Improving The Quality of Printed Learning Materials Through Formative Evaluation

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ABSTRACT

Printed learning materials are the primary resources for students learning in Universitas Terbuka, Indonesia. In presenting the contents, printed materials are divided into several sections called modules. Formative evaluation, as part of the educational research and development (R&D), should be carried out in order to conduct a continous improvement of the quality of such modules. This article explains the results of the formative evaluation of those modules, especially in terms of its contents and face validity. The formative evaluation itself was conducted through three following steps, namely content validity assessment of modules by subject matter experts (SME); face validity evaluation by one-to-one students and small group of students. The objects of the formative evaluation are Module #1 and Module #5 of printed learning materials titled Training Management (2 credits, consisting of 6 modules). The results indicated that the contents of those modules are generally considered as valid by SME, although they still need some additional topics, the concept of management and the concept of training. In terms of its content presentation, it still needs more detailed explanation about the topic of the steps of training management and the training organization. Meanwhile, in terms of face validity, most of students felt that in general the module is quite easy to understand. But, they also found that some explanations in the modules are too long, and there are many unfamiliar and or difficult words that need to be avoided. Small tasks given in the modules really helps the students to summarize the material had been learned. Examples and non-examples make the modules more easily understood, but there are still many complicated sentences used in some examples that need to be simplified.

Keywords: formative evaluation, subject-matter expert, one to one evaluation, small group evaluation, training management, content validity, face validity

INTRODUCTION

Printed learning materials are primary resources for students learning in Universitas Terbuka (UT), Indonesia. In presenting the contents, printed materials are divided into several sections called modules. The learning system in open and distance learning (ODL) requires students to be able to learn independently due to the physical separation with lecturers. Printed materials as a substitute for lecturers should use instructional strategies that can lead students to learn independently. Thus, there must be standard components required in order for the students to learn independently. Therefore, printed materials are required to be self-contained and self-instruction.

The Study Program of Agribusiness at the Faculty of Mathematics and Natural Sciences, UT is the only study program of Agribusiness in Indonesia that carries out ODL. The study program provides students with multiple learning resources, both printed materials and non-printed materials, where the printed materials are still a primary learning source. One of the courses offered in the curriculum of the study program is Training Management (LUHT4328), which provides knowledge to students on how to design a beneficial training for farmers and communities.

Along with the development of science and practice in training management, printed materials of LUHT4328 require material revisions in line with the science development. In order to revise the printed materials of LUHT4328, first formative evaluation studies were conducted to identify the weaknesses that exist in the module. Formative evaluation, as part of the educational research and development (R&D), should be carried out in order to conduct a continous improvement of the quality of such modules.

This article explains the results of the formative evaluation of those modules, especially in term of its contents and face validity. The aims of evaluation are to identify the weaknesses that exist in the module for revising.

METHODS

The design of this study was a formative evaluation with a qualitative approach, through these steps: content validity assessment of modules by subject matter experts (SME); and face validity evaluation by one-to-one students and a small group of students.

The objects of this study are modules of Training Management, module #1 (Title: Understanding Training Management), and #5 (Title: Implementation Training). The source persons who are SMEs are 3 people from the Faculty of Human Ecology, Bogor Agricultural University. The review results were used to revise the module stage I.

The next stage was a "one-to-one evaluation" by 3 students. The purpose of the evaluation is to identify the level face validity of the materials. Results of the evaluation were used to revise the module stage II. After the revision phase II was completed, an assessment of the revision results by a small group of students (9 people) from UT's Serang Regional Office (RO). Feedback from the evaluation was used for revision stage III.

Assessment of content validity was conducted through a desk evaluation by source persons, including substance validity and level of current-ness of the materials. The data collected were qualitative primary data. For the assessment of face validity,

information was gathered through a questionnaire and students were interviewed directly. In addition, there was an observation of students' attitude when reading module materials. All the data collected were primary data and qualitative.

Collecting data on the one-to-one evaluation was conducted by the following steps: 1) inviting 3 students to read modules together and discuss the meaning; 2) encouraging students to comment on face validity; 3) recording all the students' comments; 4) interviewing students if there are comments that need to clarified; 5) concluding the implications for module revision. The data collection for the small group discussion was conducted by the following steps: 1) inviting 9 students to a room; 2) distributing the revised module from the one-on-one evaluation; 3) asking students to read the modules carefully; 4) distributing questionnaires to the students; 5) recording the students' comments; 6) conducting interviews based on the results of questionnaires (Suparman, 2001). The data were analyzed descriptively to answer the research objectives which are to analyze content validity and face validity.

RESULTS AND DISCUSSIONS

Substantial Validity

Substantial validity is measured from indicators, i.e.: the validity of the contents and material concepts; the compatibility between the materials and the student competence; the adequacy of examples and non-examples, and relevance between formative tests and instructional goals.

a. Validity of the Contents and Material Concepts
Objective assessment by SME is to ensure that the correct learning materials are delivered and they comply with the expected student competence. In the assessment, experts advise qualitatively material to the validity of the teaching materials, which will be used as revision materials for writers. Writers do not have to accommodate the SME's advises. There are a few things that should be considered before the revision of teaching materials appropriate the SME's advises (Dick, Carey, & Carey, 2009).

Results of analysis of three SMEs concluded as presented at Table 1. For Module #1, the material is valid in general, although there are some parts that need to be corrected. Addition of management concept and training concept is an important, due there is the module directly discusses understanding of training management, while the management concept and training concepts have not been yet. There's a worry that students cannot understand the definition of training management. Explanation of training phases is not only to be explained in diagram, but must be accompanied by a narrative explaining. Various training was extended beyond of agriculture.

Advice for Module #5, the material is less detailed in guiding students to understand the organizing of training, from planning, implementation, and evaluation. Illustration of conducting of training needs to be given more, in order that students can describe the training event.

Table 1. The Validity of the Contents and Material Concepts

Learning Activities	Module #1	Module #5
I	1. Material is valid, but need to be corrected. Management concept and training concept are not explained in detail. 2. It needs to be emphasized that training management involves 3 important aspects, the person doing the job, performance, and training design. There also needs to be a distinction between training, education, and extension. 3. The purpose of the training expressed was the training purpose for government employees; it should have been more generalized, including various professions.	Participative training does not explain how the training is organized starting from the planning to evaluation stages
II	1. It needs to be presented in a more structured and profound way to make it easier for the students to grasp the materials. The language used was "PowerPoint" language; therefore it was less instructional in guiding the students in studying the module.	The Training Organization does not explain what details need to be done during the preparation, implementation, and post-training stages. There needs to be more case examples because this is an important part of Module 5.
	2. Explanation about the model and design is confusing because there are no descriptions or examples. The most vital part is the identification of training needs and the formulation of the curriculum; the stages need to be explained in more detail.	There need to be more illustrations of the training implementation: how to organize it, how to identify problems and overcome them, and how to evaluate it.
III	1. The context of various trainings is as if they were only for a limited scope. It would be better if the organizational context is explained first, followed by who are the people who require the training, and then examples are given.	The definition of problems is too broad, requiring improvement, and it should get straight to the problems found in the training.
	2. Four kinds of training were discussed, but the reason why the four kinds of training were selected was not discussed. During the discussion of SLPHT, there was an impression that this material was not meant to be a module on how to carry out the training, but instead it was written to explain what SLPHT is.	

The illustrations provided pertaining to the organizing of the training is linked to signs or conditions that resemble the real world, the students' lives out of the classroom. The presentation of material contents need to be enriched with examples on the actual

application in their real life (Suparman, 2012). In this case, the organizing of trainings is related to the condition of agricultural/animal husbandry/fisheries extension in Indonesia.

b. The Compatibility between the Materials and the Students' Competence

The results of the 3 experts on materials' assessment of the compatibility between the materials and the students' competence are presented in Table 2.

Table 2. The Compatibility between the Materials and the Students' Competence

Learning Activity	Module1	Module 5
KB 1	Not deep enough. There needs to be discussions about the definition of management, the definition of training, and the definition of both. The distinction between training, extension, and formal education also needs to be clarified.	1. The Roles of the Trainer and Trainees part needs to be described and given examples. 2. The Participative Training does not explain how the training is organized from the planning until the evaluation stages.
KB 2	The material was not basic enough and was not adequate. Many parts of the material need to be explained more elaborately so that the students could understand them. It should have been written starting from the basic concepts, followed by applied concepts, and lastly examples.	The use of digital media in evaluating the training should be considered by the module (condition: the trainees are already able to access the Internet)
KB 3	Training management in fields other than agriculture should be discussed.	The materials given should be supplied with examples and exercises so that after studying the materials, the students could carry out the actual training.
KB 4	-	The Training Evaluation needs to be described and supplied with examples.

Based on the qualitative data in Table 2, the subject matter experts suggested that the modules' materials are not yet compatible with the expected students' competence, which is to be able to organize trainings, especially for farmers/fishermen, and fill the training with relevant materials. The materials in the modules delivered were not profound enough and are too low for the competence level of undergraduate students. Therefore, the materials' quality needs to be improved in the aspects of depth of discussion, material scope, and material purpose.

Specifically for Module 5, the materials delivered could be improved by supplying examples from real-life extension cases so that the students can imagine how to organize trainings, especially in the field of agriculture/animal husbandry/fisheries. More detailed explanations are needed in the roles of the trainers, the organizing committee, and the trainees in the training process in order to reach the training goals.

c. The Level of Sufficiency of Examples and Non-examples

The results of the 3 experts' assessment on the sufficiency of examples and non-examples are presented in Table 3.

Table 3. The Level of Sufficiency of Examples and Non-examples

Module 1	Module 5
A serious lack of illustrations; this module needs to be enriched with various examples of trainings and pictures	1. Seriously lacking in illustrations, examples, and non-examples. The few training examples given were about agriculture; there needs to be examples from non-agricultural fields 2. This module needs to be enriched with detailed explanations, examples (illustrations), and concepts which could help students understand not only the practical aspects but also the theories. Especially since Module 5 is the "execution" of the training.

Based on the qualitative data in Table 3, it can be seen that the three subject matter experts believe the module materials are seriously lacking in examples and non-examples. The modules present more theories and concepts without equipping them with examples to explain the concepts and theories. Examples and non-examples could be given in from the agricultural field or from other fields for Module 1 because the discussions in Module 1 are still general, pertaining to the definition of training management. According to Suparman (2012), in the learning process, there examples need to be widely given, not only positive examples but also negative ones. In order to explain good behavior according to norms in practice, a teacher also needs to supply examples of behavior that is against the norms.

d. The Relevance between the Formative Tests and the Instructional Purposes

The results of the 3 experts' assessment of the relevance of the formative tests and the instructional purposes are presented in Table 4.

Table 4. The Relevance between the Formative Tests and the Instructional Purposes

Module 1	Module 5
Evaluation of the concept of management and the concept of training is not found. In Formative Test 1 on page 1.6 there were some irrelevant problems such as numbers 1 and 2.	Relevant enough.

In general, the formative test problems were quite relevant to the materials delivered. There were a few problems that were irrelevant to the materials; therefore they need to be replaced with others. The replacements must be able to assess the students' expected competence.

2. The Level of BMP Materials' Current-ness Level

The results of the 3 subject matter experts' assessment of whether the BMP materials are up-to-date or not are presented in Table 5. Module 1's materials need to be updated by inserting some non-agricultural concepts and training examples so that the students will have a broader insight in the field of training. The concepts and theories delivered should refer to the most current references and concepts which are nationally and internationally recognized. Therefore, the students would receive concepts of training management which are valid in a broader level, not limited to the agricultural field. The use of digital media in training evaluation also needs to be considered in the form of either non-printed teaching materials or web-supplements.

Table 5. The Current-ness of the BMP Materials

Module 1	Module 5
The module' materials need to be updated in the aspect of human resource development in various fields, not merely in the field of agriculture. Find concepts of training or training management that are accepted in a broad level, the international level.	- The inclusion of the Participative Training is a plus point for this module, but there needs to be more depth in how to apply it. - The use of digital media in evaluating the training in the module's materials should be considered (condition: the trainees already able to access the Internet) - The references used in the module should be supplemented with references with a broader, more up-to-date scientific scope.

The presence of participative training materials in Module 5 is a plus point in the Training Management module. However, these materials were not included in Module 1, making it seem as if the materials were forced in. It might be a good idea to include participative training materials in Module 1 under the types of training heading. The delivery of materials should be equipped with application examples so that the students could apply participative training in the community. The participative training type is now popular because it is believed have more trainee involvement in the training process compared to other types.

The references in writing this module should be more current. It would be better to use articles from journals which publish training management study results. The references used determine the current-ness of the modules materials.

The Stage 1 Revisions are in Accordance to the Subject Matter Experts' Suggestions

The Stage 1 revisions of the module were done after receiving input from subject matter experts. The revisions that have been done are as follows:
a. The addition of the definition of management and management concepts.

Some definitions of management which were added were from James. A. F. Stoner (1996) who defined management as "the process of planning, organizing, leadership, and overseeing the efforts of the members of the organization and the use of all the organization's resources to achieve its intended purpose" and from Husaini Usman (2011) who defined management as "planning, organizing, steering, and controlling all the organization's resources to achieve its purpose effectively and efficiently."

b. The addition of the definitions of training and training concepts.

Some definitions of training which were added were from Noe, Hollenbeck, Gerhart & Wright (2003) who stated that "training is a planned effort to facilitate learning of job-related knowledge, skills, and behavior by employees." Bernardin and Russell (1998) define it as "any attempt to improve employee performance on a currently held job or one related to it".

c. The training management steps material is given in more detail, not limited to charts, but charts that are supplemented by explanations. The language used is a narration, not "PowerPoint" language. It is hoped that the students would have a better understanding of the research stages.

d. The addition of materials about the differences between training, education, and extension. The delivery of the materials was done in a simple but effective way in explaining the difference between the three terms. It was supplied with one example and one non-example.

e. The training purpose materials were changed into a more general one, not limited to training purposes for government employees.

f. The training organizing materials are presented in a more detailed manner in each and every step of the planning, execution, and evaluation. The presentation of materials was accompanied by examples and illustrations in the form of flow charts and simple caricatures. Participative training was deleted from Module 5 because it was not given in Module 1, making it look as if it were unplanned and had no direct connection to the materials in Module 5.

g. The replacement of formative tests number 1 and 2 in Module 1 because they had no relevance to the students' competence which was being assessed and the materials given.

h. The addition of small tasks in the material explanation so the students could practice memorizing the materials read as soon as possible.

The use of narrative texts is required to help students understand the module materials in a structured, detail, and profound way. The "Power Point" language previously used in the module was supplied with a detailed explanation. The "Power Point" language might be understood by the writer (the lecturer) but not by the students, while in fact the module was developed for students, not lecturers. Kumar (2000) explained that modules should encourage the students' interest in reading them. Therefore, the language used must be narrative and guide the students in detail.

4. Face Validity, The Resultsof One-to-One Evaluation by Students

The aspects evaluated in the one-to-one evaluation with students were material clarity, the effect of the materials on students' learning independence, and the adequacy of the instructional strategy (Dick, Carey, & Carey, 2009).

In general, the results of the one-to-one evaluation with students show that the explanations in the module can basically be understood; however, there are some parts that need clarifying, for example the explanation of the material is too long (needing simplification), the number of questions need to be decreased, and the use of foreign words needs to be minimized because it hinders the students' understanding. The input needs to be accommodated by the module developer in the module revision process because the input originated from the prospective direct-users of the module. According to Suparman (2001), the results of the one-to-one evaluation are invaluable to the module developer, especially the students' comments and the students' difficulties in understanding each part of the module. This opinion is supported by Kumar (2000) who believes that the development of modules differs from the development of textbooks. Modules are developed for a specific group of students, whereas textbooks are designed for a broader audience. Therefore, input from the one-to-one evaluation is very important for the revision process because it comes from prospective readers who will be directly using the module.

Small tasks which encourage students to think about and recall the materials they had read prove to be invaluable in assisting the students summarize the module materials they had read. Students are pleased when assigned those small tasks. Hence, the writers have no need to give exercises at the end of the material as the exercises have been given in the middle the materials so that the students' ideas can be built constructively. This is in step with the constructive learning psychological school. According to Suparman (2012), the flow of constructivism focuses the development of the students' ability in building new knowledge independently though the thinking process of synthesizing previous and new knowledge and experiences. The ability to construct knowledge is vital as a way to increase innovativeness, creativity, and to create something new for themselves and others.

The examples and non-examples given in the modules were a great help to the students in understanding the modules; however, the language used in the examples need to be simplified. According to Suparman (2012), giving examples and non-examples are in line with the fifth instructional principle, "learning to generalize and differentiate is the foundation of learning something complex such as problem solving."

The Stage II Revision is in Accordance to the One-to-One Student Evaluation

Revisions of the module materials were made based on the input from the one-to-one students evaluation. The improvements made included: 1) the simplification of some explanations of materials which were too lengthy; 2) the decrease in the number of questions; 3) the separation of experts' opinion into different points; 4) avoidance of foreign terms; 5) replacement of difficult words with more easily understood ones; 6) the formulation of steps in preparing a training into points; 7) the simplification of the language used in examples; 8) the supplementation explanations for pictures.

The students' input on the need for caricatures could not yet be accommodated in the stage I revision because of the instructional developer's limitation. In further developments of the module, the instructional developer could recruit illustrators to make interesting caricatures.

Words that were deemed difficult by the students, foreign words, were replaced by more easily understood ones, but the foreign words were still printed to increase the students' knowledge. The foreign words were given after the more easily understood Indonesian words. For example, the word *content* which is considered difficult by the students is presented as "isi (*content*)"; the words *hand out* is presented as "buku pegangan (*hand out*); *press release* as "pernyataan pers (*press release*).

5. Face Validity Based on the Evaluation of a Small Group of Students

Evaluation by a small group of students was done with the purpose to observe three important things: 1) determining the effectiveness of the changes made during the module revision which was done in line with the one-to-one student evaluation; 2) identifying the problems in learning which remain after the one-to-one evaluation; 3) determining whether the materials delivered are able to guide the students in independent learning (Dick, Carey, & Carey, 2009).

In the small group evaluation, the face validity of module is classified into several variables, i.e.: the module material clarity; the module appeal; the picture clarity and its relevance to the materials delivered; and the clarity of the exercises, summary, and formative test. The results of the small group evaluation of the module material clarity are presented in Table 6.

Table 6. The Results of a Small Group of Students' Evaluation of the Module Material Clarity

Variable	The Students' Response	Conclusion
The module's material clarity	1. In general it can be understood, but page 1.21, the part "steps in training management", could not be understood because there were no examples.	The explanation of the materials was still too lengthy; the students expect a simpler one. Difficult and unfamiliar terms were still found.
	2. There were several sentences that could not be understood, especially those containing unfamiliar terms.	
	3. The language was difficult to understand, for example page 1.4 about the definition of management, page 5.2 paragraph 4, page 5.6 point 4 "collaborate in conducting trainee selection…"	
	4. Much of it was not understood because there were too many difficult words.	

The module materials which had been revised based on the input from the one-to-one evaluation are basically effective enough in the learning process of the small group of students. Students can understand the materials better compared to materials used during the one-on-one students' evaluation. This is proven by the low number of questions asked by the students in relation to the meaning of sentences. This means the module materials are already understood well by the students (self contained) and are able to make students learn independently (self instruction).

However, there are still some weaknesses found in the module material delivery, for example too lengthy explanations. In the module revision, simplification of overly long sentences had been done. But, the students' in the small group evaluation state that they are still not simple enough. This input will be accommodated in the module revision stage 2.

Results of the small group evaluation of the module's appeal are presented in Table 7. From the results of the evaluation, it was discovered that the module materials were still unappealing to read due to the lack of illustrations in the form of caricatures. The module materials are still dominated by texts. This is an excellent suggestion from the students because the modules provided by UT have mostly presented texts. In the future, the UT module writers could provide pictures that are relevant to the materials so that the students do not feel bored studying them.

Table 7. The Results of the Small Group Evaluation of the Module's Appeal

Variable	The Students' Response	Conclusion
The modules appeal for students	1. The modules were not interesting, especially Module 5, because they were presented in the form of full text, not enough pictures.	The module materials were not interesting to peruse because of the lack of pictures. The module materials could be more interesting if the language were simplified. There needs to be motivational quotes for students.
	2. They were interesting enough because the materials were useful for me.	
	3. Not interesting because the examples were difficult to understand.	
	4. The materials presented were not interesting; if possible, please insert motivational quotes to encourage students.	

The students also need words which would motivate them to study, for example praises after finishing tasks. According to the students, motivational words are needed to maintain their interest in reading the module. This is in accordance to the first instructional principle (Suparman, 2012), i.e. "new responses are repeated as an effect of the response. If the response has a positive effect, the students tend to repeat the response in order to maintain the positive effect". The consequence of this principle is the need to give immediate positive feedback or praise to reward the correct response given by the students. In the case of the module, praise can be given after the assignment of small tasks within the material explanation.

Table 8. The Results of a Group of Students' Identification of the Clarity of the Pictures and
Their Relevance to the Materials

Variable	The Students' Response	Conclusion
The clarity of the pictures and the compatibility with the materials delivered	1. The pictures are compatible to the materials, but it would be better if the pictures were authentic.	It would be better if the pictures were taken from actual activities, for example training activities conducted by farmers and extension officers. It would be better if the pictures were presented in color. Some of the pictures presented were quite interesting.
	2. The pictures on page 1.22 are confusing, on page 5.3 not authentic enough. It would be better to use photographs of activities.	
	3. The pictures need to be clarified, if possible in color.	
	4. The pictures presented were quite interesting.	
	5. If possible, the pictures should show trainings held by farmers and extension officers	

Based on the qualitative data in Table 8, students gave input that some pictures were not clear (blurred), making it difficult for the students to understand them. From the picture substance aspect, the students suggested that the pictures feature authentic activities, for example photographs of training activities done by farmers and extension officers. The pictures should also be presented in color. These inputs will be accommodated in the revision stage 2. The use of pictures in delivering the materials and their relevance are in line with the second instructional principle (Suparman, 2012) which is "behavior is not only controlled by the effect of a response, but it is also under the influence of conditions or signs found in the students' environment."

The results of the small group evaluation on the clarity of the examples and their relevance to the materials are presented in Table 9. Based on the qualitative data in Table 9, students stated that the examples given clarified the materials presented. Examples and non-examples (bad examples) are the interpretation of the module materials in the students' daily lives.

Table 9.   The Results of Small Group of Students' Identification of the Clarity of
Examples and Their Relevance to the Materials

Variable	The Students' Response	Conclusion
The clarity of the examples and their relevance to the materials delivered	1. It is not clear which concept the examples are representing. There are no connective sentences between the examples and the small tasks in the materials.	The examples given clarified the materials. It is not clear which concept the examples are representing. The non-examples were not relevant to the examples. The examples were too general; they should be about the agribusiness field.
	2. The non-examples were difficult to understand and were not relevant to the examples.	
	3. Too many examples made the module too thick, making the readers bored. It would be better if there the examples were limited to one per topic as long as they are clear and can be understood.	
	4. The examples are too general; they should be specific for the agribusiness field.	
	5. The examples make the materials presented even clearer.	
	6. It would be better if the examples were developed in the direction of larger companies in order to motivate the students.	

The results of the evaluation of a small group of students of the clarity of the exercises, summary, and formative tests are presented in Table 10. Most of the students already understand the exercises, summary, and formative tests given. Therefore, no drastic revisions are needed on the three module components above.

Table 10. The Results of a Group of Students' Identification of the Clarity of the Exercises,
Summary, and Formative Tests

Variable	The Students' Response	Conclusion
Clarity of the exercises, summary, and formative tests	1. The language used in the exercises, summary, and formative tests are easy to understand. The summary contains the core of the materials.	The language used in the exercises, summary, and formative tests are easy to understand. The summary contains the core for the materials.
	2. The exercises are comprehensible. The answers are not far removed from the materials delivered and help clarify the materials delivered. The formative test is comprehensible.	

The Stage 3 Revision is in Accordance to the Input from a Small Group of Students

Based on a small group of students' input on the module materials, module revision stage 3 was done, covering:

1. The simplification of sentences which were too long and too scientific by using words which are more popular in the community. At the same time, this revision accommodated the students' input that there were too many words that were difficult to find.
2. The increase in the number of pictures in the form of photographs of agribusiness activities.
3. The addition of motivational quotes for the students to encourage them and cultivate their interest in perusing the module.
4. The supply of examples which are more specific for the field of agribusiness.

CONCLUSION

The module materials are generally valid in substance, even though there are several parts that need to be improved, i.e.: the addition of management concepts and training concepts, the need to deliver training stages in the form of both a narration and a chart, not only a chart, and the need to deliver the training organizing materials in more detail. As for the compatibility between the materials and the students' competence, the materials are still too low for undergraduate students who are expected to be able to organize trainings, especially in agriculture/animal husbandry/fisheries.

The module materials need to be updated with more current concepts such as management concepts and training concepts which are accepted at both the national and international level. The participative training model need to be included starting from Module 1. The references used should be state-of-the art and even better if they are journal articles of study results in the field training management.

Face validity of the module materials according to the one-to-one evaluation is understandable; however, some parts need to be clarified, for example the explanations are too lengthy (they need to be simplified), the number of questions need to be reduced, and the use of foreign terms need to be reduced because they are difficult for the students to understand. Based on those suggestions, the stage 2 module revisions should include: 1) simplifying some material explanations which are too long; 2) reducing the number of questions; 3) avoiding the use of foreign terms; 4) replacing the difficult words with other, more popular terms.

The results of the module evaluation by a small group of students show that the module materials are quite effective in the learning process in a small group of students. The students could understand the materials better compared to when evaluated one-to-one. This is shown by the low number of questions asked by the students pertaining to the meaning of a sentence. However, there were still some flaws found in the delivery of the module materials, for example: 1) there are still some sentences that are too long; 2) difficult words are still found; 3) the module materials are not yet interesting to read because of the lack of pictures in the form of either photographs or caricatures; 4) the lack of motivational quotes for the students; 5) some pictures were not clear; 6) the examples provided were too general; not specific for the field of agribusiness. Based on these flaws, stage 3 revision was done on the module, including: the simplification of sentences which were too lengthy and too scientific by using terms that are popular in the

community; the increase in the number of pictures in the form of photographs of agribusiness activities; the addition of motivational quotes for the students; and the supply of examples that are more specific for the agribusiness field.

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