

**THE DEVELOPMENT OF CONTEXTUAL LEARNING ORIENTED TO CIVIC LEARNING MODULE BASED ON VALIDATIONS OF MATERIAL, LEARNING DESIGN AND METHODOLOGY EXPERTS TO IMPROVE THE STUDENTS' LEARNING OUTCOMES OF GRADE V SD 030413 SALAK, MEDAN, INDONESIA**

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**ABSTRACT:** *Civic learning shows some weaknesses in the methodological aspects in which the expository approach strongly dominates almost the entire learning process. The teacher's activity is more prominent than the students' activities, so the students learning are limited to memorizing the concepts. The main problem in learning Citizenship Education (Civics) is the use of methods or learning models. Contextual approach is a learning concept in which the teacher presents a real-world situation into the classroom and encourages the students to make connections between their knowledge and applications in their lives as family members and society. The module and learning instruments are declared valid by the validator team. The practicality level of the module and learning instruments are stated good. Experts and practitioners state that the module and the developed learning instruments can be used with little revision. The teachers and the students can use this learning instrument in learning very well.*

**KEYWORDS:** Civic Learning, Contextual Learning, Learning Outcomes, Module

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## **INTRODUCTION**

The quality of current Civics learning shows some weaknesses, both in terms of process and learning outcomes, in the methodological aspects in which the expository approach strongly dominates almost the entire learning process. The teacher's activity is more prominent than the students' activities, so the students learning are limited to memorizing the concepts. The main problem in learning Citizenship Education (Civics) is the use of methods or learning models. Teachers still pay less attention to the environment as a source of learning; teachers also have not linked the material with the real life of the students.

Many factors affect the low quality of education in Indonesia. One of them is the learning process that has been less precise, learning media and learning approaches used are not effective. In addition, the teaching materials used are only limited to the book textbooks. Whereas in the Regulation of the Minister of National Education (Permendiknas) no.41 of 2007 about the standard process is expected the teachers can use other teaching materials textbooks as one OF the learning sources. Teaching materials here can be a teaching material developed by the teacher himself. Teaching materials are prepared by the teachers can be more effective because they are based on the nature and characteristics of the students.

Problems occur at this time, that the teachers in Class V SD Negeri 030413 Salak never develop their own modules. This happens due to the many practical and ready-to-use teaching materials. The teaching materials do not match the characteristics of the students. The learning system uses these teaching materials, forces the students to follow the learning process in order and

time, while each student has different abilities in terms of understanding the materials. Low-skilled students will find this kind of learning very boring.

In accordance with their characteristics, the learning system with learning tools in the form of developed modules provide the opportunities for the students to develop based on their ability. Moreover, all the students are in Class V SD Negeri 030413 Salak. Thus, learning with developed modules is a suitable answer to overcome the students' problems in understanding the materials, so that students are expected to be able to learn more effectively and efficiently.

## **REVIEW OF LITERATURE**

### **Understanding the Module**

Module is the smallest unit of learning, systematically and attractively composed including material contents, methods and evaluation, containing a concept unit rather than a lesson. It can be used independently to achieve a desired goal according to the speed of each individual. Ashyar (2012: 155) states that: "Module is a printed-based instructional material designed to learn independently by the lesson participants because module is equipped with instructions for self-study. The students can do their own learning activities without the presence of the teachers directly".

Through the module, the participants learn to be able to learn themselves, not dependent on others. All the learning materials from one unit of competence to the sub-competencies studied are in one module in full. Depdiknas (2008: 6) states that: As one of the teaching materials, module will be as effective as face-to-face learning. A good module writer writes as if they were teaching the student about a topic through writing. Everything the writer wishes to convey during face-to-face learning, put forward in the module he wrote. The use of the module can be said as a tutorial activity in writing.

### **Contextual Learning Approach**

According to Nurhadi (2003: 4): "The Contextual approach is a learning concept in which the teacher presents a real-world situation into the classroom and encourages the students to make connections between their knowledge and applications in their lives as family members and society." Meanwhile Sanjaya (2007: 253) states that: CTL is a learning approach that emphasizes the full process of the student involvement in order to find the material learned and relate it to real life situations that encourage students to apply it in their lives.

From this opinion it can be concluded that Contextual learning emphasizes the process of involvement of the students to find the material learned, encouraging the students to find the relationship between the materials studied and the real life situation and encourage the students to apply them in life. It means that Contextual learning is not just expecting the students to be able to understand the materials they learned, but how the subject matter can color its behavior in everyday life. Along with that, it can be said that learning with Contextual approach is a learning approach that begins by taking, simulating, telling, dialogue, questioning or discussing the real-world events of daily life experienced by the students, then lifted into the concept to be studied and discussed. Muslich (2008: 42) states that there are 10 characteristics of Contextual learning: (1) cooperation, (2) mutual support, (3) fun, not boring, (4) passionate learning, (5) integrated learning, (6) ) using various sources, (7) active students, (8) sharing

with friends, (9) critical students and (10) creative teachers. From the above opinion it can be concluded that the characteristics of Contextual learning are: (1) Learning is meaningful and fun, (2) The existence of the relationship between the material being studied with the real world context, (3) Active and critical students and creative and innovative teachers.

According to Nurhadi (2003: 31) Contextual Learning has seven main components: Constructivism, questioning, inquiry, learning community, modeling, reflection and authentic assessment. A class is said to use a Contextual approach if it has implemented the seven components in learning.

## **RESEARCH METHOD**

### **Types of Research**

This research is a research and development. The research and development/R&D model is a research method used to produce a specific product, a development research procedure according to Borg and Gall such as learning tools or other learning resources and test the effectiveness of the product so that it is feasible to use. In this research, Civics module has been developed, the needed learning tools and instruments. Learning device that will be developed in this research is learning device which includes Module and test of learning outcomes.

### **Research Subject**

The subjects of this study are the students of Class V1 SD Negeri 030413 Salak in the academic year 2016/2017 that consists of three classes and amounted to 96 people namely V1, V2, and V3 and each class has 32 students.

### **Instruments and Data Collection Techniques**

The research instruments and data collection techniques are structured to measure the validity and the effectiveness of the development of learning tools with Contextual teaching approaches. The instruments used in this research are the validation sheets of learning tool (RPP, module, and learning result test), student activity observation sheets, teacher observation sheets in managing the lesson, and the student response questionnaire that will be described.

### **Test Results of Civics learning**

The tests provided for this study are multiple choice test and are prepared based on the pre-arranged test lattice and refer to the specific learning objectives that have been made. This test aims to determine the improvement of students' learning outcomes before and after learning using the learning tools that have been developed previously.

To measure the students' ability, the scoring guidelines are used to measure the students' cognitive domains. The scoring uses a free scale, depending on the weight of the item. Each item of the scaling scale is not the same depending on the level of the problem difficulty. The instrument test is conducted to determine the validity of the test, test reliability and as input to revise the item.

### Validity of Test Item Construction

The validity of the item is calculated to find out how far the relationship between the answer of the item score with the total score has been determined. A test item has high validity if the score on the item has alignment with the total score (Arikunto, 2011: 76). To obtain a good measurement or the instrument scale, it must have the validity of the tests to be used in the research. A test is said to have validity if the result matches the criteria, in the sense of having a gap between the test results and the criteria. Validity test which is used for Natural Science test instrument uses the formula of Besimal Point Correlation Technique proposed by Arikunto and Sudijono (2012: 258) as follows:

$$r_{pbi} = \frac{Mp - Mt}{SD_t} \sqrt{\frac{p}{q}}$$

#### Note

$r_{pbi}$  : Index number of biserial point correlation

$M_p$  : Mean score achieved by test participants who answered correctly

$M_t$  : Total of Mean score

$SD_t$  : Total of deviation standard

$p$  : The proportion of test of participants who answered correctly

$q$  : The proportion of test participants who answered wrongly ( $q = 1 - p$ )

Finding out the formula of Total Standard Deviation ( $SD_t$ ) proposed by Sudijono (2012: 260) as follows:

$$SD_t = \sqrt{\frac{\sum X_t^2}{N} - \frac{(\sum X_t)^2}{(N)}}$$

Then the price of  $r_{pbi}$  calculation of each test item is consulted with table  $r_{pbi}$  price with significant level 5% (0,05). If  $r_{pbi}$  calculation >  $r_{pbi}$  table on the test instrument is considered valid and vice versa. The interpretation classification of correlation coefficient, Arikunto (2011: 75) as follows

$0,80 \leq r_{xy} \leq 1,00$  The test has a very high validity

$0,60 \leq r_{xy} \leq 0,80$  The test has a high validity

$0,40 \leq r_{xy} \leq 0,60$  The test has a medium validity

$0,20 \leq r_{xy} \leq 0,40$  The test has a low validity

$0,00 \leq r_{xy} \leq 0,20$  The test has a very low validity.

The value of product moment correlation (r<sub>xy</sub>) obtained is interpreted by consulting to the product moment correlation table with  $\alpha = 0.05$  i.e. when  $r_{\text{calculation}} > r_{\text{table}}$  then the test is declared valid or significant, otherwise if  $r_{\text{calculation}} < r_{\text{table}}$  then the test is stated invalid or insignificant.

Before the measuring tool or instrument is tested to the respondent, the test items that have been prepared based on the grid of the ability test shall be consulted to the experts for the assessment. The assessment is conducted by two experts that is two people in Civics lesson. This assessment is conducted to determine the content validity of the learning outcomes ability test that has been prepared. Content validity is the validity determined by the degree of representativeness of the test items that have been prepared to represent the overall material to be measured.

### Reliability of Item Problem

Reliability is intended as a tool that gives the same results. A measuring instrument is said to have a high reliability when the measuring instrument has a consistent reliability even conducted by the same subject. The calculation of test reliability is determined by the formula K-R 20 formula for multiple choice test (Arikunto, 2003). In principle it includes measuring homogeneity in which two aspects are focused, namely the content aspect and the heterogeneity aspects of the test. The form of the formula is as follows:

$$r_{11} = \left( \frac{n}{n-1} \right) \left( \frac{s^2 - \sum pq}{s^2} \right)$$

- R<sub>11</sub> : Overall reliability test
- P : The proportion of subjects who answer the question correctly
- q : The proportion of subjects who answer the question incorrectly (q=1- p)
- $\sum pq$  : The number of multiplications between p and q
- n : Number of items
- S : Standard deviation from the test

Meanwhile for calculating the variance of each item it is used the formula:

$$\sigma^2 = \frac{\sum X^2 - \frac{(\sum X)^2}{N}}{N}$$

Note

$\sigma^2$  = Variance of each item

X = value of each item

N = number of test participants

The interpretation of coefficient reliability is classified as follows:

**Table.1: Interpretation of Coefficient Reliability**

<b>r<sub>11</sub> Amount</b>	<b>Interpretation</b>
0,00 < r <sub>11</sub> ≤ 0,20	Very Low
0,20 < r <sub>11</sub> ≤ 0,40	Low
0,40 < r <sub>11</sub> ≤ 0,60	Medium
0,60 < r <sub>11</sub> ≤ 0,80	High
0,80 < r <sub>11</sub> ≤ 1,00	Very High

### Power of Difference

The power of difference test is the ability of a problem to be able to distinguish between clever and high-performing students and the not clever (low-ability) students. How to determine distinguishing power is differentiated between the small groups (less than 30 respondents) and the large groups (respondents over 30 people). According to Surakhmad (1990: 217) with the testee (n) > 30, then the division of high-group and the low group is conducted by dividing 27% of the upper group and 27% of the lower group. Meanwhile, for small groups with the testee (n) < 30 then for the upper and lower groups, each taken 25% of the population. The test of the problem in this study, involves 24 students, for the difference of 50% of the students who have the top score (12 students) as the upper group, and 50% of students with the lowest score (12 students) as the lower group. To determine the power of difference test, the following formula (Sudayana, 2014) is used for finding discrimination indices of distinguishing power:

$$DB = \frac{JB_A - JB_B}{JS_A}$$

#### Note:

JB<sub>A</sub> = Number of upper group students who answered correctly

JB<sub>B</sub> = Number of lower group students who answered correctly

JS<sub>A</sub> = Number of upper group students

According to Sudayana (2014: 78) if the number of students in the test is more than 30 people then taken 27% upper and lower groups for the purposes of analysis with the following classification:

For the power of difference

DP ≤ 0,00 : Very bad

0,00 < DP < 0,19 : Bad

0,20 < DP < 0,39 : Enough

0,40 < DP < 0,69 : Good

0,70 < DP < 1,00 : Very Good

### Degree of Difficulty

The degree of difficulty is the existence of an item whether it is difficult, moderate, or easy. To determine the degree of difficulty the following formula is used (Sudayana, 2014):

$$TK = \frac{JB_A + JB_B}{2JS_A}$$

#### Note:

TK = Degree of difficulty

JB<sub>A</sub> = The number of upper group students who answered correctly

JB<sub>B</sub> = The number of lower group students who answered correctly

JS<sub>A</sub> = The number of upper group students

#### For Degree of Difficulty

TK = 0,0 : Too Difficult

0,00 < TK ≤ 0,29 : Difficult

0,30 < TK ≤ 0,69 : Medium/enough

0,7 < TK ≤ 0,99 : Easy

TK = 1,00 : Too Easy

#### Data Analysis Technique

Module is categorized as effective if the learning outcomes using the module indicate: 1) The students' learning completeness is classically met; 2) The student's response to learning is positive and (3) The teacher's ability to manage learning is in good category.

#### Validation Data Analysis of Learning Instrument

The validation data analysis of learning instrument results consists of modules, RPP and Learning Test Result. In general, the aspects to be assessed are format, content and language. The activities to be taken to analyze this data are:

a) Inputting the assessment data into the table includes: aspect ( $A_i$ ), indicator ( $I_i$ ), and value ( $V_{ji}$ ) for each validator

b) Determining the average of each indicator from the five validators by the formula:

$$I_i = \frac{\sum_{j=1}^m V_{ji}}{n} \quad (\text{Arikunto, 2011})$$

#### Note:

$I_i$  = Average value for to-I indicator

$V_{ji}$  = Score of to-j validator of learning outcome on to-1 indicator

n = the amount of validator

j = validator

i = indicator

The results obtained are written on the columns in the appropriate table.

c) Determine the average for each aspect by the formula:

$$A_i = \frac{\sum_{j=1}^m I_{ij}}{m} \quad (\text{Arikunto, 2011})$$

Note:

$A_i$  = The average value for to-I aspect

$I_{ij}$  = The average for to-i aspect of to-j indicator

m = The amount of indicator in to-I aspect

i = aspect

j = indicator

The results obtained are written on the columns in the appropriate table.

d) Determining the average value of total validation for all aspects by the formula:

$$V_a = \frac{\sum_{i=1}^n A_i}{n} \quad (\text{Arikunto, 2011})$$

Note:

$V_a$  = The total of average value for all aspects

$A_i$  = The average value for to-I aspect

n = The amount of aspects

j = aspect

The results obtained are written on the columns in the appropriate table.

e) Determining the validity category by matching the total average value ( $V_a$ ) with the validity criteria as follows.

$1 \leq V_a < 2$  = Invalid

$2 \leq Va < 3$  =Less valid

$3 \leq Va < 4$  = valid enough

$4 \leq Va < 5$  = valid

$Va = 5$  = Extremely valid

Note: Va is a determiner value for validity level

### Note

f) Learning instruments have a good degree of validity if the minimum level of validity achieved is in the category *valid*. If the validity level is under a valid category then revised again based on the input of the validator. Revisions are made onward until a valid learning device is obtained.

### Data Analysis of the Module Effectiveness

To analyze the practicality of teaching materials is to provide a module to the validator to be validated. The module is said to be practical if the validator states that the developed module can be applied and used in the field with little revision or no revision. The result of the observation sheet during the learning process with the module can show a positive improvement on the students' activity and the ability of the teacher to manage the learning.

### Data Analysis of the Teacher's Ability in Managing the Learning

To analyze the observation data of the teacher's ability in managing the learning can be conducted through the steps as follows:

- a). Conducting r recapitulation of assessment data include: aspect ( $A_i$ ), and criteria ( $K_i$ ) for each meeting.
- b). Determining the category value (NK) of the average criteria value from each aspect of the assessment by the formula:

$$NK_j = \frac{\sum_{i=1}^n NRK_{ij}}{n}$$

Note:

$NK_j$  = to-j category value

$NRK_{ij}$  = to-i average criteria, to-j aspect

N = number of criteria in to-j aspect

- c). Determining the teacher's ability level (TKG) is by searching the average category value with the formula:

$$TKG = \frac{\sum_{i=1}^m NK_i}{m}$$

$TKG$  = level of teacher's ability

$NK_j$  = to-j category value

$m$  = the amount of assessment aspect

d). Determining the category of teacher's ability level with criteria as follows:

1,00 ≤ Teacher's Ability Level ≤ 1,49: "Not Good"

1,50 ≤ Teacher's Ability Level ≤ 2,49: "Less Good"

2,50 ≤ Teacher's Ability Level ≤ 3,49: "Good Enough"

3,50 ≤ Teacher's Ability Level ≤ 4,49: "Good"

4,50 ≤ Teacher's Ability Level ≤ 5,00: "Very Good"

e) The criteria state that teachers are able to manage the learning when the minimum level of the teachers' ability achievement to manage the learning is in the *good* category. If level of the teachers' ability achievement to manage the learning is under good category then it is conducted a review of aspects that have *less good* value. Then retest.

The observation instrument of the Contextual learning is used to measure the teachers' ability in managing the learning. In this research, the observed aspects from the teacher's activity in managing the learning are shown in Table 2 below.

**Table.2: Teacher's Ability Aspect in Managing the Learning**

Aspects Observed	
<b>Phase-1 Constructivism</b>	
	a. Informing the goals, basic competencies and indicators of learning.
	b. Motivating the students about the usefulness and application of lessons in the everyday activity
	c. Directing the student to a question or problem.
	d. Asking the students to ask questions.
	e. Digging out the extent of student's knowledge about prerequisite materials.
<b>Phase-2 Finding</b>	
	a. Informing the learning methods and shortcomings in previous learning.
	b. Expressing the problems on learning.
	c. Dividing / preparing the teaching materials / LAS.

<b>Aspects Observed</b>	
<b>Phase-2 Asking</b>	
	a. Deciding the distribution of origin groups.
	b. Forming a group of experts and facilitate them.
	c. Directing the students to analyze the student's books.
	d. Encouraging discussion dialogue with friends.
	e. Preparing various troubleshooting alternatives.
	f. Helping the students define and organize learning tasks related to problems
<b>Phase-4 Society Learning</b>	
	a. Guiding the students to do the LAS.
	b. Guiding, observing the group work.
	c. Giving motivation and support.
<b>Phase-5 Modeling</b>	
	a. Guiding the students to make ideas based on their understanding to give the answer of the group.
	b. Motivating the students to presentate the result of their work group.
	c. Directing each group to give inputs and questions to the presentating group.
<b>Phase-6 Reflecting</b>	
	a. Directing to give conclusions to the group who presentate the results of their work.
	b. Giving salutation to other group for their suggestion and questions to the presentating group.
	c. Giving direction to all students to make conclusions about the today's lessons.

Besides the above categories, other abilities that support the smooth learning are also observed. The capability categories include time management, questioning techniques, and classroom observation. The classroom atmosphere is shown by the teacher's enthusiast in managing the learning and the students' difficulties in learning. The result data of the teacher's ability assessment to manage the learning by applying Contextual learning model is analyzed by finding the category value from some aspects of assessment given by the observer for each lesson plan. The activities undertaken to analyze the teacher's ability assessment data to manage the learning are as follows.

The observation result data of the teacher's ability in managing Contextual learning is filled by the observer with 5 criterion of ability: not good (value 1), less good (value 2), good enough (value 3) good (value 4) and very good (value 5). The observer's results on the observation result data are then analyzed by finding the mean score of the teacher's ability to manage the Contextual learning by using formula:

$$\text{Average Score (TKG)} = \frac{\text{number of score}}{\text{amount of score}}$$

Note: TKG = Teacher's ability level in managing the lessons

Next, the average score (TKG) is referred to the interval determining the level of the teacher's ability in managing the learning with Contextual learning model as follows:

1 ≤ TKG < 2 (Not Good)

2 ≤ TKG < 3 (Less Good)

3 ≤ TKG < 4 (Good Enough)

4 ≤ TKG < 5 (Good)

TKG = 5 (Very Good),                      Adapted from Sinaga (2007: 171).

Note: TKG = Teacher's ability level in managing the lessons

Criteria states that the teachers are able to manage the learning is the level of the teachers' ability achievement in managing the learning well. If the teacher's ability level is below *good*, the researcher review and revise the lesson planning and learning tools as well as they become inputs to the teacher to improve the mastery and teaching skill especially on the aspect/indicator which has the *less good* value. Then the next cycle of retesting is conducted with the aim to get the application of an effective model in terms of the indicators of the teachers' ability in managing the learning.

### Data Analysis of the Students' Responses on Learning Activities

The data obtained from questionnaires are analyzed by determining the number of the students who gave positive and negative responses for each of the categories asked in the questionnaire. The positive response means the students express pleasure, and interested in the components and the learning activities in the application of Contextual learning model. To determine the achievement of learning objectives in terms of students' responses, if the number of the students who responded positively is greater than or equal to 80% from the number of the subjects studied for each learning test.

The students' responses data obtained from the questionnaire are analyzed to determine the students' positive or negative response to the components and the learning activities in the form of percentages and grouped for each indicator. The students' responses are said to be positive if the average percentage gained = 80% is in category of happy, and interested. The students' responses to problem-based learning activities with simple plane materials are measured from the students' responses to the given questionnaire. Each answer *strongly agreed* (SS) is given a score 4 (four), the answer *agreed* (S) is given a score 3 (tig), the answer *disagree* (TS) is given a score of 2 (two), and the answer *strongly disagree* (STS) is given the score 1 (one). All the students' answers then are tabulated in the list to be calculated on average. From the average obtained, the criteria of the students' responses to the learning activities are determined. The students' response criteria are as follows (Tamrin, 2003: 90):

3,5 < skor rata-rata ≤ 4 : Very Positive

2,5 ≤ skor rata-rata ≤ 3,5 : Positive

0.0 ≤ skor rata-rata < 2,5 : Negative

The data obtained from the questionnaire of the students' responses are analyzed by determining the percentage of the students who gave a positive response answer for each category asked in the questionnaire by using the following formula:

$$PRS = \frac{\sum A}{\sum B} \times 100\% \quad (\text{Borich dalam Herman, 2012})$$

Note:

*PRS* : The percentage of the students who respond positively to each category asked

$\sum A$  : The proportion of students who choose

$\sum B$  : Number of students (respondents)

To determine the achievement of the learning objectives in terms of the students' responses, if the number of the students who respond positively is greater or equal to 80% of the subjects studied for each trial (Sinaga, 2007).

### Data Analysis of learning outcomes

Each student is said to be complete learning (individual requirements) if the proportion of the answers is true 65% and a class is said to be complete learning (classical provisions) if in the class there are 85% of the students complete learning (Depdikbud in Trianto, 2010: 241).

1). to determine the students' learning mastery (individual) it is used equation

$$KB = \frac{T}{T_1} \times 100\% \quad (\text{Trianto, 2010:241})$$

Note:

KB = Learning mastery

T = Number of scores obtained by the students

Tt = Number of total score

The criteria:

$0\% \leq PKB < 65\%$  : The students who have not yet finished studying

$65\% \leq PKB \leq 100\%$  : The students who have finished studying

Note: PKB = Percentage of Completed Learning

Each student is said to be complete learning (individual completeness) if the final grade of the test students = 65%.

2). to calculate the learning mastery by classical, it is used the formula:

$$PKK = \frac{\text{Number of students who studeid completely}}{\text{Total number of the students}} \times 100\%$$

Note: PKK = The Percentage of classical learning completeness

The students' completeness criteria classically are fulfilled if in the class there are = 85% of students who have completed the learning. After the students' completeness the learning individually and classically is analyzed, the results of pretest and posttest are calculated with gain score. To assess the increase and effectiveness of the LAS on the subject of simple aircraft between before and after using LAS in the learning process is calculated by a normalized gain score formula. For the differences in the students' posttest and pretest score, then first determined the value of the gain. To calculate the gain, it is used the Melzer formula (Hasanah, 2011: 69).

$$\text{Gain} = \frac{\text{posttestscore} - \text{pretestscore}}{\text{max imumscore} - \text{pretestscore}}$$

Gain score is a good indicator to show the effectiveness treatment level of the posttest score (Hake, 1999). The gain score categories are grouped as follows:

0.70 <gs <1.00 = High

0.30 <gs <0.70 = Medium

0.00 <g <0.30 = Low

Each student is said to have completed the learning (individual completeness) if the proportion of correct answers students = 85% of the gain value is at least *medium* (in Trianto, 2009).

## DISCUSSION

### Validation of Material Expert, Learning Design Expert and Method Expert

Product validation aims to know the opinion of material experts, learning design experts and methods experts about the accuracy of design, learning aspects and the truth content, media and learning design.

#### Data of Material Expert Validation

Material experts' validation on the development of Contextual learning module is conducted by UNIMED lecturers. The assessment is conducted to obtain the information that will be used to improve the quality of Civic learning especially for the students of grade V in even semester. The validation results in the form of score assessment towards the learning components on the eligibility quality of the contents can be seen in Table 3 below.

**Table.3: Assessment Score of Contextual Learning Module by Content Experts about the Content Feasibility (Scale 1-5)**

No	Assessment Indicator	Respondent		Number of Score	Average	Criteria
		1	2			
1	Clarity of learning objectives	5	5	10	100,00 %	Very Good
2	Material Accuracy	5	5	10	100,00 %	Very Good
3	The truth of concept	4	4	8	80,00 %	Good
4	Depth of learning material	4	5	9	90,00 %	Very Good
5	Compliance with curriculum	5	5	10	100,00 %	Very Good
6	Accuracy of learning material order	5	5	10	100,00 %	Very Good
<b>Average</b>				<b>9,5</b>	<b>95 %</b>	<b>Very Good</b>

The result of material expert validation is in the form of score assessment towards the components of Contextual Learning Module on the quality of learning strategies can be seen in Table 4. The assessment by the material expert from the quality aspects of the learning strategy that includes the presentation time is rated *Good*, while the preliminary quality and the presentation of the material and the involvement of the students in the learning activity and the quality of the feedback is considered *Very Good*.

**Table. 4: Assessment Score of Contextual Learning Module by Material Experts about the Learning Strategy (Scale 1-5)**

No	Assessment Indicator	Respondent		Number of Score	Average	Criteria
		1	2			
1	Preliminary Quality	5	5	10	100,00 %	Very Good
2	Quality of material presentation	5	5	10	100,00 %	Very Good
3	Involvement and role of learners in learning activities	5	5	10	100,00 %	Very Good
4	Quality feedback	4	5	9	90,00 %	Very Good
5	Presentation time	3	5	10	80,00 %	Good
6	Quality exercise questions	5	5	10	100%	
<b>Average</b>				<b>9,8</b>	<b>98,00 %</b>	<b>Very Good</b>

The result of material expert validation on the components of the Contextual learning module about aspects of the language system can be seen in Table 5. According to the material expert on the quality of the Contextual Learning Module from the aspects of the language system learning is in the criteria of *Very Good*. There are 3 items that include the criteria of *Very Good* namely Material accuracy and logical exposure, Language usage and the ease of language understanding. Therefore as a whole from the aspect of learning language system, the product is rated as *Very Good*.

**Table 5: Assessment Score of Contextual Learning Module by Material Experts about Learning Language System (Scale 1-5)**

No	Assessment Indicator	Respondent		Number of Score	Average	Criteria
		1	2			
1	Material accuracy and logical exposure	5	5	10	100,00 %	Very Good
2	Language usage	5	5	10	100,00 %	Very Good
3	Ease of language understanding	5	5	10	100,00 %	Very Good
<b>Average</b>				<b>10</b>	<b>100 %</b>	<b>Very Good</b>

The assessment conducted by the material experts include the aspects of content feasibility, the quality of learning delivery, learning strategies, linguistic aspects on the Contextual learning module. The validator comments of material experts about the content feasibility, presentation, language in general is *Very Good* but there are some suggestions submitted for improvement as listed in Table 6 below.

**Table 6: Summary of Study Result Data on Contextual Learning Module by Material Expert**

Topic	Problems that Need Revision
Opening page	Standards of competence, basic competencies, indicators and objectives of learning achievement should be displayed on the opening page.
Understanding Freedom in Organization	There should be made more examples, it is necessary to show page problem solving.
Sample of Test	Sample of test should be made in variety
Evaluation Test	Evaluation test needs more in order the students understand more varied

**Data of Validation Result of Learning Design Expert**

The validation of the learning design experts is conducted by the graduated lecturer of Medan State University (UNIMED). The learning design expert validates the product on the design aspects of learning, among others, on the content feasibility aspect consisting of the quality of instructional design, the presentation aspect consisting of the quality of information design and the quality of the interaction, and the aspect of the presentation consisting of presentation quality and presentation design quality. The validation results can be seen in Table 7.

**Table. 7: Assessment Score of Contextual Learning Module by Learning Design Experts about the Learning Design Quality (Scale 1-5)**

No	Assessment Indicator	Respondent		Number of Score	Average	Criteria
		1	2			
1	Accuracy of topic selection	4	4	8	80,00 %	Good
2	Material conformity with learning indicator	4	5	9	90,00 %	Very Good
3	Giving exercises	5	5	10	100,00 %	Very Good
4	Tests Consistency with learning indicators	4	5	9	90,00 %	Very Good
<b>Average</b>				<b>9,00</b>	<b>90,00 %</b>	<b>Very Good</b>

Based on the assessment of the teaching design expert in Table 4.6 about the quality aspects of learning design, it is stated as *Very Good* category. There is only one item that belongs to *Good* category that is the accuracy of topic selection. Overall from the aspect of the quality of the learning design is considered *Very Good*. The validation result of assessment score toward module on design quality aspect of Contextual learning module can be seen in Table 8.

**Table.8: Assessment Score of Contextual Learning Module by Learning Design Expert (Scala 1-5)**

No	Assessment Indicator	Respondent		Number of Score	Average	Criteria
		1	2			
1	Giving motivation	4	4	8	80,00 %	Good
2	Clarity of material description	4	5	9	90,00 %	Very Good
3	Clarity of examples given	4	5	9	90,00 %	Very Good
4	New information usage	4	4	8	80,00 %	Very Good
5	Feedback on the students' test result	4	5	9	90,00 %	Very Good
6	Sequential	4	4	8	80,00 %	Good
7	Maximizing the learning process	5	4	9	90,00 %	Very Good
8	Ease of use	5	5	10	100,00 %	Very Good
<b>Average</b>				<b>8,75</b>	<b>87,50 %</b>	<b>Very Good</b>

The assessment scores from the results of the validation of design learning experts on the design aspects quality can be seen in Table 9 and it is seen that the assessment of learning design from the aspect of design quality is rated *Very Good*. There are three items that are rated *Very Good*, they are Use of learning instructions, Explanation the terms and t Use of different text to mark important parts. Explanation the term is *Good*. From the information design aspect, it is considered *Very Good*.

**Table. 9: Assessment Score by Learning Design Expert about Design Quality Aspect (Scala 1-5)**

No	Assessment Indicator	Respondent		Number of Score	Average	Criteria
		1	2			
1	Use of learning instructions	4	5	9	90,00 %	Very Good
2	Explanation the terms	5	4	9	90,00 %	Very Good
3	Feedback of the students' responses	4	4	8	80,00 %	Good
4	Use of different text to mark important parts	5	5	10	100,00 %	Very Good
<b>Average</b>				<b>9,25</b>	<b>92,50 %</b>	<b>Very Good</b>

The validation result of the learning design expert overall shows that the learning design quality is stated *very good*. However, there several suggestion items stated by the learning design expert. The validation result of the learning design expert is the basic revision to revise the design. The suggestions revealed by the learning design validator are seen in table 10 below:

**Table. 10: Summary of Study Result Data on Contextual Learning Module by Learning Design Expert**

Topic	Problems Need to be Revised
Starting page	<ul style="list-style-type: none"> <li>- The need for additional standards of competence, basic competence, indicators and learning objectives</li> <li>- Prior to material page, it is necessary to make a frame of learning subject content for one semester in the module</li> <li>- Adding motivation</li> <li>- Adding new information and news about the activities that spur the students' to Civics</li> </ul>
Material page	<ul style="list-style-type: none"> <li>- Before starting, the text needs to explain the prerequisite test to be able to study the topic</li> <li>- Various materials need to be added</li> </ul>

**Data of Method Expert Validation Result**

Validation of method expert is performed by the lecturers of UNIMED. The method experts provide a product validation. The validation result of assessment score of Contextual learning module can be seen in Table 11.

**Table. 11: Assessment Score of Contextual Learning Module By Method Expert**

No	Assessment Indicator	Respondent		Number of Score	Average	Criteria
		1	2			
1	The beauty look of Contextual learning module	4	4	8	80,00 %	Good
2	Text Readings	5	5	10	100,00 %	Very Good
3	Picture quality on Contextual learning module	5	5	10	100,00 %	Very Good
4	Width of material coverage	5	5	10	100,00 %	Very Good
<b>Average</b>				<b>9,57</b>	<b>95,70 %</b>	<b>Very Good</b>

**CONCLUSION**

In this development research, it is resulted the module and learning instrument with a valid, practical and effective contextual approach. The learning instruments consist of: (1) learning implementation plan, (2) module, and (3) test result of learning. The invalid rate and module and learning tools are in *valid* categories. The module and learning instruments are declared *Valid* by the validator team. The practicality level of the module and learning instruments are stated *Good*. Experts and practitioners state that the module and the developed learning instruments can be used with little revision. The teachers and the students can use this learning instrument in learning very well.

**REFERENCES**

- Arikunto, Suharsimi. 2011. *Dasar-dasar Evaluasi Pendidikan*, Jakarta: Bumi Aksara.  
 Armai, Arief, 2002. *Pengantar Ilmu dan Metodologi Pendidikan Islam*, Jakarta: Ciputat Pers.

- Ashyar, Rayandra. 2012. *Kreatif Mengembangkan Media Pembelajaran*, Jakarta: Referensi Jakarta.
- Asep H. Hermawan, dkk. 2008. *Pengembangan Kurikulum dan Pembelajaran*. Jakarta: Universitas Terbuka.
- Asikin, Muhammad & Cahyono, Adi Nur. *Penelitian Pengembangan dalam Bidang Pendidikan. Makalah disajikan di Sekolah Riset FMIPA Unnes*. <http://adinegara.com/wp-content/uploads/2011/06/makalah-R-n-D.pdf>  
Diakses : 11 Oktober 2016.
- Borg & Gall, 2003. *Education Research*. New York : Allyn and Bacon.
- Departemen Pendidikan Nasional. 2008. *Penulisan Modul*. Jakarta: Dirjen PMPTK, Depdiknas Jakarta. <http://www.google.com/>. Diakses: 11 Oktober 2016.
- Departemen Pendidikan Nasional. 2008. *Teknik Penyusunan Modul*. Jakarta: Dirjen Manajemen Pendidikan Dasar dan Menengah, Depdiknas Jakarta. <http://www.google.com/>. Diakses : 11 Oktober 2016
- Dimiyati, dan Mudjiono. 2013. *Belajar dan Pembelajaran*, Jakarta: Rineka Cipta.
- Djohani, Rianingsih & Irfani, Riza. 2005. *10 Jurus Menulis Modul Pelatihan*. Bandung : Studio Driya Media. <http://riadjohani.files.wordpress.com/2011/11/10-jurus-menulis-modul-pelatihan-ria.pdf>. Diakses: 16 November 2016.
- Ekana, Heni., dkk. 2012. *Pengembangan Modul Matematika yang Berbasis Peta Konsep. Makalah diseminarkan di Seminar Nasional Pendidikan Matematika FKIP Universitas Sebelas Maret, Surakarta, 21 Nopember 2012*. <http://lppm.uns.ac.id/kinerja/files/pemakalah/lppm-pemakalah-2012-11122013224206.pdf>. Diakses :16 November 2016.
- Engkoswara, 1984. *Dasar-Dasar Metodologi Pengajaran*, Jakarta: Bina Aksara.
- Freudhental. 2002. *Revisiting Mathematics Education*. University of Utrecht. <http://p4mriunismuh.files.wordpress.com/2010/08/revisiting-mathematics-education.pdf>. Diakses : 16 November 2016.
- Johnson, Richard, 2007. *Applied Multivariate Statistical Analysis*, Prentice Hall, United States of America.
- Kunandar. 2013. *Penilaian Autentik (Penilaian Hasil Belajar Peserta Didik Berdasarkan Kurikulum 2013)*. Jakarta: PT Raja Grafindo Persada.
- Kusuma dkk, Dharma, 2011. “*Pendidikan Karakter Kajian Teori Dan Praktik Di Sekolah*”, Bandung: remaja rosda karya
- Litbangkemdikbud. 2011. *Survei International TIMSS dan PISA*. <http://litbangkemdikbud.go.id>. Diakses: 28 November 2016.
- Muslich, Masnur. 2008. *KTSP Pembelajaran Berbasis Kompetensi dan Kontekstual*. Jakarta: Bumi Aksara.
- NCTM. 2000. *Principles and Standard for School Mathematics*. Reston : The National Council of Teachers of Mathematics, Inc. <http://standards.nctm.org/document/chapter2/index.htm>. Diakses :19 September 2016.
- Nurhadi, dkk. 2003. *Pembelajaran Kontekstual (Cooperatif Learning di Ruang-ruang Kelas)*. Jakarta: Gramedia Widiasarana.
- Permendiknas No. 41 tahun 2007 tentang Standar Proses. [http://akhmadsudrajat.files.wordpress.com/2009/04/standar-prose\\_permen-41-2007 .pdf](http://akhmadsudrajat.files.wordpress.com/2009/04/standar-prose_permen-41-2007.pdf). Diakses : 11 Oktober 2016.
- Permendiknas. No. 22 tahun 2006. *Peraturan Menteri Pendidikan Nasional Republik Indonesia Tentang Standar Isi Untuk Satuan Pendidikan Dasar Dan Menengah*.  
\_\_\_\_\_ 2006. *Peraturan Menteri Pendidikan Nasional Republik Indonesia Nomor 23 Tentang Standar Kompetensi Lulusan Untuk Satuan Pendidikan Dasar Dan Menengah*.

- Peraturan Pemerintah. No. 19 tahun 2005. *Tentang Standar Nasional Pendidikan*.
- Roestiyah. 2008. *Strategi Belajar Mengajar*. Jakarta: Rineka Cipta.
- Purwanto, dkk. 2007. *Pengembangan Modul*. Pusat Teknologi Informasi dan Komunikasi, Depdiknas, Jakarta. [http://issuu.com/download-bse/docs/buku\\_pengembangan\\_modul\\_full](http://issuu.com/download-bse/docs/buku_pengembangan_modul_full). Diakses :16 September 2013
- Sardiman. 2011. *Interaksi & Motivasi Belajar Mengajar*. Jakarta : PT. Raja Grafindo Persada.
- Sabri, Ahmad. 2007. *Strategi Belajar Mengajar Micro Teaching*. Ciputat: Quantum Teaching.
- Sanjaya, W. 2007. *Strategi Pembelajaran Berorientasi Standar Proses Pendidikan*. Jakarta: Kencana Prenada Bahan ajar Group.
- \_\_\_\_\_. 2010. *Kurikulum dan Pembelajaran*. Jakarta: Kencana Prenada Media Group.
- \_\_\_\_\_. 2013. *Penelitian Pendidikan*. Jakarta: Kencana Prenada Media Group.
- Skunk, Dale H. 2012. *Learning Teories (Teori-teori pembelajaran: perspektif pendidikan)*. Yogyakarta: Pustaka Pelajar.
- Somayasa, dkk. 2013. *Pengembangan Modul Matematika Realistik disertai Assesmen Otentik untuk meningkatkan Hasil Belajar Matematika Peserta Didik Kelas X di SMK Negeri 3 Singaraja*. *E-Journal Program Pascasarjana Universitas Pendidikan Ganesha. Prodi Penelitian dan Evaluasi Pendidikan*. Volume 3 Tahun 2013.
- Sudjana. 2002. *Metoda Statistika*. Bandung: Tarsito.
- Sapriya. 2011. *Pendidikan IPS Konsep dan Pembelajaran*. Bandung: PT Remaja Rosdakarya
- Thiagarajan, S. Semmel, DS. Semmel, M. 1974. *Instructional Development for Training Teachers of Exceptional Children*. A Sourse Book. Bloomington: Central for Innovation on Teaching The Handicapped.
- Trianto. 2010. *Mendesain Model Pembelajaran Inovatif-Progresif*. Jakarta: Kencana Prenada Media Group.
- Undang-undang No. 20 Tahun 2003. *Tentang Sistem Pendidikan Nasional*.
- \_\_\_\_\_. No. 25 Tahun 2000. *Tentang Program Pembangunan Nasional (Propenas) Tahun 2000-2004*.
- Undang-undang No. 39 tahun 1999. *Tentang Hak Asasi Manusia*.
- Vembriarto, St. 1985. *Pengantar Pengajaran Modul*. Yogyakarta: Yayasan Pendidikan Paramita.
- Winarno. 2006. *Paradigma Baru Pendidikan Kewarganegaraan*. Bumi Aksara. Jakarta.
- Winataputra, Udin S. 2007. *Teori Belajar dan Pembelajaran*. Jakarta: Universitas Terbuka.