Developing Theme Based Learning Through Powerspring Html 5 of Android to Deradicalize The Attitude of Primary School Students

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Abstract: The research aims to describe and testing the effectiveness of Android-based thematic learning through PowerSpring Html 5 to build the deradicalize attitude of primary school students. It is a research and development type. The procedure adapted from Borg & Gall in this research involving three phases. The research method using quantitative and qualitative combined. The data of research is obtained from questionnaire, tests, observations, and documentation in nine schools in Kudus regency. T-Test was used to ensure the statistical test effectiveness. The results of the research improved in six learning activities in control and experiment classes. The result of testing t_{hitung} = 2,538 trought the degrees of significant 0,012<α=0,05. The students learning is higher in experiment class. The students could apply android, student learning wtth fun. Therefore the theme based learning through PowerSpring Html 5 of android is effective to develop the deradicalize attitude of primary school student.

Keywords: Thematic learning, Powerspring Html 5, deradicalization attitude.

1. Introduction

Today, Indonesians are faced with global problems that seize public attention. The global problem is faced with the threat of radicalism in groups, religions, and ethnic groups in Indonesia. News of sectarian riots as a result of rapid radically was widespread through the sophistication of communication tools so that in a short time it became a mass riot. The rapid development of science and technology provides easy information for people's lives in Indonesia. The facilities experienced by the community due to the development of science and technology often drag people to be affected and participate in radical movements. Radical movements that are often accompanied by violent acts make people's lives uncomfortable and difficult. The action of terror committed by the radical group to intimidate the people who considered opponents to make community unrest in the homeland.

School as an educational institution becomes very likely to spread radical understanding. A radical transformation process that begins with the strong sense of tribal, ethnic, and religious that is far from the national values of Indonesia. Radical attitudes slowly began to get into school since elementary school age. Elementary School became a special target of the

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Radicalist group recruitment. Muqoyyidin (2017:48) suggests that some studies have proved the recruitment efforts of children to schools to be educated in radicalism. The activity is done by brainwashing the students who are then filled with certain radical ideology. According to Agus (2016:26) The school is a potential arena to recruit children to be radical. In fact, the school as a learning arena determines the starting point of student development to gain social life, knowledge, and experience as an injection of future provisions. Therefore, there is a need for deradicalisation thematic learning.

Thematic learning can be interpreted as a learning activity by integrating several lessons in a theme or topic. Sukayati and Wulandari (2009:18) stated that thematic learning is a learning approach designed to intentionally associate and integrate some basic competencies and the curriculum/standard content, indicator of some eyes Lesson into one entity to pack in one theme. In line with it, Utaminingsih, dkk (2014:76) states that thematic learning is an attempt to integrate knowledge, skills, values, attitudes, and creative thinking by using themes.

The advantages of thematic learning according to Kemendikbud (2016) as follows: (1) The materials contained in the maple have a relation to the concept, so that the learning is more meaningful. (2) Students are easy to focus on because the subject matter is packaged in the theme. (3) Students can develop various competencies in a single subject. (4) The student is training makes the relationship of several subjects so as to process the information in a way of thought. Aqib (2014) added that thematic learning saves time as some lessons are delivered in one unified theme.

The syntax of thematic learning in elementary school according to Musfiqon (2017:127) as follows. 1) Understand the problem of deradicalizing constomeal. The first step that the teacher is addressing the constecstual problems that occur in the community. The students perform observing activities such as reading and understanding constecstual problems. 2) solve the problem of constectual. This activity students try to solve the problem in its own way. Teachers guide students to bring out many of the diverse design ideas and problem solving strategies. 3) comparing and discussing the answers. Activities undertaken by students communicate work outcomes to teachers and friends. Teachers motivate students to interact in their respective groups such as ask, brainstorm, give explanations to peers, and resolve problems. Students discuss comparing the answers in their respective groups. 4) Draw conclusions. This stage teachers help students reflect on knowledge, attitudes, and skills. Teachers help students draw conclusions and make summaries.

Deradicalization is not radical attitude. Radical from the Latin radix which means the roots in English word radical can mean extreme, thorough, bigoted, revolutionary, ultra, and Fundamental (Depdiknas: 2006). While radicalism has the meaning of doctrine or practices of radical or extreme understanding. Some radical activities that teachers and radical students often do in viewing religion and ethnic groups. Radical religion is a movement that has the characteristic of focusing on the dimension of religious identity. Practical political movements sometimes drag teachers and students tend to follow radical steps. The radicalism associated with attitudes is sometimes used to corrupt the order and terror of the community. Therefore, radicalism should not be taught in schools.

Agus (2016:46) radical is a condition of people or movements that want to happen to be social and political change rapidly and thoroughly in uncompromising ways even using violence. Radical people by Mahfud (2016:17) are actually people who understand a problem up to its roots. The Radikalis more often firmly adhere to a principle than the nonradicalist. Changes made are often done even with the path of destruction in total. Then replacing with new things in a revolutionary way is to overturn the values drastically through violence and extreme action radicalism. Radicalism is interpreted by Huda (2018:4) as an act of

exaggeration of vulgar expression in religion, ethnic and group that tends to complicate society. Often radicalists claim and fight for truth in harsh ways.

Deradicalisation studies in primary schools are expected to prevent radical behaviour. In this context learning deradicalisation very significantly prevents the efforts of suppression of radicalism. In the context of deradicalisation became a reference in deconstructing and reconstructing the radically understood religious doctrines and triggering acts of terrorism. Deradicalisation learning is expected to provide a solution for peace in nation and state.

Deradicalisation thematic learning models can be used to prevent the development of students' radicalism phenomenon. The thematic learning model closes opportunities for other parties to drop the image of religious and certain ethnic groups in Indonesia. The success of deradicalisation thematic learning in elementary schools is a major focus on preventing radical attitudes that tend to be in the fight for the radical doctrinal correctness that is believed (Asmani, 2011:35).

Based on the observation of the teachers and students of nine elementary schools in Kudus regency, that learning the deradicalization of science material "Solar System" class VI considered to be difficult to understand. This is due to solar system materials requiring analytical skills, and abstraction. Some science laboratory tools about the solar system that is owned by the school today is adequate. However, there are some obstacles faced by teachers and students. The obstacles include: (1) The difficulty of dividing the practicum tools that are not balanced between the number of students. (2) The difficulty of maintaining the durability of the practicum tool because the practicum tool is mostly made of glass and plastic so that it is easily damaged. (3) The maintenance fee of the practicum tool is expensive. (4) The practicum tool is too risky and cannot be carried anywhere. (5) Safety guarantee during practicum, because some of the laboratory equipment is made from glass and plastic that is easily broken.

Creative and innovative teachers who always have brilliant ideas to overcome the problems experienced by students when experiencing the learning constraints of the science of solar system. Teachers must be able to update learning. One form of learning reform conducted by teachers on learning to deradize science Solar system material by using interactive learning media, effective, interesting, and meaningful for students. In addition, if the media of learning is well made better the media in carrying out its function as an effective message distributor (Sarwono, 2014:19).

Hermawan (2016:47) deradicalisation thematic learning using the media is very beneficial to complement and improve the quality of the learning process. The use of media in learning can improve students' motivation, creativity, activity, and learning outcomes to avoid being radical. Related to media selection experts give the view that learning by using a double sense (view and hearing) will provide benefits to the students and influence the outcome of learning. Susilana (2012:26) states that interactive learning media is considered to be able to provide and direct the learning experience from abstract to concrete, and able to stimulate students to love learning so that learning outcomes are improving.

The selection of learning media is an android-based learning media. Sandy (2019:46) explains that android is a sophisticated communication tool that is favored by various circles. As a teacher who is sensitive to the development of sophistication communication tools should utilize the sophistication of android for learning media. Android selection as a learning medium with the reason: (1) Android is an advanced communication tool that is used every circles. (2) Almost all elementary school age children know and as android users. (3) Android as an effective tool for message feeder that contains educational knowledge content. (4) The

material can be accessed easily, cheap, when and anywhere. (5) Students can do independent learning.

This media interactive learning android-based is made from a combination of *PowerSpring Html 5* software. *PowerSpring Html 5* is an acronym for *PowerPoint*, Ispring Suite 8 and Website 2 APK Builder Pro v 3.0 Html 5. Sandy (2019:11) the combined selection of three software as a form of development of learning media because the software can be easy to use, not complicated because it does not use coding or visual basic and cheap because the software can be obtained for free.

Android-based in thematic learning presents material in the form of text, images, audio, video, animation, as well as combining links and tools that enable students to interact interactively. Interactive media is defined according to Susilana (2012:126), which is the learning media where the learners face and interact directly with the computer, android, or other. Such interactions occur individually with links and tools that allow students to choose the material that is presented. Android-based thematic learning can be effective in establishing students ' deradicalisation attitudes on science material science class VI material so that the material can be presented more attractive, effective, and empowered. Android utilization as an interactive learning media deradicalisation of the solar system can also be done as a learning companion as long as students are at home or outside school activities.

2. Research Methods

Research is oriented towards developing android-based thematic learning to build a deradicalisation stance on the science of Solar system material lesson. The design of the development adapted the development model according to Borg & Gall (in Sukmadinata 2007). Research and development measures there are ten stages in arranging the product (Sugiyono, 2015:146) is **Figure 1.**

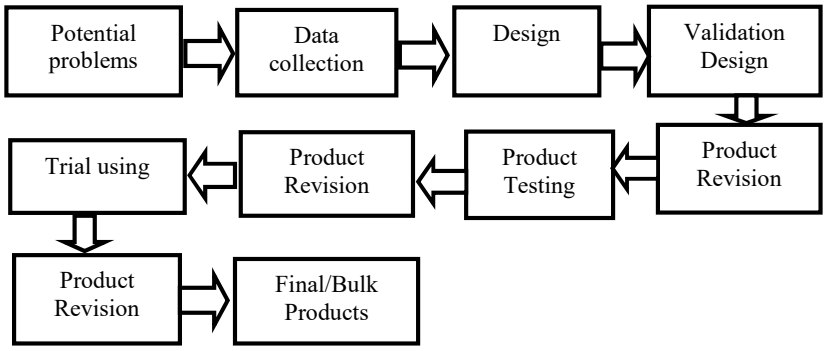

Figure 1. Research Design

Salahudin (2017:112) the two groups were given pre-test before treatment with the same test to measure the initial conditions. Experimental groups are given a learning treatment using the android media treatment thematic Learning (X) the control group is not given treatment (X^1), after the learning process, the two classes are tested again with the same test as the final test (post-test).

The study was conducted in the first half of January-June of 2019 in elementary school in Kudus in the year 2018/2019 with a sample of class VI research amounting to 203 students. Both groups carry out learning activities through pretests and posttest activities, the pretests activity is used to know the basic ability of students on android-based thematic learning to build a deradicalisation stance before being held learning, while the posttest is used to learn students learning outcomes after the study. Group experiments during the learning process using android media help, while in the learning control group are conventionally. The role of the android media thematic learning in this case is as a teaching medium that can help students during the learning process to make it easier for students to understand thematic learning. The achievement of the pre-test and post-test scores of both groups was tested for effectiveness to determine the achievement of the learning outcomes of the experimental and control group.

Mairing (2017:47) explains that data collection techniques are conducted by angket, tests, observations, and documentation. Pre-Test and post-test Data from the control group and experiment Group are analyzed using the N-Gain formula:

$$N - gain < g > = \frac{Posttest\ Score - Pretest\ Score}{Maximum\ Score - Pretest\ Score}$$

Data-driven validation datesand thematic learning with *powerspring Html 5* to build a deradicalisation stance is obtained through a validation poll. Data collected in the form of assessment score related to the feasibility of thematic learning android-based with *Powerspring Html 5*.

3. Research Result and Discussion

Learning is conducted under the learning plan. Learning consists of initial activities, core activities, and closures. In the first study carried out a pre-test to know the student's mastery of the material. The preliminary meeting conditioned in a group of learners. Classes are divided into groups. Each group consists of 4 selected students heterogeneous. After the teacher's greetings and presences, explain the goals and benefits, ask for readiness, motivate the students by saying: "My children, today we will learn with fun. All of you will get new things that are very interesting and fun. What a delight, we together learn science solar system and awareness of being deradicalisation with android media. Furthermore, the teacher gave a refreshment to sing with the students "Garuda Pancasila". The students listen to teacher learning steps.

The next step of teacher-guided students elaborated on solving constectual problems. This phase of activities students try to solve problems with their own strategies. At this stage, the students are stimulated to bring out many different ideas and problem solving strategies from students. The different workarounds for each student are preferred. Students ask questions when there are solar system things and deradicalisation attitudes that are still less obvious. Teachers motivate students to solve problems.

The next activity students examine the answers to the problems that teachers convey. This activity students examine the answers that have been obtained and write down answers with clear sentences and sequential words. Compare and discuss answers in groups. Activities conducted by students to communicate the results of the work to teachers and friends.

Teachers motivate students to interact in their respective groups. Teachers stimulate students to dare to ask, brainstorm, give explanations to their peers, and solve problems that exist in the worksheet. Students discuss to compare the answers gained in their respective groups. Then one representative of the group was assigned presenting the results of work. By the time one group advanced the presentation, the other group gave a response. In this activity the teacher directs all the students directly involved and actively discuss. This phase of activity is expected for students to collaborate and communicate work outcomes. This is in accordance with the Slameto opinion (2013:14) explaining that thematic learning should be able to present creative and collaborative students.

Subsequent activities students draw conclusions with the teacher's direction. This stage teachers help students reflect on the knowledge, attitudes, and learning skills of the solar system and the deradicalisation gained. Teachers confirm the solar system problem solving strategy and the deradicalisation of students to contribute during the study of the group. The teachers play a role in directing students independently.

Furthermore, teachers confirm, teachers straighten out the students ' mistakes in the discussion, ask the learners, provide reinforcement and a confirmation. The work of the group of learners is collected to organize the work of the upcoming meeting. Based on the results the teacher discussions helped students draw conclusions and make summaries.

The closing activities include: (1) assessment and evaluation, (2) each student has a reflection of today's learning, (3) teachers perform analysis of evaluation results for improvement and enrichment. The activity ends with singing the song "Bagimu Negeri".

3.1 Pre-test and *Post-Test* Results

The pre-test was conducted on the first meeting day for the subject of the solar system and deradicalisation. The activity begins with explaining the solar system material and the importance of deradicalisation attitude to students. Students are then asked to answer the pre-test about the material. Teachers help read about and explain the intent of the question so that students can work. The pre-test result data on the control group and its subsequent experiments were used to determine the success or unsuccess of the android-based deradicalistic thematic learning for elementary school students. T- test in pre-test results are presented in the **Table 1**.

Table 1. T test results Pre-test group controls and experiments

		t-test for Equity of Means		
		t	df	Sig. (2-tailed)
Pre-test t	*Equal Variances Assumed*	0,918	201	0,360

In the Table 1 indicates that the value significance is 0,360 > α = 0,05 so that H_0 is received. This means there is no significant difference between the average pre-test scores on the control and experiment groups. Thus both samples are eligible for the next trial.

3.2 Students Learning Activities

Student learning activities in the control group and experiment groups show different results. In the control class shows acceptable results, while the experiment class is good. The following recapitulation of the learning outcomes of control classes and experiment classes are presented in the **Table 2**.

Table 2. Recapitulation of control and experiment class learning activities

Teaching learning to	*Controls Class*		*Experiments Class*	
	Persentage	Category	Percentage	Category
I	46,4	Acceptable	49,8	Acceptable
II	47,5	Acceptable	59,6	Good
III	48,1	Acceptable	64,4	Good
IV	48,8	Acceptable	65,4	Good
V	50,2	Acceptable	66,1	Good
VI	50,8	Acceptable	67,4	Good
Average	49,1	Acceptable	62,8	Good

To know the improved learning outcomes students as follow the recapitulation of result pretest and posttest experimental and control class presented in the Table 3.

The improved of the learning outcomes students is showed the normalization of gain rows. The improved of ability identtify the member of solar system is analyzed based on the normalization of gain by using pretest and posttest data. As follow the comparation learning outcomes students in the sixth learning experimental and control class data in **Table 3**.

Table 3. Comparison of improved learning outcomes of control and experimental students on the ability indicator multiculturalism attitudes

Classes	n-gain	Category
Experiments	0,70	High
Controls	0,32	Acceptable

Improved of ability to understand Earth and moon movements presented in **Table 4**.

Table 4. Comparison of the improved learning outcomes of control and experimental students on the ability indicators to tolerance attitudes

Classes	n-gain	Category
Experiments	0,40	Acceptable
Controls	0,28	Low

The improved of ability to understand solar and lunar eclipses are in **Table 5**.

Table 5. Comparison of increased learning outcomes of control and experimental students on the ability indicator to togetherness attitudes

Classes	n-gain	Category
Experiments	0,42	Acceptable
Controls	0,30	Acceptable

The improved of ability to build deradicalisation attitude is presented in **Table 6**.

Table 6. Comparison of the improved learning outcomes of control-grade students and experiments on indicators of the ability to nasionalism attitudes

Classes	n-gain	Category
Experiments	0,70	High
Controls	0,28	Low

Post-test data is further used in T-test to determine whether the average difference in the learning outcomes in the control class and the experimental class after a field trial in the **Table 7**.

Table 7. Control class and Experimental class T-test in post-test results

		t-test for Equity of Means		
		t	df	Sig. (2-tailed)
Posttest	*Equal Variances Assumed*	2,538	201	0,012

In **Table 7** the significance value is 0,012 < α = 0,05 which means there is a significant difference between the average post-test of learning outcomes between the control class and the experimental class. This suggests that the average post-test class of the experiment is higher than the average post-test control class and thus H_1 is accepted (Arifin, 2017:88).

Thematic learning is developed based on principles of scientific learning development and deradicalisation has fulfilled the criteria of valid judgment according to the validators. The aspect is considered categorized: (1) design learning thematic in the science lesson of solar system-based material android with *Powerspring Html 5*, and (2) the use of android media in thematic learning.

Thematic learning design is constructed based on the conformity of learning with the principles of learning, conformity with indicators, the proper learning with the environment, ease in the application of learning, comfort and quality learning. The use of media developed in the form of android based with *Powerspring Html 5*. This selection is tailored to the learning objectives, namely to develop the deradicalisation attitude of elementary school age students. Media is created in the form of APK for android application, making it easy for users to use it on android. Media contains material and training questions. The material learning consists of (1) the multiculturalism attitides, (2) tollerance attitudes, (3) togetherness attitudes, (4) nationalism attitudes. It is supported by the opinions of Ediger (in Bafadal, 2009:147) which suggests that thematic in learning should be delivered following the advancement and development of technology, one of which by making applications through Android.

Android media is created using *Powerspring Html 5*. It is done because to make this app very easy to use and duplicated. Almost everyone from kids to adults is very familiar with android. Amiroh (2016:33) mentions that nowadays it is almost certain that everyone uses android, HP and gadgets. Thus the media created can utilize android with *Powerspring Html 5* in order to divert the students who have been only playing games and chats that are useless and unusable. Through the thematic learning application in solar system learning is expected that students will utilize a lot of time learning through android to improve their creativity.

The result of the accumulated scoring score provided by the validator meets valid criteria. Therefore, thematic learning in the science lesson of android-based solar material with *Powerspring Html 5* to build a deradicalisation stance has fulfilled valid criteria so that it is worth use in learning activities for children elementary school age.

The findings of the learning activities in the six meetings are as follows: (1) The learning atmosphere of experimental classes is more fun and enjoyable than the control class. (2) The thematic learning using android is highly liked by students. (3) through android students can study independently. (4) experiment class learning results are better than the control class. (5) Students in experimental classes are very enthusiastic and happy learning using android.

The analysis results show that increasing students' ability to understand identifying the solar system, understanding the earth's and moon's outline, solar and lunar eclipses, as well as deradicalisation for the class of experimental control classes is always an improvement. There is a difference in the learning outcomes of the controls and experiments classes. Experiment class learning results are higher.

4. Closing

Based on the results of the research and discussion, it can be concluded that the thematic learning android-based in the Solar System science lesson with *Powerspring Html 5* to build a deradicalisation stance has fulfilled valid, effective, and practical criteria.

It is recommended that thematic learning android-based with *Powerspring Html 5* be used on every theme in elementary school to build a deradicalisation stance. Through thematic learning android-based with *Powerspring Html 5* will create a learning atmosphere that is active, effective, efficient, and enjoyable so that students' learning activities and outcomes are improving.

References

[1] Agus, S.B.: Deradikalisasi Nusantara. pp. 26-46. Daulat Press, Jakarta (2016)

[2] Amiroh.: Membangun E-Learning dengan Managemen Sistem. pp. 31-33. Genta Group, Sidoarjo (2016)

[3] Arifin. J.: SPSS 24 Untuk Penelitian dan Skripsi. pp. 80-88. Kompas Gramedia, Jakarta (2017)

[4] Asmani. J.M.: Buku Panduan Internalisasi Pendidikan Karakter di Sekolah. pp. 31-35. Diva Press, Yogyakarta (2011)

[5] Aqib. Z.: Model-Model, Media, dan Strategi Pembelajaran Konstekstual (Inovatif). pp. 1-14. Yrama Widya, Bandung (2014)

[6] Bafadal, I.: Meningkatkan Profesionalisme Guru Sekolah Dasar. pp. 140-147. Bumi Aksara, Jakarta (2009)

[7] Depdiknas.: Kamus Besar Bahasa Indonesia. pp. 205-506. Balai Pustaka, Jakarta (2006)

[8] Hermawan.H.: Media Pembelajaran Berbasis Powerpoint. pp. 43-47. Haekal Inti Pustaka, Kudus (2016)

[9] Huda. N.: Menangkal Ideologi Radikal. pp. 7-14. Lirboyo Press, Kediri (2018)

[10] Kemdikbud.: Permendikbud Nomor 21 Tahun 2016 tentang Standar Isi Pendidikan Dasar dan Menengah. pp. 1-18. Pusbuknas, Jakarta (2016)

[11] Mahfud. C.: Pendidikan Multikultural. pp. 1-17. Pustaka Pelajar. Yogyakarta (2016)

[12] Mairing. J.P.: Statistika Pendidikan, Konsep dan Penerapannya Menggunakan Minitab dan Ms.Excel. pp. 40-47. Penerbit Andi, Yogyakarta (2017)

[13] Musfiqon.: Pendekatan Pembelajaran Saintifik. pp. 120-127. Nizamia Learning Center, Sidoarjo (2017)

[14] Muqoyyidin. A.W.: Proceding ANCOM 2017. Membumikan Deradikalisasi Pendidikan Islam Sebagai Respon Antisipatif Radikalisme di Era Global. pp. 1-14. Annual Conference For Muslim Scholars Kopertais Wilayah IV, Surabaya (2017)

[15] Salahudin. A.: Metode Riset Kebijakan Pendidikan. pp. 120-122. Pustaka Setia, Bandung (2017)

[16] Sandy. T.A.: Game Mobile Learning. pp. 11-46. Multimedia Edukasi. Malang (2019)

[17] Sarwono. R.: Komputer dan Media Pembelajaran di Sekolah Dasar. pp. 10-19. Widya Sari, Salatiga (2014)

[18] Slameto.: Pembelajaran Kreatif dan Inovatif. pp. 10-14. Widya Sari, Salatiga (2013)

[19] Sugiyono.: Metode Penelitian dan Pengembangan. pp. 140-146. Alfabeta, Bandung (2015)

[20] Sukayati & Wulandari.: Pembelajaran Tematik di SD, Modul Matematika SD Program Bermutu. pp. 1-67. PPPPTK Matematika, Yogyakarta (2009)

[21] Sukmadinata.: Metode Penelitian. pp. 184-185. Remaja Rosda Karya, Bandung (2007)

[22] Susilana. R.: Media Pembelajaran. pp. 26-126. Wacana Prima, Bandung (2012)
[23] Utaminingsih. dkk.: Jurnal Refleksi Edukatika. Design Of Thematic Integrative Learning Based On Local Adventage In Elememtary School. pp. 16-33. http://jurnal.umk.ac.id./index.php/RE (2014) diunduh 17 Maret 2019 at the time 13:11.