evaluation criteria formative from the Indonesian Ministry of Education. This study attempts to compare the old teaching materials with new teaching materials (after revisions) to determine whether the advice and recommendations from experts, tutor of FTFT and students already applied. Based on the background and pre-study, then EKMA4115 teaching materials need to be designed, revised and enriched so that it becomes self-instructional materials. Therefore, the formative evaluation of the teaching materials EKMA4115 is conducted in this study.

The case study of assessment of teaching materials EKMA 4115 are to:

- 1) Evaluate the teaching materials EKMA4115 through evaluation of individual or one-to-one evaluation.
- 2) Evaluate the teaching materials EKMA4115 through the evaluation group (small group evaluation) that have been revised based on the results of individual evaluations.

3) Test, analyse efficacy, and validating EKMA4115 teaching materials revised or developed based on the evaluation of individuals and groups being through student results.

Critical analysis aimed to understand or assess reality, events, situations, objects, people, and the statement behind the clear meaning as well as direct meanings. This study begins with a critical analysis of teaching material Introduction to Accounting / EKMA4115 to identify the things that have been going well in the planning and implementation as well as in the section where improvements can be made which later became a recommendation for revision or development of independent teaching materials. Several steps to develop a self-learning materials can be done through the formative evaluation.

This research outlines the issues and challenges faced to understand distance teaching materials effectively. The research objective is to examine learning effectiveness for distance students understand the objectives intended through formative evaluation. Through this research, formative assessment and feedback from related stakeholders are reinterpreted to show how these processes can help distance students take control of their own learning (Nicol and Debra, 2006). Formative evaluation undertaken in this study include the instruments that consists of organizing and quality content, the use of instructional methods, use of language, organizing grammar and typographical arrangement, devoted to the several modules of teaching materials Introduction to accounting / EKMA4115. This formative evaluation involves experts, tutor of FTFT and students as the user of the teaching materials.

## **Literature Review**

### **Open and Distance Learning (ODL)**

One of the characteristics of ODL is independent study. Students learn unaccompanied by a teacher or tutor so the presence of the teacher must be replaced by the presence of a specifically designed teaching materials.

It is important that “ODL practitioners should not lose sight of the different cognitive styles when designing instructions for distance learners. They should allow both cooperative and individualized learning in the whole class” (Osuji, 2011, p 12). A particular challenge for ODL to develop teaching materials that have the substance presented as interesting, relevant, motivating and quality. Transferring the knowledge should be supported by the quality content of description, whether written or oral, equipped with pictures and sound. Especially for teaching materials of Introduction to Accounting/ EKMA4115 that have comprehensive case studies. Therefore, if students find the case study is difficult to understand and contains several mistakes, it may impact students in learning the case study effectively.

The role of science and technology, education becomes very important, teaching materials need another media as supporters like the pictures speak with colour slides even interspersed with music. Personal and Sjarif (2010) states that BAC used in institutions Distance Education (ODL) as UT generally designed using a very tight structure and contains solid information and knowledge. Teaching materials used in the operation ODL need to be designed using appropriate instructional models with learning conditions, in order to assist students in the learning process effectively and efficiently. Design learning system is a systematic process used to design learning events to achieve the expected goals. Design of effective teaching material includes several components such as structure, the content or subject matter, the presentation of the strategy and the physical appearance. In addition, students learn how to evaluate the success and feedback also playing an important role in determining the quality of the teaching materials used in ODL program (Personal and Sjarif, 2010).

### **Design of teaching material ODL**

Instructional development is not confined to the process of identifying instructional needs through the development of instructional strategies, but until the evaluation stage as set out in Figure 2.1 in the following phase.

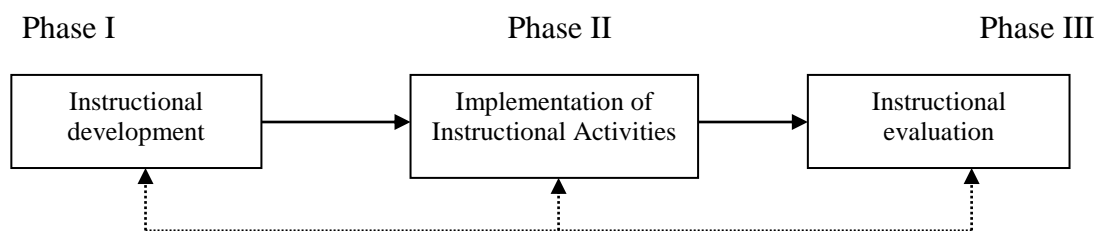


Figure 1. The Complete cycle of instructional activities

#### phase I

Defining the problem and the organization (identifying instructional needs, formulate general instructional objectives, instructional analysis, identify the behaviours and characteristics of early learners and describe the background / setting)

#### phase II

Analysis and instructional systems development (writing specific instructional objectives, write the reference benchmark tests, preparing instructional strategies, and develop prototype instructional system)

### phase III

Formative evaluation of the prototype instructional systems (expert review and revision, small scale trials and revisions, and large scale trials involving the user community of graduates and revision)

This study is considered as a Research and Development (R & D). R & D is a series of processes or steps in order to develop a new product or enhance existing products in order to be accountable. Such products are not always hardware, such as books, modules, learning tools in the classroom or laboratory, but it can also software such as computer programs for data processing, learning, classroom, library or laboratory, or models of education, learning, training, guidance, evaluation and management systems.

The procedure of research and development (R & D) for distance teaching materials is conducting through an evaluation namely a formative evaluation. Research and development of teaching materials are done by designing programs or instructional materials according to the problems derived from the results of the needs analysis. Follow-up of the results of the needs analysis was to design, conduct pilot programs or materials, and make revisions to the instructional materials are considered ready for use in a real situation. The procedures of the development of teaching materials specifically through formative evaluation are:

1. To evaluate individual or one-to-one evaluation on teaching materials EKMA14115 and implementing revisions based on the results of that evaluation. In the first step is to evaluate teaching materials with (a) expert knowledge of accounting and (b) tutor of FTFT. The results of this evaluation provided some inputs and recommendations for the author to revise the instructional materials.
2. To evaluate the group (small group evaluation) on teaching materials EKMA4115. Evaluation is being conducted by the group of nine students in one class. Each student filled out a questionnaire which is equipped with a print-out of the old module (before revision). The results of this evaluation then become input and recommendation as feedbacks to the author to immediately respond and revise the module accordingly.
3. Conducting field trials or field try out for the teaching materials are being developed. This last step is a step to test the potency of the product produced. The trial was conducted by 24 students in one class, each student is given a questionnaire and a new module (after revision). The results of this trial will be analysed by comparing the old module (before revision) and a new module (after revision). Comparing the results of tests / experiments on these two groups can indicate the level of efficacy and the resulting product

## **Methodology**

Sources of data in this study using primary data. Primary data were obtained from questionnaires and interviews with students in Jakarta and Bogor regional office who took this course EKMA 4115 semester registration period year 2014 semester 1 and 2. The sample of students from Jakarta and Bogor regional office are considered to represent the complexities of the social, cultural, education and the variation of UT students. In addition, primary data were also obtained from experts (expert review) through questionnaires and interviews. The criteria of experts in this study are tutors of UT who have the educational background of accounting and already teach the course of Introduction to Accounting / EKMA4115 with minimum two semesters or people who have a great interest in the subject areas of accounting backgrounds linear in accounting with master of education or to earn the honorary title of Professor.

This research data obtained from the study along with experts or tutors, in particular the substance of the material field of accounting. In addition, data was also collected through observation in the classroom tutorials, and distributing questionnaires in Bogor and Jakarta Regional office. The questionnaire used is Questionnaire User Rating of the Subjects (AJ10-RK03-R02) to students who follow FTFT and non FTFT. This study is the research and development of teaching materials through the formative evaluation of the several modules on teaching materials Introduction to Accounting / EKMA4115 first printed in 2009 that is still used by students until now. Formative evaluation is a study that serves to plan, acquire, and analyse data and information that used in revising the existing teaching materials (Supaman, et al, 2013).

The formative evaluation consists of several stages involving subject matter, experts and students. In addition, formative evaluation procedure is described as follows by adopting procedures Suparman, et al (2013).

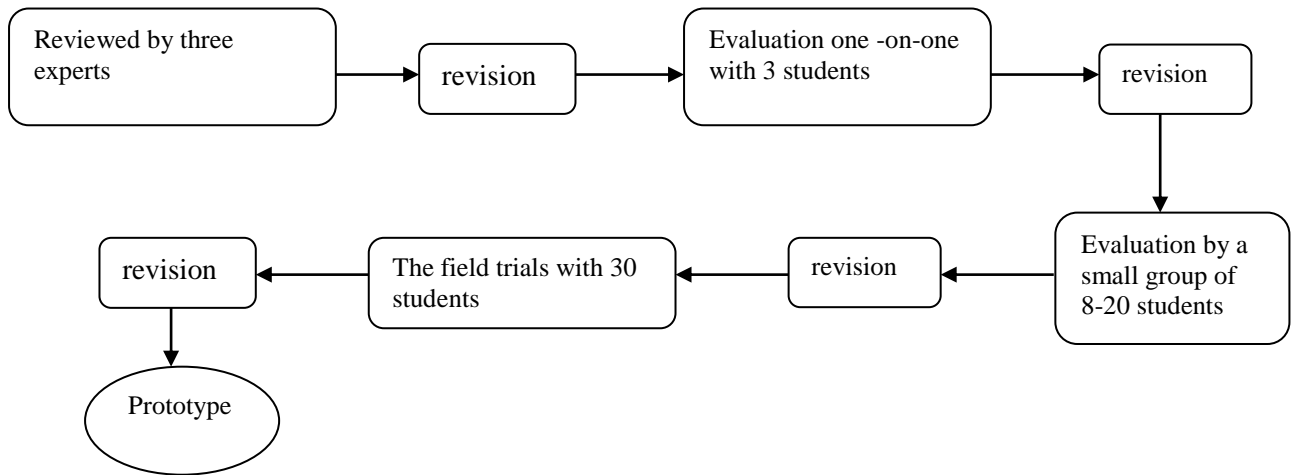


Figure 2. Procedure formative evaluation

1. Participation by three subject matter experts to verify:
  - 1) Formulation of learning objectives
  - 2) Analysis of instructional
  - 3) Accuracy and contemporary of material
  - 4) vocabulary, sequence, and student participation activities
  - 5) Clarity and proper test items
2. Participation by students
  - 1) Evaluate the quality of initial tests and formative tests
  - 2) Sit with students at the time he studied teaching materials
    - a. clarity of learning
    - b. The impact on students
    - c. Appropriateness
3. Evaluation by a small group of 8-20 students
  - 1) Effectiveness of learning (initial and final test)
  - 2) Attitudes toward Learning (questionnaire and interview)
  - 3) Feasibility study (the time it takes for students and the attitude of the organizers)
  - 4) Carry out a questionnaire to students about their attitudes:
    - a. Does the earlier lesson attract your attention?
    - b. Is the earlier lesson too long or short?
    - c. Whether learning was too difficult or too easy?
    - d. Do illustrations aid or hinder?
    - e. Whether the test was to measure the materials that have been presented?



#### 4. The field trials with 30 students

- 1) Effectiveness was measured by the final test for students
- 2) The attitude of students and tutors to learning
- 3) Feasibility study in terms of relevance / benefits, time and cost
- 4) Design of learning materials (compliance with the principles of learning, learning and motivation)
- 5) Availability of other learning resources if necessary

The paradigm framework of this study as follows:

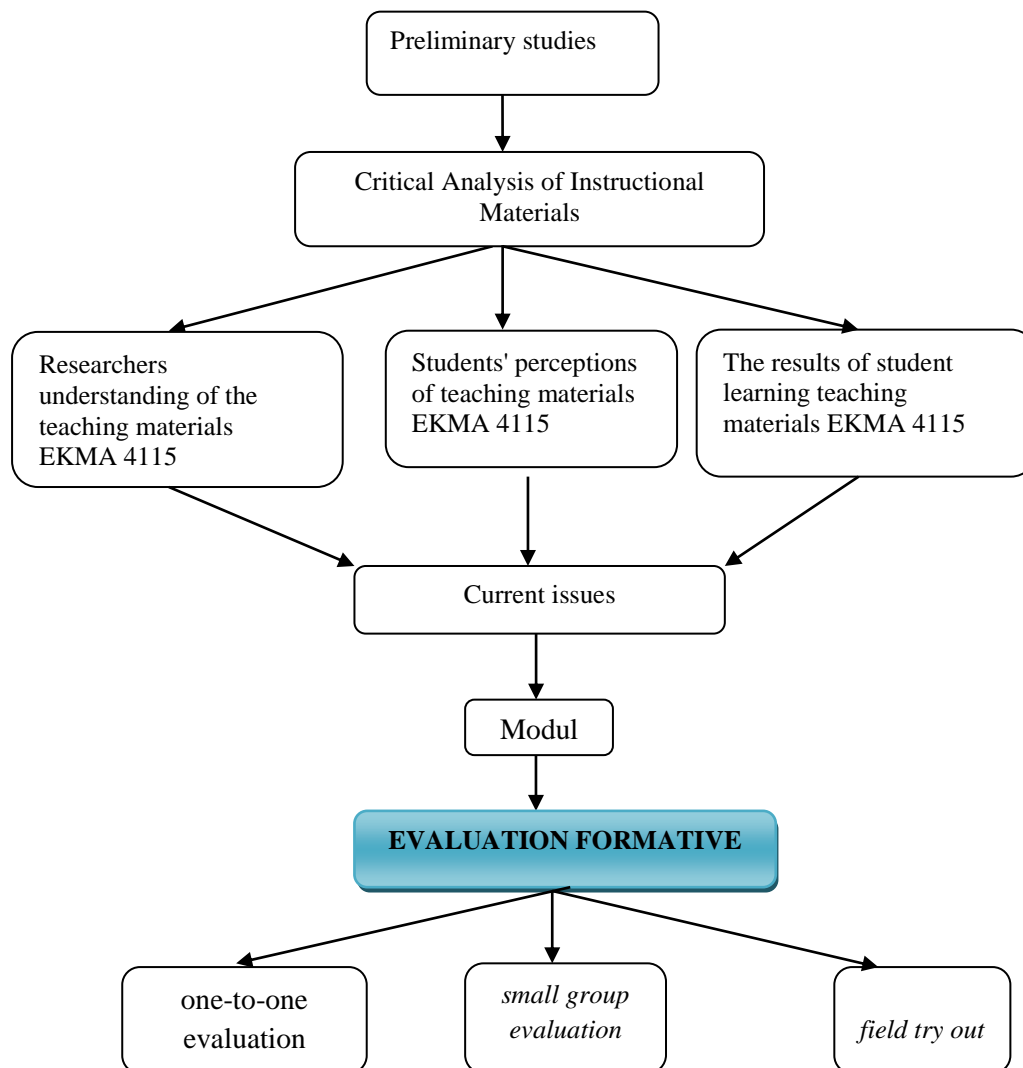


Figure 3. The framework research

This framework outlines the notion of a preliminary study resulted in problems through critical analysis of teaching materials, researchers' understanding, students' perceptions of learning materials including student complaints about the difficulty in understanding the content of the materials, as well as learning outcomes of students who take the course EKMA4115. Preliminary study presents that most of the learning results (grades) students

who do not follow the FTFT received score of C and D. While the majority of students who attend FTFT obtained A and B.

After problems arise through critical analysis the next step is doing the formative evaluation of teaching materials through three the evaluation phase which resulted in independent distance teaching materials suitable with the concept of distance learning. This research paradigm begins with a critical analysis of teaching materials EKMA4115 by identifying the things that have been going well at every stage of the planning and development of teaching materials, and then evaluate the parts which need to be revised. Then steps formative evaluation is conducted as follows.

Table 2. Steps evaluations done by using formative evaluation of teaching materials.

NO	STAGES EVALUATION	OBJECTIVE EVALUATION	DATA ANALYSIS	RESPONDENTS	RESULTS
1	Evaluation of an individual (one-to-one)	Identify and eliminate mistakes and to obtain indications and initial reactions from experts and instructional designers	Descriptive using the instrument (AJ10-RK03-R02)	1 experts + 1 tutor	Revised Draft Design and Instructional Materials
2	small group evaluation	Determine the effectiveness of the changes that have been made after an individual evaluation and identify when learners have learning problems	Descriptive Evaluative	10 students	Revised Draft Subjects
3	<i>Field Try Out</i>	Determine whether changes have been made after the evaluation of the group has been effective and tested teaching materials developed are in accordance with the substance and the concept of instructional design	Descriptive Qualitative	30 students	Revised Final BA

This study is also a combination of descriptive, evaluative, and experimental. Descriptive method used in a pilot study to collect data on existing conditions. Existing conditions include: (1) the condition of the products that already exist as a comparison material or base material (embryo) product to be developed, (2) the condition of the part of users (students); (3) The condition of the factors supporting and inhibiting the development and use of the product to be produced.

Evaluative methods, are used to evaluate the product in the process of testing the development of a product. Product research was developed through a series of tests and trials on each activity an evaluation, whether the evaluation results and the evaluation process. Based on the findings on the results of trials held enhancements (revised model). Experimental method

used to test the efficacy of the resulting product. Although the pilot phase has been no evaluation (measurement), but such measurements are still in the context of product development, there is no comparison group. Comparing the experimental results in both groups can indicate the level of efficacy and the resulting product.

Formative evaluation is undertaken in this study include instruments comprising:

- 1) organizing the material, review the contents of the theory, quality of presentation, explanation of the formula and practice questions, illustrations, and case studies of teaching materials course Introduction to Accounting / EKMA4115.
- 2) the use of instructional methods and feedback the course Introduction to Accounting / EKMA4115.
- 3) use of language teaching materials course Introduction to Accounting / EKMA4115.
- 4) organizing board layout and appearance of the course Introduction to Accounting module / EKMA4115.

With the formative evaluation module course Introduction to Accounting / EKMA4115 expected:

1. Target specific instructional design improvements and material substance more effectively include the complexity theory and applications of basic accounting. And to develop teaching materials that can evoke a sense of curiosity and interest more students in the course Introduction to Accounting/EKMA4115. Given the course EKMA4115 an existing course at the beginning of the semester.
2. The long-term target, the revision of teaching materials Introduction to Accounting / EKMA4115 become self-sufficient and appropriate teaching materials with instructional design and input the results of this study. Particularly in the development of teaching materials-science teaching materials accounting.

## **RESULTS AND DISCUSSION**

### **One-to-one evaluation**

Based on the result of a questionnaire with 20 students Bogor regional office who take courses Introduction to Accounting (EKMA 4115) at the time of registration year 2014 semester 1 and 2, of 12 modules of the most critical to be evaluated is the module 1 and 2. This is because the majority of students taking this course are students with the educational background of natural sciences. As seen in Table 4 and 5, students with a background in natural science need the description of accounting concepts more detail and motivate the process of understanding the material on subsequent modules and as a basic foundation for studying subjects related to other advanced accounting courses.

Table 4. Comparison of participants FTFT based on educational background at the time of registration 20141

Registration Period	Participants of FTFT			Participants of Non FTFT		
	Participants	Educational background		Participants	Educational background	
		Social sciences	Natural sciences		Social sciences	Natural sciences
20141	28	12	16	77	33	44

Table 5. Comparison FTFT participants based on the educational background of education at the time of registration 20142

Registration Period	Participants of FTFT			Participants of Non FTFT		
	Participants	Educational background		Participants	Educational background	
		Social sciences	Natural sciences		Social sciences	Natural sciences
20142	31	17	14	95	45	50

Sumber: Data SRS processed

This is in line with expert opinion that two tutors course Introduction to Accounting (EKMA 4115) of Jakarta regional office and one tutor of Bogor regional office. Based on the evaluation of individual three tutors obtained the following results.

The learning materials are still considered to be less than 50% in accordance with the development of thought / practice in the field of science and technology. Based on the interview knowing the reason experts say this is because the use of the term account is not in accordance with Financial Accounting Standards (GAAP) and is not equipped with foreign language terms.

Explanation of material and the concept is still considered unfinished, still in the range of less than 65%. This is because the material explanation on teaching materials Introduction to Accounting (EKMA 4115) too wide to other subjects. Should focus on the explanation of the basic concepts of accounting.

As for the quality of the presentation of the method or paradigm of thinking that a consistent and balanced, logical structure, orderly and coherent, the difficulty level or depth of the material in accordance with the program level, material help to analyse the relationship between reality with the theory or the theory discussed, the material does not contain delivery errors information, materials fitted with a chart that students add to the understanding of the

accounting cycle, and the material does not contain the error count is at a moderate level is 60-80%.

Best judgment of experts is on the tasks and tests that have been considered relevant to the test that is equal  $\geq 80\%$  but still needs plus examples of his case. In addition, experts also give some expert advice and recommendations for improvement modules 1 and 2, namely:

- 1) Taking into account the use of the names of the account in the accounting in accordance with Financial Accounting Standards (IFRSs)
- 2) Include the names of the account in English. So that students are familiar with the term foreign language
- 3) Review the calculation results
- 4) Review the accuracy of the questions and answers
- 5) Review the quality and consistency of worksheet in formative tests
- 6) Review the structure of content

In addition to these criteria, the expert also revealed an overall assessment of substance modules:

- 1) The substance should be more compacted, more focused on the discussions: the scope of accounting, the accounting cycle, the worksheet and the closing of bookkeeping, financial statements, the company's legal and specialized journals, accounting for fellowship, to the company's Accounting I and Accounting II for the company. Since the majority of students who studied accounting have different educational backgrounds mainly from natural sciences.
- 2) We are so error-typos and arithmetic can be minimized
- 3) Price modules were too expensive so that students rarely have the original book (probably due to factors book thickness)

To view the overall quality of teaching materials Introduction to Accounting (EKMA 4115), the evaluation of individuals in this study using the instrument evaluation form AJ10-RK03-R02 which was developed by the Centre for Quality Assurance (Pusmintas). This evaluation includes physical, layout, language and material and non-print instructional materials (BANC). Individual evaluation by using evaluation form AJ10-RK03-R02 conducted on 10 students Bogor regional office and 8 students Jakarta regional office in 20142 registration period as a random sample. The results of this evaluation can be seen in Figure 4 physical evaluation, image layout evaluation 5, Figure 6 language evaluation and image evaluation 7 material. For BANC evaluation cannot be performed because the students who do not have the original teaching materials. Students only have copy of teaching materials, so it does not have BANC inherent in teaching materials.

Based on the result of physical evaluation of the most critical things to be remedied is the cover of teaching materials Introduction to Accounting (EKMA4115) is considered not describe the contents of the substance and less attractive. Based on the evaluation of the most critical layout to be remedied is the layout of the material is deemed not appropriate. Based on the evaluation of the most critical language to be remedied is the appropriate spelling Enhanced (EYD), this is because the teaching materials EKMA 4115 there are many typos and punctuation are not appropriate. Based on the evaluation of the material, the most critical thing to evaluate is the presentation of material that is not systematic, uninteresting and boring.

Figure 4. Physical evaluation

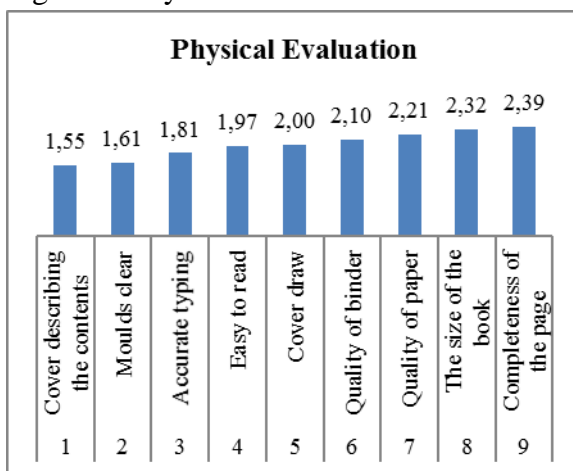
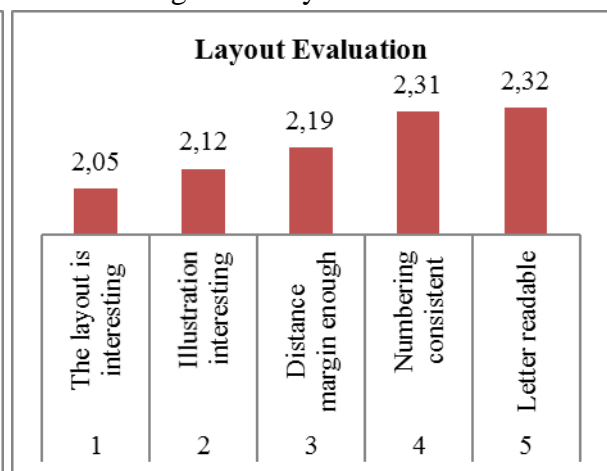


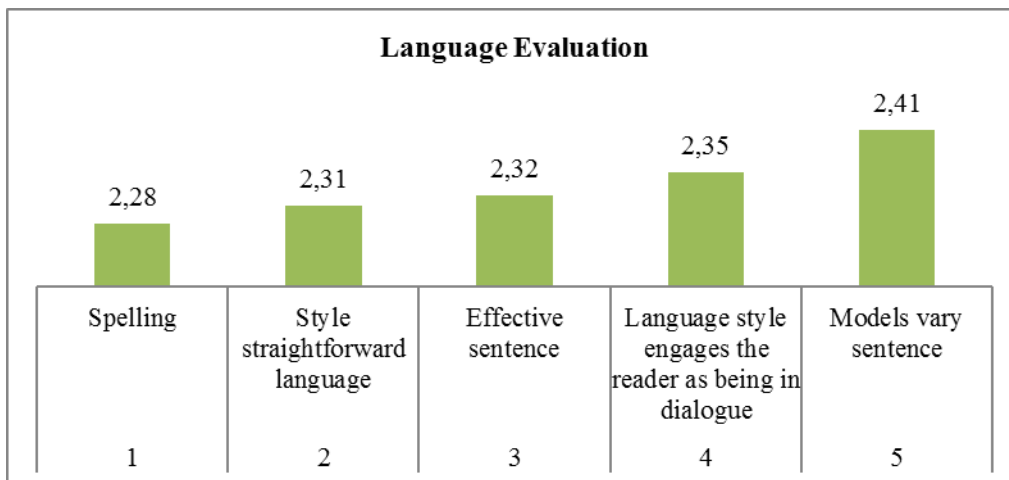
Figure 5. Layout evaluation



Source: Data processed

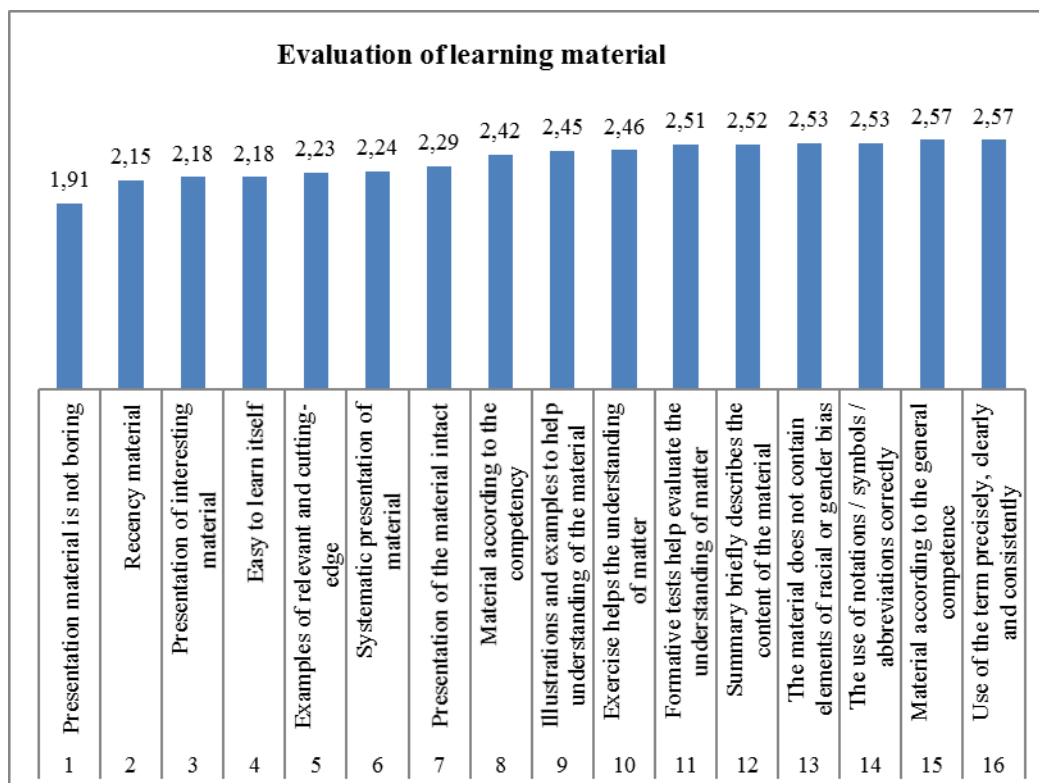
Source: Data processed

Figure 6. Language Evaluation



Source: Data processed

Figure 7. Evaluation of learning material



Source: Data processed

Based on the results of individual evaluations can be concluded that the modules 1 and 2 EKMA4115 teaching materials should be revised. This was strengthened by the results of student learning in the semester 2014.1 in Bogor regional office, namely when the Rector Decree No. 3747 / UN31 / 2013 article 3 that the value of supporting subjects that are scores FTFT or online tutorials will be calculated contribution of its value against the value of the end of the course only if the value of UAS reached  $\geq 30$ . Based on table 7, the number of students who attend face-to-face tutorials (FTFT) whose grades C, D and E had a very significant increase when compared to Data table 1 was 90.5% (22.5% vs. 42.86%), this percentage is dominated by students who have a background in natural science of 11 people (table 7). While on the contrary, students who receive grades of A and B experienced a significant decrease when compared to table 1 is 30.18% (77.55 vs. 54.14%), it is dominated by students who have the educational background in social science (table 7), While students learn independently without the help of FTFT for grades C, D and E are increased by 2.06% (87.8% vs. 89.61%) and students who received grades A and B of the results of independent study decreased by 14, 83% (12.2% vs. 10.39%).

Based on these data we can conclude that aid in the form of a tutorial to-face learning that is needed by the students, especially with the educational background natural science does not help much in terms of graduation. With the Rector Decree No. 3747 / UN31 / 2013 Article 3

students are required independence in learning. Therefore, this research suggested that UT needs to improve the quality of distance materials.

Table. 7. Comparison of Participants and Non face to face tutorial (FTFT) based educational background

Registrati on Period	Participants of FTFT				Participants of Non FTFT				
	Partic ipants	% of grade A and B		% of grade C, D & E		Partici pants	% of grade A & B		% of garde C, D & E
20141	28	57,14 (16 Vs 28)		42,86 (12 Vs 28)		77	10,39 (8 Vs 77)		89,61 (69 Vs 77)
		Educational background		Educational background			Educational background		Educational background
		Social sciences	Natural sciences	Social sciences	Natura l sciences		Social sciences	Natural sciences	Social sciences
		11	5	1	11	6	2	27	42

Source: Data SRS processed

### Evaluation groups are (small group evaluation)

Evaluation of the group only involves students participating in FTFT On Demand course Introduction to Accounting / EKMA4115 at the time of registration 20142. Samples students who attend group evaluation is being conducted at a random sample of 42 students consisting of 21 students Jakarta regional office is divided into 2 groups of 10 students of class A and class B 11 students, and 21 students Bogor regional office were divided into 2 groups of 10 students and 11 students. The evaluation was conducted in the 2nd meeting that is at the end of the tutorial after the students finished discussing the modules 1 and 2 class tutorial.

Face to face tutorial participants of respondent data into the sample field trials showed that the participants are dominated by women because the majority of participants were women FTFT (64,29 %). Age still can be said younger or a fresh graduate. Because the courses Introduction to accounting given to students of the first semester. The participants FTFT majority of unmarried (88,10%) so it should be able to set the time to learn better. Students who work as private employees ranked the largest compared to other jobs amounted to 76.19%. The students hope the courses studied at UT to support his work. The educational background of participants for social and natural science is 54.76% and 45.24% respectively. Thus, the samples taken are considered to represent the entire participants of FTFT.

From the results of the questionnaires by student groups are related to the review of the experts of the modules 1 and 2 in the form of 20 questions covering that the most critical thing to be improved is associated with practice questions, illustrations, and case studies. This is because the level of students' understanding of the module does not reach the targeted objectives of the course especially for students with natural science background.



### **Field trials (field try out) against the revised teaching materials**

After the students filled out questionnaires in the evaluation of the group, and give an explanation of things that should have been carried out repairs on the module 1 and 2, the researchers are working with a tutor to evaluate the students' understanding of the modules 1 and 2 in the form of task assignment tutorial tutorials 1. Results :

a. Bogor regional office of 32 students participating in FTFT, as much as 81.25% (26 vs. 32) student receives a grade of > 90.

b. Jakarta regional office: at grade A 76.92% (20 vs. 26), while class B 69.70% (23 vs. 33)

From these results indicate that the majority of students have understood the material in Module 1 and 2.

### **Conclusion**

1. The evaluation contributes to promote effective and constructive distance learning.
2. This research outlines the issues and challenges faced to understand distance teaching materials effectively. Distance students have diverse educational background and range of age. In addition, the variation of learning pattern and diverse understanding to the distance teaching materials are also identified in this research. The mechanism of reviewing distance teaching materials needs to conduct periodically, reviewed by peer reviewers, and updated with the dynamics of knowledge advancement and best practices as suggested in this research. The participants consider the teaching materials as less interactive and less instructional to stimulate the curiosity of students. The teaching materials are expected to help students to learn independently and achieve the competence and expertise from the learning experience.
3. This research examined learning effectiveness for distance students to understand the objectives intended through formative evaluation. This research suggested that formative evaluation is considered as an integral part of effective learning experience and students' learning progress. The evaluation needs to be conducted periodically to cope with knowledge advancement and best practices.

### **Suggestion**

Suggestions from the results of this study are:

1. Results of the evaluation of individual or one-to-one evaluation on EKMA4115 material as the most critical to be improved is the introductory modules. The introductory modules provide a fundamental understanding to study further modules

- especially for students with natural science educational background as the majority of users of teaching materials Introduction to Accounting (EKMA 4115).
2. Introduction to Accounting Teaching materials / EKMA 4115 recommended being revised. The most critical modules to be remedied is the module 1 and 2 as suggested by the results of the individual evaluation of experts. In addition, based on the results of the evaluation form instrument AJ10-RK03-R02 things that need to be improved is the cover module, layout of the material that is less attractive, according to EYD spelling, and presentation of the material that is considered less interactive.
  3. The substance should be more compacted, more focused on the discussion: the scope of accounting, the accounting cycle, the work-sheet and the closing of bookkeeping, financial statements, the company's legal and specialized journals, accounting for fellowship, to the company's Accounting I and Accounting II for the company. This is needed to provide the foundation for an adequate understanding of the basics of accounting. While other materials exist on teaching materials Introduction to Accounting / 4115 EKMA, it is better given the advanced semesters with the competencies related subjects.
  4. The focus of the revision should be carried out on the work-sheet and tests formative, mainly the work that related to the calculation and the accuracy of key answers of the work-sheet and formative tests.
  5. This study requires further research on the framework to evaluate the teaching materials from the students understanding through the examination mechanism.

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