



The Development of Learning Outcome-Based Islamic Education Materials to Improve the Students' Critical Thinking

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ABSTRACT

This study aims to develop learning outcome-based Islamic education materials in a module for the Islamic education department at IAIN Curup. This study employed a Research and Development method. The data were collected using questionnaires, interviews, observations, and documentation. The analysis of quantitative data deployed percentage formulas, and the qualitative data analysis rested upon an interactive model comprised of data reduction, data display, and conclusion drawing. This study revealed that 89% of lecturers and 94.47% of students perceived that the existing Islamic education materials were less or not appropriate. The students perceived those new materials were needed. The subsequent focused group discussion called for the urgency of developing learning outcome-based Islamic education materials – the module. The design consisted of three chapters titled the definition of Islamic Education and Sources of Islamic Education, Islamic Education Curriculum, and Students. After being validated by four experts, the module was considered worthy, with a few revisions suggested. The learning outcome-based Islamic education materials are efficient based on the results of practicality tests on one-for-one evaluation and small group evaluation. Students' critical thinking ability is in the very high category of test results at intervals of 80-99.

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INTRODUCTION

Human resource issues have become a constraint in Indonesia. The forgoing calls for actions taken to improve competencies and make equalization of human resource qualifications. In Indonesia's tertiary education field, such actions are realized by constructing a tertiary education curriculum called the Indonesian Qualification Framework (IQF), commonly known as the Indonesian National Qualification Framework (hereafter as KKNI, the abbreviation generally used in the Indonesian context). KKNI is designed to assimilate the National Qualification Framework (NQF) globally. Each level can be pursued through informal education, training, and work experience.¹

A learning system is an essential part of the educational process to produce highly competitive graduates. A well-designed learning system can provide students with learning experiences to unlock and develop their potential. With the issuance of Permendikbud No. 49 of 2014 on National Standards for Higher Education, departments at tertiary education are required to produce graduates based on KKNI qualifications. Likewise, the education quality assurance system must control the educational processes appropriately, referring to the IQF qualification level.²

The position of KKNI has become essential, along with technological developments and human movements. Free market agreements in the Southeast Asian region have made it possible to move labor across countries. Therefore, equalizing learning achievement among ASEAN member countries becomes very important. In addition, the 4.0 industrial revolution is a challenge for universities. College graduates are expected to have the readiness to face an era in which technology and artificial intelligence can replace human roles.³

Aligned with KKNI, graduates equivalent to a bachelor's degree must have several competencies, including: (1) being able to apply their expertise and utilize science and technology in their fields in problem-solving, and being able to adapt to the situations at hand; (2) mastering theoretical concepts in specific fields of knowledge in general and exclusive theoretical concepts according to their majors in-depth, as well as being able to formulate procedural problem solving; (3) being able to make appropriate decisions based on analysis of information and data, and being able to guide in choosing alternative solutions independently and in groups; and (4) being responsible for their works, being eligible to take charge of organizational works.⁴

However, the fact shows that, based on alumni tracking, some are still unemployed.

¹ Soeharto, "PHYCCTM Development Based on KKNI on Impuls and Momentum Material to Increase HOTS and Independent Character," *EDUCATIO: Journal of Education* 2, no. 1 (2017): 267–72.

² Tim Kurikulum dan Pembelajaran Direktorat Pembelajaran dan Kemahasiswaan Direktorat Jenderal Pendidikan Tinggi Kementerian Pendidikan dan Kebudayaan, *Buku Kurikulum Pendidikan Tinggi* (Jakarta: Direktorat Pembelajaran dan Kemahasiswaan Direktorat Jenderal Pendidikan Tinggi Kementerian Pendidikan dan Kebudayaan, 2014).

³ Direktorat Pendidikan Tinggi Keagamaan Islam Kementerian Agama Republik, *Panduan Pengembangan Kurikulum PTKI Mengacu Pada KKNI Dan SN-Dikti* (Jakarta: Direktorat Jenderal Pendidikan Islam Kementerian Agama Republik, 2018).

⁴ Sanusi, Wasilatul Murtafiah, and Edy Suprpto, "Pengembangan Bahan Ajar Berorientasi KKNI Untuk Penguatan Scientific Approach Pada Mata Kuliah Evaluasi Dan Proses Pembelajaran Matematika," *Jurnal Penelitian Pendidikan* 8, no. 1 (2017): 1245–49.

It is one indicator that they have not been able to master competencies in the field of expertise and utilize science and technology to solve problems and adapt to existing situations.⁵ One way that can be applied to improve the quality of human resources at the collegial level is by implementing KKNi through developing teaching materials. In such a way, the materials to be developed include a lesson plan, textbook, students' worksheet, and assessment sheet.⁶ These materials are developed to encourage students to be more willing and motivated to participate in learning processes sincerely. Teaching materials that are only provided in the form of photocopies and a lecturing method as a way of delivery will lead to boredom, and the students will find it difficult to acquire knowledge from the materials.

Renandya said that good teaching materials must meet what is needed by learners who will use them. Furthermore, he said that the teaching materials motivate learners to master a set of knowledge therein in effective and efficient ways. Hutchinson and Waters offer several criteria for good teaching materials. First, teaching materials are developed to function as the learned materials and encourage learners to learn independently. For this reason, the instructional materials must contain interesting texts, fun activities that can foster thinking skills, opportunities to practice the learned content in both micro and macro ways, and content that teachers and students can digest. Second, teaching materials developed can facilitate the occurrence of teaching and learning activities by organizing the structure of interrelated teaching materials. Third, the teaching materials developed are up to date. Fourth, the teaching materials developed are oriented toward activities that challenge students to think. Fifth, teaching materials developed have the function of broadening material horizons. Sixth, the teaching materials present a model of ideal input.⁷

Due to the importance of materials, lectures in the classroom need a renewal or innovation to improve their qualities with the development of a new curriculum. Lecturers must also have creativity in developing teaching materials and creating innovations to support the success of lecturing processes. Orientation and innovation should always give priority to the students. Grounded in the present study's context, the Islamic education department of IAIN Curup, this department calls for the procurement of ideal teaching materials resting upon KKNi. The development of KKNi-based Islamic education materials is an effort to improve students' ability to analyze the course materials because these materials are assumed to correspond to the needs of Islamic Education (PAI) students. Moreover, at IAIN Curup, Islamic education is essential to the foundation of students' knowledge *vis-a-vis* Islamic education. This subject becomes a bridge mediating student to further courses later on. Students and lecturers need KKNi-based Islamic education materials because such materials are ideally qualified.

The importance of thinking skills in Islamic Education is a crucial issue that needs to be carried out. The study of the Islamic Education curriculum puts this proficiency in the second stage after listening proficiency. They are then followed by reading and writing proficiency. In teaching and learning, Islamic education must be taught to students to

⁵ Sanusi, Murtafiah, and Suprpto.

⁶ Sanusi, Murtafiah, and Suprpto.

⁷ Mona Adria Wirda, Nurmala Berutu, and Rosni Rosni, "Developing of the Demography Teaching Book Based on KKNi-Curriculum and High Order Thinking Skills," in *1st International Conference on Social Sciences and Interdisciplinary Studies (ICSSIS 2018)* (Atlantis Press, 2019), 111–17.

master language proficiency simultaneously in the learning process. The teaching of critical thinking proficiency has been introduced in all courses. However, its implementation is still in the process of being developed to the fullest.⁸ Wibowo and Istiani explained that learning in Islamic Education must be oriented toward reasoning rather than rote memorization to give rise to new ideas.⁹

Based on the results of preliminary observations and interviews with one lecturer handling the Islamic Education course, Abdul Rahman, M.Pd.I, he explained that the lecturers have not yet developed Islamic education teaching materials. Lecturers only use Islamic education reference books that have existed and have not been based on the analysis of students' needs and are not also based on KKNI. In the meantime, students tend to be tired and get bored viewing unattractive Islamic education reference books. This study is conducted to develop KKNI-based Islamic education materials as a module to improve students' critical thinking.

RESEARCH METHOD

The present study applied a research and development method.¹⁰ It is to develop Islamic education materials based on of Indonesian qualification framework curriculum (hereafter KKNI). The rationale beyond the selection of this method was that it was convenient for validating an educational product,¹¹ such as learning material.¹² With the underlying mixed-philosophical worldview, this method merged quantitative and qualitative studies to garner comprehensive, valid, reliable, and objective data.¹³ This study adopted a concurrent triangulation model using balanced qualitative and quantitative studies.¹⁴ The following figure highlights the design of this study.¹⁵

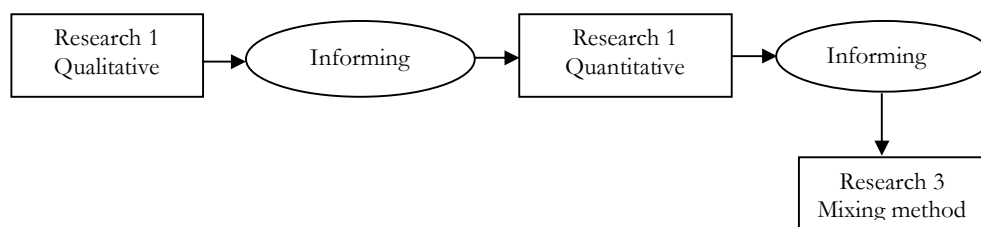


Figure 1. Mixed-Method Design of Research and Development

⁸ Bakri Anwar, "Pendidikan Islam Melalui Kemahiran Berfikir Membentuk Moral Dan Akhlakul Karimah Pelajar Islam," *Al Daulah: Jurnal Hukum Pidana Dan Ketatanegaraan* 5, no. 2 (2016): 341–51, <https://doi.org/10.24252/ad.v5i2.4853>.

⁹ Muhammad Fajrul Bahri and Supahar, "Kemampuan Berpikir Kritis Menggunakan Tes Terintegrasi Agama Dan Sains Dalam Pembelajaran PAI Di SMA," *Edukasi Islami: Jurnal Pendidikan Islam* 8, no. 2 (2019): 233–51.

¹⁰ Sugiyono, *Metode Penelitian Kuantitatif Kualitatif Dan R&D* (Bandung: Alfabeta, 2011).

¹¹ Walter R. Borg and Meredith D. Gall, *Educational Research: An Introduction* (New York: Longman, 1983).

¹² Meredith D. Gall, Joyce P. Gall, and Walter R. Borg, *Educational Research: An Introduction* (Boston: Pearson Education, Inc, 2003).

¹³ John W Creswell, *Research Design (Pendekatan Kualitatif, Kuantitatif Dan Mixed)* (Yogyakarta: Pustaka Pelajar, 2012).

¹⁴ Sugiyono, *Metode Penelitian Kombinasi (Mixed Methods)* (Bandung: Alfabeta, 2012).

¹⁵ M Rusdi, *Penelitian Desain Dan Pengembangan Kependidikan (Konsep, Prosedur Dan Sintesis Pengetahuan Baru)* (Depok: Rajawali Pers, 2018).

The research and development procedures subsumed four steps adopted by Borg and Gall.¹⁶ The first step was research, and initial information collection was carried out utilizing problem identification, perception analysis, and needs analysis. Problem identification was undertaken to obtain information *vis-a-vis* the problems of Islamic Education lectures.¹⁷ Based on the preliminary data from interviews and observations, it was known that there was no teaching Islamic education material previously developed by the lecturers of the Islamic education department at IAIN Curup.¹⁸ Both lecturers and students only used reference books written by Islamic education Specialists. Such initial information was helpful for needs analysis.¹⁹ This information was collected using interviews, questionnaires, and documentation. The instruments were given to lecturers and students to gather input regarding teaching and learning conducted in Islamic Education. Some information from the curriculum and various works of literature from books and scientific articles published in scientific journals were further collected and reviewed so that the researchers had adequate sources for planning ideal materials in the form of a module based on the KKNI curriculum.

The second stage was planning to design activities and working procedures for the material development. At this stage, the initial prototype was planned and discussed with relevant practitioners and experts to produce it and its development guidelines. The selection and setting of learning objectives were also carried out. Planning the initial design was grounded in the results of needs analysis which included: 1) the lecturers' and students' evaluation to find the existing materials with the lecturers' weaknesses; 2) The lecturers' and students' responses to the desired teaching materials based on learning objectives; 3) reviewing the latest references and articles published in scientific journals related to the preparation of materials; 4) conducting focus group discussions in depth, and 5) compiling the initial design of Islamic Education materials in the form of a printed module (handbook) relevant to the analyzed needs.

The third step was developing the initial product format by preparing the prototype. This process was done conforming to the planning results by applying Jolly and Bolitho's steps, namely the material's contextual and pedagogical realization. The product was designed as a printed module containing three materials with the following topics: Understanding of Islamic Education and Basic Islamic Education, The Essence of Islamic Education Curriculum, and Students. The module's contents were arranged as follows:

Table 1. Module Contents

1.	Introduction
2.	Preface
3.	Table of Contents

¹⁶ Punaji Setyosari, *Metode Penelitian Pendidikan Dan Pengembangan*, Cetakan 1 (Jakarta: Kencana, 2010).

¹⁷ Alan Cunningsworth, *Choosing Your Coursebook* (Oxford: Heinemann Publishers Ltd, 1995).

¹⁸ Walter Dick, Carey Lou, and James O Carey, *The Systematic Design of Instruction* (New Jersey: Pearson Education Upper Saddle River, 2009).

¹⁹ David Jolly and Rod Bolitho, "A Framework for Materials Writing," in *Materials Development in Language Teaching*, ed. Brian Tomlinson (Cambridge: Cambridge University Press, 2011), 35–113.

4.	Learning Objectives
5.	Mind Mapping
6.	Learning Activities
7.	Material Description
8.	Summary
9.	Evaluation
Closing (Bibliography)	

The fourth step was preliminary field testing carried out by having the contents and design validated by experts, in this regard, experienced lecturers²⁰ with expertise in materials, presentation and graphics, and linguistics. The purpose of validation in such a way was to get some input on the strengths and weaknesses of the module’s design and product so that further improvement could be made. The validation of instruments to assess the teaching materials’ feasibility included the appropriateness of material contents, material presentation, language, and graphics. According to the expert validators, the instruments were appropriate, and a few revisions were recommended. The following table displays the components of validation.

Table 2. Components of Validation/Eligibility Module Evaluation

No	Component	Module Assessment
1	Content/Material Eligibility	<ol style="list-style-type: none"> 1. Compliance with learning objectives 2. Conformity to students’ development and characteristics of 3. The trustworthiness of the material substance 4. Clarity of material contents 5. Content suitability based on KKNi
2	Presentation Feasibility	<ol style="list-style-type: none"> 1. The suitability of the materials with the learning objectives 2. The order of presentation 3. The extent of being motivating and attractive 4. Interactivity (stimulus and response) 5. Complete information
3	Language Feasibility	<ol style="list-style-type: none"> 1. Readability of the texts in the module 2. Clarity of information 3. Complete information 4. Conformity to Indonesian language rules 5. Effective and efficient use of language
4	Eligibility for Graphics	<ol style="list-style-type: none"> 1. Size and typeface 2. Illustration

²⁰ Dick, Lou, and Carey, *The Systematic Design of Instruction*.

No	Component	Module Assessment
		3. The combination of colors
		4. Layout display
		5. The cover page display

The subjects of the present study included 9 lecturers teaching Islamic education courses in various departments at IAIN Curup and the first and third-semester students. The first-semester students filled in the questionnaires regarding material needs, and the third-semester students filled in the questionnaires concerning perceptions of Islamic education materials. The first-semester students in total were 234 individuals. Those engaged as the participants were selected randomly.²¹ The principle of 10% error level randomization generated 127 first-semester students to be involved as the participants. For third-semester students, their total number was 198 students. After assigning the same principle of randomization, 115 students were engaged as the participants.

The data collection techniques in this study were questionnaires, observations, documentation, and interviews. The questionnaires in this study were used to obtain data on needs analysis concerning Islamic education courses, objective conditions, syllabus analysis and learning plans, and the feasibility of teaching materials. Observations were conducted to obtain objective data conditions associated with the learning processes of Islamic education at IAIN Curup. Documentation was used to garner the data related to the syllabus and semester learning plan (RPS) of Islamic Education lecturers at IAIN Curup.²² Interviews were conducted to collect data concerning the characteristics of the Islamic education department, the curriculum used, and the materials used during lecturing.

The data *vis-a-vis* needs analysis and feasibility of teaching materials were analyzed qualitatively through data reduction, data display, and verification with triangulation of techniques, sources, and time. The data concerning the description of objective conditions of the learning process of Islamic Education were analyzed quantitatively. Such a description comprised four aspects: the syllabus used, the semester learning plan (RPS) used, the teaching materials used, and the process of lecturing in Islamic Education at IAIN Curup. The quantitative analysis was assisted by IBM SPSS 21. The categorization of quantitative data analysis is 1 for not good/inappropriate, 2 is not good enough, 3 is good enough, 4 is good, and 5 is very good.

RESULT AND DISCUSSION

This section is divided into two parts. They are findings and discussion. The results of the present study are grouped into four categories. They extend to the results of identifying students' and lecturers' needs of Islamic education materials based on the KKNI curriculum, planning for the development of Islamic education materials, the design of Islamic Education materials, and validation of Islamic Education materials.

²¹ Wina Sanjaya, *Penelitian Pendidikan: Jenis, Metode Dan Prosedur* (Jakarta: Kencana Prenada Media Group, 2013).

²² Danang Sunyoto, *Analisis Regresi Dan Uji Hipotesis* (Yogyakarta: Caps, 2011).

The Results of Needs Analysis of Learning Outcome-Based Materials

Preliminary information for needs analysis was garnered according to the steps of research and development suggested by Borg & Gall's theory. Information was collected using field studies or surveys, interviews, literature or documentation studies, questionnaires, and focus group discussions (FGD). The survey and documentation were conducted on the curriculum and materials used in Islamic Education. Questionnaires of needs analysis were given to lecturers and students to seek recommendations and advice on Islamic education materials to be developed. The final discussion with 9 Islamic Education lecturers was held through focus group discussion (FGD).

Based on the survey results and interviews with the lecturers of the Islamic Education department, Abdul Rahman, M.Pd.I and Siswanto, M.Pd.I., on the 13th and 15th of August 2018, concerning lectures in Islamic Education, it was known that there were no teaching materials that matched the competencies as expected at level 6 of the KKNI curriculum. Teaching materials in the form of reference books used in lecturing processes were not written and compiled based on KKNI qualifications. In addition, such reference books did not present scientific data, such as the cited study findings already published in qualified journals. Such reference books lacked referential sources. The books had monotonous designs, and the contents were not accommodated with sufficiently detailed explanations. Hence, students found it challenging to understand the books. As revealed from the survey, the books used in lecturing were: Islamic education, written by Prof. Dr. Abuddin Nata; Educational Sciences in Islamic Perspectives, written by Ahmad Tafsir; Studies in Islamic Education Studies, written by Moh. Haitami Salim and Syamsul Kurniawan; and Islamic Education were written by Ramayulis and others.

The survey, documentation, and interviews revealed the following summary: 1) there were no teaching materials in line with the competencies as expected at level 6 of the KKNI curriculum; 2) teaching materials in the form of reference books used in lecturing were not written and arranged based on KKNI qualifications; 3) the reference books used had no exercises or assignments related to competencies as expected at level 6 of KKNI curriculum; 4) the reference books did not have quoted scientific data published in qualified journals, and 5) the implementation of learning processes only rested upon the reference books. Therefore, it was necessary to develop ideal materials for Islamic education courses based on KKNI.

Lecturers and Students' Perceptions of the Existing Materials

Gathering the data corresponding to the weakness of the existing materials was essential to elicit sufficient valuable information for developing ideal materials. To do the preceding, questionnaires were deployed to obtain lecturers' and students' perceptions of the existing Islamic education materials. The questionnaires were distributed on August 23rd, 2018. The questionnaires contained 20 statements and 1 space for giving suggestions. Four options accompanied each statement. It consists of 1. not true/not appropriate/never, 2. not quite right/not appropriate/rarely, 3. true/appropriate/ever, and 4. very correct/very appropriate/always. The following table displays the recapitulation of questionnaire data on lecturers' and students' perceptions of the existing materials.

Table 3. Lecturers and Students' Perception of the Existing Islamic Education Materials

No	Aspect Rated	Scores of Lecturers' Perception				Scores of Students' Perception			
		4	3	2	1	4	3	2	1
		1	The existing materials are in accordance with students' competencies.	3	2			113	2
2	The existing materials are in accordance with learning objectives.	2	3			78	37		
3	The existing materials are complete.					110	5		
4	The existing materials are appropriate.					3	112		
5	The existing materials are interesting.					45	70		
6	The existing materials have accurate concepts and theories.					3	112		
7	The existing materials provide sufficient examples.						115		
8	The examples provided in the existing materials are followed by explanations.					53	62		
9	The existing materials use conceptual maps.						115		
10	The content composition of the existing materials is systematic.					35	80		
11	The structure of the existing materials conforms to the ideal concepts.					26	89		
12	The content composition of the existing materials is balanced.					23	30	62	
13	The instructions provided in the existing materials are clear and complete.					14	101		
14	The presentation of the					12	103		

No	Aspect Rated	Scores of Lecturers' Perception				Scores of Students' Perception			
		4	3	2	1	4	3	2	1
15	existing materials is supporting. The existing materials include skills to solve problems.						50	65	
16	The existing materials can be easily understood.					4		111	
17	Sentences in the existing materials are effective.					20		95	
18	The existing materials use standard language.						23	25	67
19	Vocabularies used in the existing materials are understandable						18	97	
20	Vocabularies used in the existing materials are appropriate						37	78	
	Total			1	8	1	0	127	744
	Percentage		0%	1%	8%	1%	%	5.5	32.3
							2%		4%

Based on the result of the questionnaires, it could be summarized that 11% of the lecturers perceived that the existing Islamic education materials were appropriate; 48% of them perceived that the existing materials were less appropriate, and 41% of them perceived that the existing materials were not appropriate. To sum up, 89% of the lecturers perceived that the existing Islamic education materials were less appropriate and inappropriate. Subsequently, grounded in the recapitulation data, 5.52% of students perceived that the Islamic education materials were appropriate; 32.34% of them perceived that the existing materials were not suitable, and 62.13% perceived that the existing materials were not appropriate. To sum up, 94.47% of students perceived the existing Islamic education materials as less appropriate and inappropriate.

The Results of Lecturers and Students' Needs for Islamic Education Materials to be Developed Based on KKN I

After garnering information concerning the weaknesses of the existing materials, a needs analysis was subsequently undertaken. The questionnaires of needs analysis were distributed to gather information pertinent to lecturers' and students' needs for ideal Islamic education teaching materials based on KKN I to be developed. The questionnaires were distributed to 5 lecturers and 115 students on the 5th and 7th of September 2018. The

questionnaires contained 19 statements and 1 space for giving suggestions. Four options accompanied each statement: 1. Not needed/unnecessary, 2. Needless, 3. Needed, and 4. Very needed. The following table displays the recapitulation of questionnaire data on lecturers' and students' needs for the ideal materials to be developed.

Table 4. Lecturers and Students' Needs for Ideal Islamic Education Materials (a Module) Based on KKNI

No	Aspect Rated	Lecturers				Students			
		4	3	2	1	4	3	2	1
1	A New and creative KKNI-based module is needed	5				123	4		
2	A KKNI-based module is needed based on students' competencies.	5				125	2		
3	A KKNI-based module is needed based on learning objectives.	5				110	17		
4	A KKNI-based module that gives many benefits is needed.	5				122	5		
5	A KKNI-based module which is complete, is needed.	5				112	15		
6	A KKNI-based module that is clear is needed.	5				98	29		
7	An interesting KKNI-based module is needed.	5				127			
8	A KKNI-based module equipped with examples is needed.	5				65	62		
9	A KKNI-based module containing concept maps is needed.	5				113	14		
10	A New module based on KKNI qualifications is needed.	5				92	35		
11	A new module based on the development of competencies as expected at level 6 of KKNI is needed.	5				89	38		
12	A KKNI-based module that is contextual is needed.	4	1			91	36		
13	It is necessary to arrange the contents of a KKNI-	4	1			120	7		

No	Aspect Rated	Lecturers				Students			
		4	3	2	1	4	3	2	1
	based module containing materials, examples, assignments, and evaluations relevant to one another.								
14	It is necessary to develop a KKNI-based module whose contents are systematic.	5				103	24		
15	A KKNI-based module equipped with a supporting presentation of information is needed.	5				77	50		
16	It is needed a KKNI-based module equipped with skills in problem-solving.	5				114	13		
17	It is necessary to develop a KKNI-based module whose sentences therein are easily understood.	5				95	32		
18	It is necessary to develop a KKNI-based module containing effective sentences.	4	1			124	3		
19	It is necessary to develop a KKNI-based module as appropriate.	4	1			126	1		
Total		91	4	0	0	026	387	0	0
Percentage		95.79%	4.21%	0%	0%	33.96%	16.04%	0%	0%

Based on the questionnaire, it is summarized that 95.79% of the lecturers stated that Islamic education materials in the form of a KKNI-based module were very much needed to be developed; 4.21% of lecturers stated that such a module was needed, and no lecturer expressed that such a module was less needed or not needed. Subsequently, it could also be summarized that 83.96% of students stated that Islamic education materials in the form of a KKNI-based module very much needed to be developed; 16.04% of them stated that such a module was needed, and there were no students who said that such a module was less needed and not needed.

The Results of Focus Group Discussions with Lecturers and Students

All data on lecturers' and students' perceptions and the analysis of their needs were further discussed in *Focus Group Discussion* (FGD) by engaging a group of lecturers and students. The FGD was conducted at the end of August 2018 (Sunday, August 26th, 2018) after distributing the questionnaires of lecturers' and students' perceptions. FGD was also

performed on the second week of September 2018 (Saturday, September 15th, 2018) after the questionnaires of lecturers and students' needs were distributed. FGD involved 5 lecturers who taught Islamic education and 10 students who were considered knowledgeable and eligible to be engaged in discussions. Based on in-depth discussions, it was found that the existing Islamic Education teaching materials had not yet been prepared according to students' needs and had not been adapted to the KKNI curriculum and National Higher Education Standards (SNPT). For this reason, it was necessary to procure KKNI-based Islamic Education teaching materials for the Islamic Education department students at IAIN Curup.

FGD was ended up with reaching the following agreements: 1) lecturers should develop and use KKNI-based Islamic Education materials, 2) lecturers should use interesting materials and guide students to develop competencies as expected at level 6 in KKNI, 3) Islamic education materials must contain references and studies from various scientific articles already published in scientific journals, 4) Islamic education materials should contain tasks that could develop students' competences in problem solving, decision making, elaboration, discussion, and group work, 5) Islamic Education materials must contain illustrations in accordance with the learning materials, 6) Islamic education materials must contain activities that could develop students' abilities for the sake of getting familiar and accustomed to using science and technology, 7) Islamic education materials must contain students' interactive activities, 8) Islamic education materials must be complete and in accordance with students' competencies, 9) Islamic education materials must be systematic in composition, 10) Islamic education materials must be balanced and in accordance with the materials, assignments, and evaluation, 11) Islamic education materials must relate to the previously studied materials, 12) the language used in Islamic education materials must be standardized, attractive, and effective, 13) Islamic education materials must be equipped with appropriate and proper presentation of the materials.

The Results of Design Planning of Developing KKNI-Based Islamic Education Materials

At the planning stage, KKNI-based Islamic education materials were designed according to the specifications based on lecturers' and students' needs analysis. Needs analysis revealed that lecturers and students needed complete Islamic education materials in the form of a module conforming to competencies at level 6 in KKNI. They also needed materials that could develop students' critical abilities. Accordingly, the following design in the form of a KKNI-based module was planned to be developed.

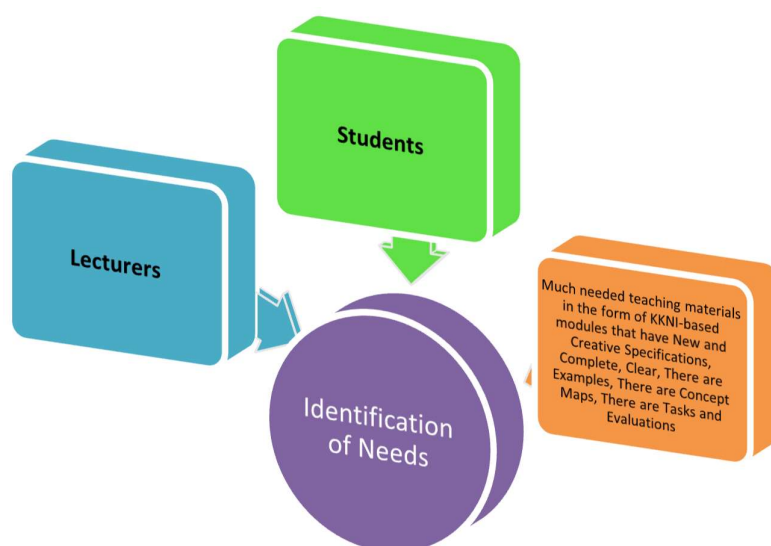


Figure 2. Identification of Lecturers and Students' Needs for Islamic Education Materials

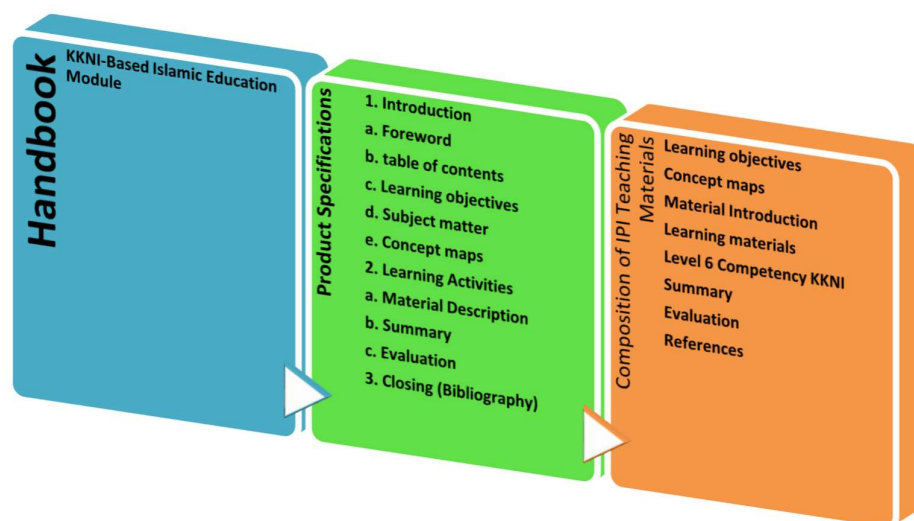


Figure 3. Planning the Design of Islamic Education Materials in a Module/Handbook

Results of Initial Product Format Development (Preparation of Initial Product Design/Prototype)

The initial design development of the KKNI-based Islamic education module was based upon the following steps:

Planning

The preparation of the initial design development of KKNI-based materials began

with scrutinizing and studying the existing materials used in Islamic education courses at IAIN Curup. To realize such planning, the researchers consulted the experts, conducted observation and interviews with lecturers and students, learned the techniques for developing materials in the form of a module, reviewed some literature needed, and analyzed the related syllabi and learning plans.

Analyzing Learning Objectives

Various sources were collected according to students' competencies and indicators to be achieved. Based on the sources gathered, the researchers compiled a learning map, compiled the materials or contents of the module to be developed, and module material to be compiled, and evaluated the related sources and materials.

Developing Learning Materials

After obtaining the sources and materials to be compiled, the KKNI-based materials were further developed by the researchers in the form of a module/handbooks, which covered the following themes: 1) the definition of Islamic Education and Islamic Education Sources, 2) The Nature of Islamic Education Curriculum, 3) Students. Besides containing materials, the module included students' interactivity, assignments related to competencies as expected at level 6 KKNI, and evaluation. The initial design of the KKNI-based module consisted of 62 pages. The grand elements of the KKNI-based Islamic education module that was developed comprised: 1) introduction, which contained preface, table of contents, learning objectives, and concept maps; 2) learning activities which contained material description, summary, and evaluation; and 3) references (bibliography). In addition, the module was equipped with pictures relevant to the materials, students' activities oriented towards developing competencies as expected at Level 6 of KKNI, color variations, and explanatory materials in the material description taken from published scientific articles in qualified journals.

Validation Result from Experts

The product of the KKNI-based module was subsequently duplicated into 4 copies to be validated by four experts. Validation was carried out to determine whether the initial design of the module was feasible to be used/tested in the Islamic education department of IAIN Curup. The experts who validated the module were Dr. Fakhruddin, M.Pd.I. as the content expert, Abdul Rahman, M.Pd.I. as the presentation expert, Dr. Murni Yanto, M.Pd. as a linguist, and Dr. Kusen, S.Ag., M.Pd. as the graphic expert. The validation instrument was divided into two parts. The first part contained the assessment table in numbers 1-5 (scale 5). The second part contained suggestions and input for the development of the module as given by the validators, as well as the conclusion of the validation results. This validation aims to discover the shortcomings/mistakes and the strengths of the initial design of the developed Islamic education module. Suggestions and responses from the validators become a reference for improving the developed product. Table 5 below shows the results of validation from the content expert.

Table 5. Validation Results from Content Expert/Material

No	Component Content / Material Eligibility	Score					Total
		1	2	3	4	5	
1	Compliance with Learning Objectives					√	5
2	Conformity to the development and characteristics of students				√		4
3	The trustworthiness of the material substance					√	5
4	Clarity of material content				√		4
5	The conformity between the material contents and KKNi					√	5
	Total						23

In addition to the above validation data, the content validator added some notes. Generally, the module is feasible to use and try out by re-considering the suitability of the learning materials described and students' development as characteristics. Information on the materials needs to be explained using more resources. The module is declared worthy but needs to be revised as suggested. Furthermore, the validation results of the presentation expert are presented in table 6 below:

Table 6. Validation Results from Presentation Expert

No	Component Presentation Feasibility	Score					Total
		1	2	3	4	5	
1	The suitability of the materials with learning objectives					√	5
2	The order of presentation					√	5
3	Providing motivation and attractiveness					√	5
4	Interactivity (stimulus and response)					√	5
5	Completeness of information				√		4
	Total						24

Besides the above validation data, the presentation expert added some notes: Generally, the learning materials presented are under learning objectives, have good organization, contain attractive elements, and have a sense of interactivity. However, the extent of the information described needs to be supplemented. The module is declared worthy but needs to be revised as suggested. Subsequently, the result of the linguist's validation can be seen in the following table 7:

Table 7. Validation Results of Linguistic Expert

No	Component	Score					Total
		1	2	3	4	5	
1	Readability of the text in the module					√	5
2	Clarity of Information					√	5
3	Completeness of Information				√		4
4	Conformity with Indonesian					√	5
5	Use of language effectively and efficiently					√	5
	Total						24

In addition to the above data of validation, the linguistics expert also added some notes as follows: Generally, the language used in the module is understandable, effective, efficient, standard, and precise, but the completeness of the information still needs to be added again, and a few uses of language needs to be simplified. The module is declared worthy but needs to be revised as suggested. Subsequently, the results of graphic validation can be seen in the following table 8.

Table 8. Validation Results from Graphic Expert

No	Component	Score					Total
		1	2	3	4	5	
1	Font Size and Type					√	4
2	Illustration					√	4
3	Color combination					√	4
4	<i>Layout</i> Display					√	4
5	Cover Page Display					√	4
	Total						20

Besides the above validation data, the linguistics expert also added some notes: image illustrations are added and adjusted to the discussion of learning materials. The teaching materials developed are suitable for use based on suggestions. The module is declared worthy but needs to be revised as suggested. Table 9 below presents the recapitulation of all values given by the validators.

Table 9. Value Recapitulation from Validators

No	Aspect	Total
1	Content	23
2	Presentation Feasibility	24
3	Language Feasibility	24
4	Eligibility for Graphics	20
Total		91
Average		22.75
Score		Very good

The average value of validation was 22.75, with a very good category. After validation, an initial design improvement was made according to the results of the experts' validation. The following figure compares the validation results from the four experts.

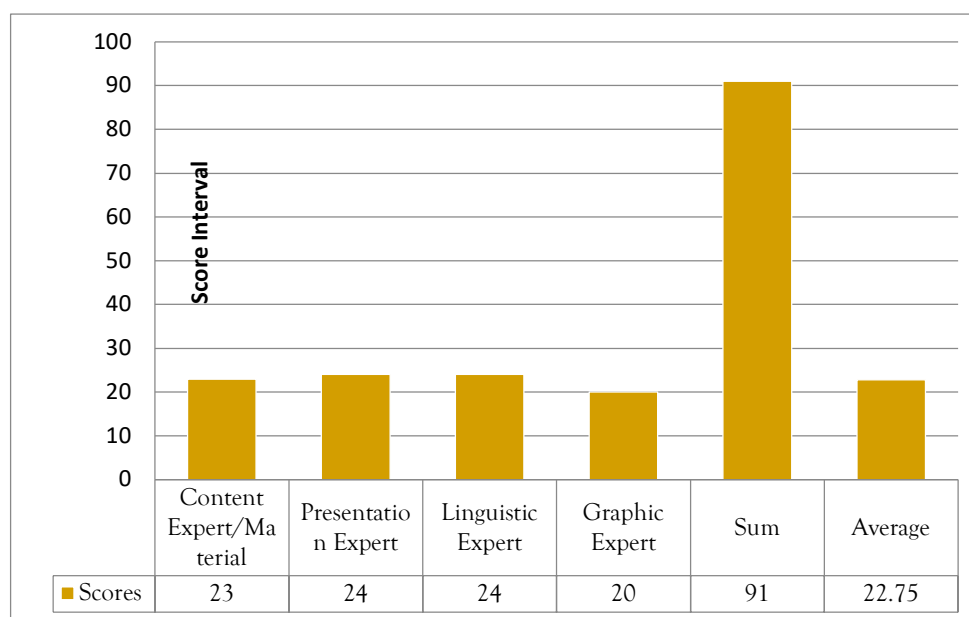


Figure 4. Comparison of Validation Results of KKNI-Based Islamic Education Module from the Four Experts

One to One and Small Group Evaluation

The first revision was carried out after the prototype of the teaching material product had been carried out a self-evaluation. The revision was also based on the validation results of the expert team after finishing product revision, one-to-one, and small group evaluations. The average student's critical thinking ability test score on one-to-one evaluation is 89.7. Meanwhile, the average test score of students' critical thinking ability in small group evaluation is 90.9. It can be concluded that the test scores of students' critical thinking ability at intervals of 80-99 grades are in the very high category.

The present study portrays steps and related data concerning the development of

KKNI-based Islamic education materials in a module. The first step was to investigate lecturers' and students' perceptions of the existing Islamic education materials so that some weaknesses of those materials were revealed to get adequate information to develop ideal materials. Based on the investigation, 11% of the lecturers and 5.52% of students perceived that the existing materials were suitable. 48% of lecturers and 32.34% of students perceived the existing materials as less appropriate. 41% of lecturers and 62.13% of students perceived the existing materials as inappropriate. As a whole, it could be stated that 89% of lecturers and 94.47% of students perceived that the existing materials were less or not appropriate.

In the second stage, the study continued to conduct a needs analysis by investigating lecturers' and students' needs for ideal Islamic education materials to be developed. In this entity, it was revealed that 95.79 % of lecturers and 83.96 % of students stated they highly needed Islamic education materials, which were based upon KKNI, to be used in the Islamic education department of IAIN Curup. 4.21% of lecturers and 16.04% of students stated that they needed KKNI-based Islamic education materials moderately. In addition, none of the lecturers and students who did not need any development of Islamic education materials. Further discussions were also held with the representatives of both lecturers and students. Such discussions resulted in the conclusion that the existing Islamic Education materials had not been prepared based on the needs of students and had not been adapted to the KKNI curriculum. For this reason, it was necessary to procure KKNI-based Islamic education materials for students of the Islamic education department at IAIN Curup. The planning of the teaching material base has been based on the explanation in the Higher Education Curriculum Book that a good learning system can provide learning experiences to students to unlock their potential in internalizing knowledge, skills, and attitudes as well as previous learning experiences. With the issuance of Permendikbud No. 49 of 2014 concerning National Higher Education Standards, Study Programs are required to produce graduates based on the Indonesian National Qualifications Framework (KKNI) qualifications. Likewise, the quality assurance system must adequately control the education process, referring to the IQF qualification level.²³ It can be concluded that the development of teaching materials can help guarantee the quality of graduates by preparing learning tools based on the demands of learning outcomes and referring to KKNI qualifications.

In the third stage, this study planned the initial design of KKNI-based Islamic education material. The design was prepared according to specifications based on needs analysis data on the ideal materials. The study continued to develop the initial product of the materials. The developed KKNI based-Islamic education materials contained some themes – Understanding of Islamic Education and Sources of Islamic Education, The Essence of Islamic Education Curriculum, and students. The materials were packed in a module consisting of 62 pages and 3 pages of bibliography, so as a whole, 65 pages. The first part of the module is the introduction which includes a cover, preface, and table of contents. The module cover consists of 2 pages. The preface includes 1 page; the 2 pages are for the Table of Contents, and Learning Objectives and Concept Map take one page in each module chapter compiled. The initial part of the introduction is written using the font

²³ Illah Sailah et al., *Buku Kurikulum Pendidikan Tinggi* (Jakarta: Direktorat Pembelajaran dan Kemahasiswaan Direktorat Jenderal Pendidikan Tinggi Kementerian Pendidikan dan Kebudayaan, 2014).

type *Bookman Old Style* with 12 *fonts*. The second part is the Learning Activity consisting of a description of the materials, a summary, and an evaluation. The third part is References containing bibliographies. In addition to the material, the Module/*Handbook* of Islamic Education is equipped with pictures that are relevant to the materials, student activities supporting the development of competencies as expected at Level 6 of KKNI, color variations, and explanatory materials in the material description taken from scientific articles published in qualified Journals. The materials in Chapter 1 on Understanding Islamic Education consist of learning objectives, concept maps, introductory material, and learning materials. Competency 4 at level 6 of KKNI is discussion and group work, and competency 2 at level 6 of KKNI is theoretical concept/in-depth study, summary, and evaluation. The materials in Chapter 2 about the Nature of the Islamic Education Curriculum contain learning objectives, concept maps, introductory material, and learning materials. Competency 4 at level 6 of KKNI is discussed. Group Work, competency 2 at level 6 of KKNI, is theoretical/in-depth Concepts. Competency 1 at level 6 of KKNI is problem-solving, summary, and evaluation. The materials in Chapter 3 about Students consist of learning objectives, concept maps, introductory material, learning materials, and competency 1 at level 6 of KKNI. It is problem-solving, competency 3 at level 6 of KKNI is making decisions, and competency 2 at level 6 of KKNI is theoretical concepts/in-depth study, summary, and evaluation.

This study conducted a preliminary trial or expert validation on the developed KKNI-based Islamic education module at the last stage. Based on the validation results, the average validation value from four experts was 22.75, with an excellent category. In general, the results of experts' validation indicated that the initial design of KKNI-based Islamic education materials in a module had been ideal and could proceed to trials. The four experts concluded that the developed module was worthy and that further revisions could be made, as suggested.

CONCLUSION

The present study conducted research and development to develop KKNI-based Islamic education materials as a module. Some steps were undertaken, from reviewing the existing materials' weaknesses to developing the module's product. Regarding lecturers' and students' perceptions of the existing materials, 89% of the lecturers and 94.47% of students stated that the existing Islamic Education materials were less appropriate or inappropriate. In addition, after investigating their needs, none of them said that ideal materials were not needed. The preceding indicated that the development of new materials was highly needed. Further in-depth discussions were held with some representatives of lecturers and students. The discussions ended with information that the existing materials were not yet prepared according to the KKNI curriculum, so KKNI-based Islamic education materials were considered highly necessary to be developed. KKNI-based Islamic education materials in the form of a module were subsequently planned to be developed by evaluating various elements, information, or data gained from a needs analysis. The module's development also accounted for the aspects which improved the competencies at level 6 of KKNI. The module developed contained three chapters: Understanding Islamic Education and Islamic

Education Sources, The Essence of Islamic Education Curriculum, and Students. The module contents had 62 pages and three pages for the bibliography, so it had 65 pages. Four validators further assessed the module with expertise in content, language, presentation, and graphics. The validation results indicated that the average value was 22.75, categorized into a very good category. In general, the results of the experts' validation portrayed that the KKNI-based Islamic education module was worthy and could be improved to be revised as suggested. The results of the student's critical thinking ability test on the one-to-one test and small group evaluation with very high categories at intervals of 80-99.

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