





Development of Hots-Based Communication and Business Negotiation Teaching Materials

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Abstract	Article History
<p>This study aims to test the feasibility level of HOTS-Based Communication and Business Negotiation teaching materials in learning. The method used in this research is the R&D method using a 4D model with 4 stages, namely <i>define, design, develop and disseminate</i>. The population in this study was the fourth semester students of the Unimed FE Business Education Study Program. Data collection techniques used observations and questionnaires with research instruments in the form of validation sheets for expert assessments and student response questionnaires. This research activity begins with a preliminary study by conducting interviews with the Head of the Study Program and the course lecturers. Then the design and development is carried out by analyzing the RPS and learning outcomes of graduates, collecting reference sources and compiling drafts of teaching materials. The next stage is to evaluate the product by conducting a limited trial, revising the product and then carrying out data processing and evaluation. Based on the practicality test, it can be seen that the HOTS-Based Communication and Business Negotiation Textbook is very practical to use, it can be seen from 92% of respondents stating that the HOTS-Based Communication and Business Negotiation Textbook is very practical to use, 8% said it was practical and there were no respondents who say that the book is impractical or impractical. There is an effect of using HOTS-Based Communication and Business Negotiation teaching materials on student learning outcomes in the Business Education study program, Faculty of Economics, State University of Medan. Increasing and the correlation value between pre-test and post-test was 0.947 at a significance level of $0.000 < 0.005$.</p> <p>Keywords: <i>Teaching Materials, High Order Thinking Skill, HOTS,</i></p>	<p>Received: 05 Jan 2023 Accepted: 02 Sept 2023 Published: 05 Sept 2023</p> <p>Scan QR code to view*</p>  <p>License: CC BY 4.0*</p>  <p>Open Access article.</p>
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Introduction

Learning development oriented to high-order thinking skills or *High Order Thinking Skill* (HOTS) is a program developed as an effort of the Ministry of Education and Culture through the Directorate General of Teachers and Education Personnel in an effort to improve the quality of learning and improve the quality of graduates. Lecturers as facilitators are also expected to be able to present learning that can direct students' critical thinking skills. Lecturers must be able to produce innovative and creative media and teaching materials. Learning is not only focused on theory, but must also be followed by the use of cases, *problem base learning and also project base learning* in learning.

The challenge faced today is that lecturers are required to be ready with changes in learning methods after the implementation of the new normal in the teaching and learning process. Changes in teaching materials must be adjusted

according to student needs. The main problem that occurs at the research location is that the available teaching materials are not based on HOTS, so learning focuses on theoretical understanding only, while in the HOTS method, students are required not only to understand theory but also to be able to implement the knowledge gained in critiquing cases that occur in the community and must be able to create projects as learning outcomes.

The Communication and Business Negotiation course is a very interesting subject to develop. As prospective educators and prospective entrepreneurs, students are required to be able to practice good communication and negotiation. Have good presentation skills, have good public speaking skills and be able to negotiate well. This knowledge is very much needed in the career development of students, especially as prospective teachers and prospective entrepreneurs. The phenomenon that occurs in the Unimed FE Business Education study program, the available teaching materials are not in accordance with

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HOTS learning. Facts in the field based on observations while the author is known that communication skills and student percentages are still low, so the development of teaching materials is expected to be a solution in achieving the desired graduate competencies.

Teaching materials are all materials in the form of systematically arranged and arranged as attractive as possible in order to achieve the expected competencies as stated in the curriculum (Prastowo, 2013). The teaching materials used must be in accordance with the curriculum and learning objectives in order to be able to facilitate educators and students in the learning process. The criteria for good teaching materials according to (Daryanto 2013) are having a subject that includes competencies and sub-competencies that must be achieved after learning is over, the suitability of the language used must be easy for students to understand, made systematically, clear and easy to understand.

According to Dharma (2011), good teaching materials are *self-instructional, self-contained, stand-alone, adaptive and user friendly*. This means that the teaching materials used must be able to make students learn independently and do not have to depend on educators. In addition, teaching materials must also contain and present complete, intact and structured material so that students can learn thoroughly, because learning materials and competencies are already in one package. The teaching materials used must be able to be used independently and in groups by students even without the help of other media. Another thing that should not be forgotten is that the teaching materials used must follow technological developments that can be used within a certain period of time in accordance with the applicable curriculum and teaching materials must be easily understood by students. Through the HOTS learning method, it is expected to be able to create productive, creative and innovative humans by using and utilizing critical and creative thinking skills in learning. In the *High Order Thinking Skill method*, students are not only trained to remember but also must have the ability to think creatively and critically on every problem presented.

Methodology

The method used in this research is the *Research and Development (R&D)* method using the 4D model proposed by Thiagarajan, Semmel and Smeel (1974). This model uses 4 stages, namely *define, design, develop and disseminate*. The R&D research method is a research model that aims to produce an effective product and also aims to test the effectiveness of a product (Sumarnri, 2019). So this research is not to produce a theory but to produce a product and test the effectiveness of the product. Data collection techniques used observations and questionnaires with research instruments in the form of

validation sheets for expert assessments and student response questionnaires. The next stage is to evaluate the product by conducting a limited trial, revising the product and then carrying out data processing and evaluation.

At the define stage, the determination or definition of the development requirements to be carried out is carried out. At this stage, an analysis of user needs is carried out which begins with analyzing the basic problems in the learning process so that the development of teaching materials is needed. This process begins with a preliminary study, namely conducting interviews with the head of the study program and the course lecturers. From the interview results, it is known that teaching materials and RPS for the HOTS-based Communication and Business Negotiation Course are not yet available so that there is a need for the development of learning materials according to needs. Together with the course lecturers, they select materials that are in accordance with the curriculum and CPL of the study program.

The second stage is the design stage. At this stage, the design and development is carried out by analyzing the RPS and graduate learning outcomes, collecting reference sources and compiling drafts of teaching materials and selecting the format of teaching materials and materials to be included in teaching materials. In this stage, the selection of learning outcomes *projects* and types of case studies are also carried out in each meeting.

The third stage is *Development*. At this stage, it begins with making teaching materials by developing existing drafts and then conducting trials.

The next stage is to conduct a limited trial. The trial was carried out using 2 *designs*, namely product validation trials conducted by a team of experts and product trials conducted on 20 students.

Data analysis technique

a. Feasibility test

The teaching materials that have been developed are then validated by 3 expert validators. The expert validators chosen by the author are senior lecturers at the Unimed Faculty of Economics who have long experience in book-making. The aspects that are assessed in the validation by the expert validator team are the aspects of the feasibility of the book content, presentation aspects and language aspects. In this study, the answers to the instrument items were classified into five options (Table 1).

The validator assessment instrument on the feasibility of this research product can be seen in the Table 2:

Table 1: Answers to Likert Scale Instrument Items

Information	Scale
very good/ very appropriate/ very decent/ very clear	5
good / appropriate / appropriate / clear	4
not good / not suitable / not appropriate / not clear	3
not good/ not appropriate/ inappropriate/ not clear	2
very bad / very inappropriate / very inappropriate / very unclear	1

Table 2: Feasibility Assessment Instruments for HOTS.-Based Business Communication and Negotiation Books

No	Aspect	Indicator	Item Number
1	Feasibility Aspects of Book Content	Conformity of the contents of the book with the RPS,	1, 2, 3
		Material Accuracy,	4, 5, 6, 7
		KKNI task,	8, 9, 10
		<i>Project Based Learning, Problem Based Learning Case Studies and Exercises,</i>	11, 12, 13, 14
		material support,	15, 16, 17
		Material updates	18, 19, 20
2	Presentation feasibility aspect	presentation technique,	1, 2, 3
		presentation support,	4, 5, 6, 7, 8, 9, 10
		Presentation of learning	11, 12
		Learning equipment	13, 14, 15
3	Aspects of language eligibility	straightforward,	1, 2, 3
		Communicative,	4, 5
		Dialogic and interactive,	6, 7
		Suitability with the level of development of students,	8, 9
		Coherence and coherence,	10, 11
		Use of terms, symbols and icons	12, 13

After the data is obtained, then to see the weight of each validator's response by calculating the average score with the following formula Ismail (2018):

$$\text{Result} = \frac{\text{Rata-Rata Skor}}{\text{Nilai Maksimal}} \times 100\%$$

Table 3: Eligibility Criteria Category

Percentage	Eligibility Criteria	Score
21	Very Inappropriate	1
21-40	Not feasible	2
41-60	Decent enough	3
61-80	Worthy	4
81-100	Very Worthy	5

Source: Arikunto 2009.

b. Practicality Test

To test the practicality, it was assessed by students to test the book readability assessment on a limited sample of textbooks that had been made using a Likert scale. This practicality test examines the readability of teaching materials in terms of ease for users (*Learnability*), effectiveness (*Efficiency*) and effectiveness of time (*Effectiveness of Time*). The total range of values from the resulting Likert scale will be converted to the value criteria determined by the level of practicality of using the textbook. The population in this study was the fourth semester students of the Unimed FE Business Education Study Program, totaling 64 students, the sample for the limited trial

was 26 students, namely students who were in class B of the Unimed Business Education Study Program as well as users of the teaching materials (books). The formula used in the practicality test in this study is:

$$V_p = \frac{TSEp}{S-max} \times 100\%$$

Information:

Vp = Practicality Validity

TSEp = Total Practicality Empirical Score

S-max = Maximum expected score

After knowing the value of practicality, to describe the results of practicality can be seen from the following criteria:

Table 4: Practical Criteria

Information	Category	Information
75.01% - 100%	Very Practical	Can be used without revision
50.01% - 75.00%	Practical	Can be used with minor revisions
25.01% - 50.00%	Less Practical	Recommended not to use
00.00% - 25.00%	Not Practical	Cannot be used

Source: Akbar 2011

To analyze the impact of using HOTS-Based Communication and Business Negotiation Teaching Materials, a test was conducted by piloting three materials accompanied by a pre-test and a post-test. The results of the pretest and posttest were then tested using a Paired Sample T-Test using SPSS 22

Results and Discussion

The product design produced in this study has passed various trials in accordance with product planning. The trial plays a role in improving the quality of the book's contents. The tests that have been carried out include the first time the book has

been tested by an expert validator. The expert validators who test are senior lecturers who have experience in their respective fields. Three expert validators gave an assessment and input on the book that had been made. Each score given by the validator is then tabulated and calculated using descriptive analysis. Based on the validation results from a team of three experts, the next step is to revise the book based on input and suggestions from the validator. This activity is carried out by accumulating input and suggestions from all validators and then carrying out revisions. This revision aims to enrich the contents of the book and provide new innovations in the book. The results of the revised book were then tested on students to measure the practicality of the book.

The product design is in the form of this HOTS-Based Communication and Business Negotiation book. This book is organized into eight chapters. The materials discussed are:

Chapter 1 Basics of business communication,
Chapter 2 Intercultural communication,
Chapter 3 Communication technology,
Chapter 4 Writing skills,
Chapter 5 Employment communication,

Chapter 6 Listening and reading skills,
Chapter 7 Small group communication,
Chapter 8 Negotiations and negotiation strategies.

Apart from the material, this book also contains case studies selected from the latest cases and according to the topic. The tasks given in this book are KKNI tasks that encourage students to think critically and apply High Order Thinking Skills. The approaches include routine tasks, *critical journal reviews*, *critical book reviews*, *project based learning*, *problem based learning*, idea engineering and mini research. In addition, this book also presents practices that help students become more confident in communicating, especially communication in public. The outputs produced by students during the learning process that are expected in this book are in the form of mini-research results, project outputs in the form of learning videos that are attractively designed by students and shared on YouTube media.

The results of the validation test of each indicator on the aspects of the assessment carried out by the expert validators in this book can be seen in Table 5.

Table 5: Feasibility Aspects of Book Content

Indicator	Average	Percentage	Criteria
Compatibility of book content with RPS	4.22	84.44	Very Worthy
Material Accuracy	4.50	90.00	Very Worthy
KKNI's Tasks	4.33	86.67	Very Worthy
<i>Project Based Learning, Problem Based Learning, Case Study and Exercise</i>	4.6	92.00	Very Worthy
Material Support	5	100	Very Worthy
Material Update	4.44	88.89	Very Worthy
Overall Rating	4.53	90.33	Very Worthy

Based on table 5 above, it can be explained that there are indicators that have been assessed by the validator. The indicator of the suitability of the contents of the book with the RPS with 3 statement items gets an average score of 4.22 with a percentage value of 84.44% which is included in the very feasible criteria. The material accuracy indicator gets an average score of 4.50, with a percentage value of 90% entering the very feasible criteria. The KKNI Task Indicator got a score of 4.33 with a percentage value of 86.67% which was included in the very feasible criteria. Indicators of *Project Based Learning, Problem Based Learning, Case Study and Exercise* obtained an average score of 4.6 with a percentage value of 92% included in the very feasible criteria. The Material Supporting Indicators obtained an average score of 5 with a

percentage of 100% entering the very feasible criteria and the material updating indicator obtaining an average score of 4.44 with a percentage value of 88.89 entering the very feasible criteria. From the explanation above, it can be seen that the overall assessment of the content feasibility aspect is at an average score of 4.53 with a percentage value of 90.33% which is included in the very feasible criteria.

Based on the data in Table 6, it can be seen that there are four indicators in the aspect of feasibility of presentation where the value of all indicators is in the very feasible criteria. The presentation technique indicator obtained an average score of 4.56 with a score percentage of 91.11% which was included in the very feasible criteria. The supporting indicators for presentation have an average value of 4.81 with a percentage

value of 96.19% which is included in the very feasible criteria. The learning presentation indicator obtained an average score of 4.83 with a score percentage of 96.67 included in the very feasible criteria and the completeness indicator for presentation obtained an average score of 5 with a score

percentage of 100% included in the very feasible criteria. From table 6, it can be concluded that the overall expert validation assessment on the presentation feasibility aspect obtained an average score of 4.80 with a percentage value of 95.99% in the very feasible category.

Table 6: Aspects of Feasibility of Presentation (*Design and Layout*)

No	Indicator	Average	Percentage	Criteria
1	Presentation Technique	4.56	91.11	Very Worthy
2	Presentation Support	4.81	96.19	Very Worthy
3	Learning Presentation	4.83	96.67	Very Worthy
4	Presentation Equipment	5	100	Very Worthy
Overall Rating		4.80	95.99	Very Worthy

Based on Table 7, it can be explained that there are 6 indicators on the aspect of language feasibility. The straightforward indicator obtained a score of 4.67 with a score percentage of 93.33% which was included in the very feasible criteria. The communicative indicator obtained an average afternoon of 5 with a score percentage of 100% which was included in the very feasible criteria. The Dialogical and Interactive Indicators obtained an average score of 4.50 with a score percentage of 90% being included in the very feasible criteria. The indicator of conformity with the level of development of students

obtained an average score of 4.33 with a score percentage of 86.67% which was included in the very feasible criteria. The indicators of coherence and cohesiveness obtained an average score of 4.83 with a score percentage of 96.67% belonging to the very feasible criteria. The indicator of the use of terms, symbols and icons obtained a score of 4.50 with a percentage value of 90% which was included in the very feasible criteria. Overall, the language feasibility aspect obtained a score percentage of 92.78% which was included in the very feasible criteria.

Table 7: Aspects of Language Feasibility

No	Indicator	Average	Percentage	Criteria
1	straightforward	4.67	93.33	Very Worthy
2	Communicative	5.00	100	Very Worthy
3	Dialogic and Interactive	4.50	90	Very Worthy
4	Conformity with the level of development of students	4.33	86.67	Very Worthy
5	Coherence and cohesiveness	4.83	96.67	Very Worthy
6	Use of terms, symbols and icons	4.50	90	Very Worthy
Overall Rating		4.64	92.78	Very Worthy

From Table 8, it can be concluded that this HOTS-based Communication and Business Negotiation book is very feasible to use. This can be seen from the percentage of values obtained in all aspects in the range of 81%-100%. The Feasibility Aspect of the contents of the book got an average of 4.53 with a score percentage of 90.33% which was included in the very feasible criteria. The average value of the presentation feasibility aspect is 4.80 with a percentage value of 95.99% which is included in the very feasible criteria. The

language feasibility aspect has an average value of 4.64 with a score percentage of 92.78% which is included in the very feasible criteria. So it can be explained that this HOTS-Based Communication and Business Negotiation book is very feasible to use. As previously explained, in addition to the assessment of the expert validators, they also provided inputs in improving this book. Some of the inputs received from expert validators are as follows (Table 9)

Table 8: Expert Validation Results

No	Rated aspect	Average	Percentage	Criteria
1	Feasibility Aspects of Book Content	4.53	90.33	Very Worthy
2	Aspects of Feasibility of Presentation (<i>Design and Layout</i>)	4.80	95.99	Very Worthy
3	Language Eligibility Aspect	4.64	92.78	Very Worthy

Table 9: Contents of Input for Teaching Materials from Expert Validators

No	Feedback	Input Content
1	Validator 1 (Material Expert) for Feasibility of book content	<ol style="list-style-type: none"> Some indicators of the study material need to be considered again, some are not in accordance with HOTS Writing the author's title on the cover so that it is better designed, no more than one line Case studies should occur within the last 5 years Project based learning should be one and integrated References used to include the whole including the source of the image and the case raised.
2	Validator 2 (Media Expert) for presentation eligibility	<ol style="list-style-type: none"> It is better to make illustrations in each chapter to make it easier to understand Laying out assignments and exercises will be better at the end of the chapter after the summary It is recommended that each sub-chapter be numbered for clarity Raised cases to be given a softer and more attractive color The cover of the book is made clearer and brighter, including the unimed logo, the freedom to learn and the ministry logo
3	Validator 3 (Technology) for Language Feasibility Aspect	<ol style="list-style-type: none"> Practice questions are made in the form of story questions so that they can help students apply HOTS learning In the introduction, the description of each chapter of the book is explained Typing correction so as not to make a typo The book is designed to be attractive and not stiff so that students don't get bored in learning

In addition to input from expert validators, the author also summarizes input from student responses after the practicality test of the book was carried out. The inputs given by students regarding the improvement of the book are as follows.

No	Fill in Student Input
1	This textbook is already good, but because the student workload is very heavy in each course, the number of assignments should be considered again.
2	Adding examples in the material, for example in writing letters so that students understand more easily
3	Practice questions to be considered again in terms of numbers so that they can be done optimally
4	Include pictures in each practice illustration, so it's easier to do

After taking an inventory of all inputs from the validator and also from students, the author then makes revisions to the textbook by considering input and suggestions from expert validators and also from students.

After conducting a validation test, the next step is to carry out a practicality test from the HOTS-Based Communication and Business Negotiation Book. The practicality test of this book

was assessed by students with the aim of testing the readability of the book on a predetermined sample. The practicality test examines in terms of ease for users (learnability), usability (efficiency) and effectiveness of time (effectiveness of time).

After the questionnaire was distributed, the data obtained from the student responses as in Table 10.

Table 10: Practicality Validity Test Results

No	Indikator Penilaian	Total Score (TSEp)	Score Maksimal (S-Maks)	$V_p = \frac{TSEp}{S-max} \times 100\%$	Kategori
1	<i>Efficiensi</i>	597	130	91,85	Sangat Praktis
2	<i>Learnability</i>	360	130	92,31	Sangat Praktis
3	<i>Effectiveness of Time</i>	467	130	89,81	Sangat Praktis

Based on the data in table 10, it can be seen that when viewed from the aspect of power to obtain a value of practicality validity (*efficiency*) of 91.85, it is included in the very practical category. In terms of convenience for users (*learnability*), the practicality validity value of 92.31 is included in the very practical category. Meanwhile, in terms of time effectiveness, it is known that the value of practicality validity obtained is

89.1 in the very practical category. Based on the results of the analysis above, it can be concluded that from the three aspects, this book is very practical to use.

In addition to testing practicality in terms of efficiency, learnability and effectiveness of time, the author also analyzes the presentation of each respondent's response. From the questionnaire, the following data was obtained (Table 11).

Table 11: Practicality Test Results

NO	Score	Category	Frequency	Percentage
1	75.01-100	Very Practical	24	92%
2	50.01-75.00	Practical	2	8%
3	25.01-50.00	Less Practical	0	0%
4	0-25.00	Not Practical	0	0%
Total			26	100%

From Table 11 above, it can be explained that of the 26 total respondents, it is known that 92% of respondents stated that the HOTS-Based Communication and Business Negotiation book was very practical to use, 8% said it was practical and no respondents said that the book was less practical and impractical.

To analyze the impact of using HOTS-Based Communication and Business Negotiation Teaching Materials on student learning outcomes, a comparison test was conducted between the pre-test and post-test scores of students. Data collection was carried out three times. The impact of using teaching materials is calculated by conducting a paired sample T-test using SPSS.

Based on the results of the analysis (Table 12), it can be seen that there is an increase in the average score of students from the pre test of 84.50 to 87.81 in the post test. This means

that there is a difference in the value obtained by students, namely the increase in grades after the use of teaching materials.

Based on the values in table 13, it can be seen that the correlation value between pre-test and post-test is 0.947 and the significance value obtained is 0.000. This shows that there is a very significant relationship between the pre-test scores and the students' post-test scores as a result of the use of teaching materials.

Based on the data in table 14, it can be seen that the value of Sig (2-tailed) in this data is 0.000 < 0.005, meaning that there is an effect of using HOTS-Based Business Communication and Negotiation teaching materials on student learning outcomes in the Business Education study program, Faculty of Economics, State University of Medan.

Table 12: Paired Samples Statistics

	mean	N	Std. Deviation	Std. Error Mean
Pair 1 Pre-Test	84.50	26	5.210	1.022
Post Test	87.81	26	4.050	.794

Table 13: Paired Samples Correlations

	N	Correlation	Sig.
Pairs 1 Pre-Test & Post-Test	26	.947	.000

Table 14: Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
	mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pairs 1 Preetest - Posttest	-3.308	1,892	.371	-4.072	-2.543	-8,912	25	.000

Conclusion

The product produced in this research is a HOTS-Based Communication and Business Negotiation textbook. Procurement of HOTS-based textbooks is motivated by

curriculum demands that encourage students to think critically, responsively and innovatively. The results of the validation test from the validator show that this HOTS-Based Communication and Business Negotiation Textbook is very

feasible to use. This can be seen from the values obtained in all aspects in the range of 81%-100%. The Feasibility Aspect of the contents of the book got an average score of 4.53 with a percentage value of 90.33% included in the very feasible criteria, the presentation feasibility aspect was 4.80 with a percentage value of 95.99% included in the very feasible criteria and the language feasibility aspect was 4.64 with a percentage value of 92.78 is included in the very feasible criteria. From the Practicality Test, it can be seen that the HOTS-Based Communication and Business Negotiation Textbook is very practical to use, it can be seen from a total of 26 respondents, it is known that 92% of respondents stated that the HOTS-Based Communication and Business Negotiation Book was very practical to use, 8% said it was practical and none of the respondents said that the book was less practical and impractical. To analyze the impact of using HOTS-Based Communication and Business Negotiation Teaching Materials on student learning outcomes, a comparison test was conducted between the pre-test and post-test scores of students. Based on the comparison test of pre-test and post-test scores, there is an effect of using HOTS-Based Communication and Business Negotiation teaching materials on student learning outcomes in the Business Education study program, Faculty of Economics, State University of Medan, this is evidenced by the increasing average value and the correlation value between the pre-test and post test of 0.947 at a significance level of $0.000 < 0.005$.

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