Data Analysis On Civic Education Learning Development Based On Controversial Issues In The Mass Media In Collaboration With Active Learning To Increase The Democratic Higher Order Thinking Skills

Ahmad Muhibbin, Achmad Fathoni, Zainal Arifin, Suliadi Firdaus Sufahani

Abstract: The objective of the research was to describe civic education learning development model based on controversial issues in the mass media in collaboration with active learning to increase the democratic Higher Order Thinking Skills (HOTS). It was a research and development. The data collection employed the interview data, observation, questionnaire, and documentation. The data validation and check applied a triangulation technique, member check, and FGD. The data were analyzed by using an interactive model. The results of the study show that a learning design comprised the a-perception, presentation and discussion, in-depth material understanding, verification and closing. Based on the results of tests 1-5, the scores of HOTS that have democratically been developed by using the learning increased as demonstrated by abilities, including analyzing information of controversial issues (22 points); conveying critic and rational ideas (22 points); assessing other people’s ideas (23 points); giving wise responses (23 points); arguing logically (24 points); arguing politely and hospitably (23 points); solving a problem or giving a solution to problems smartly (24 points); and solving a problem or giving a solution to problems wisely and being responsible for solution (18 points).

Index Terms: Civic Education, Controversial Issues, Democracy, Higher Order Thinking Skills, Learning.

1 INTRODUCTION

LEARNING is a process of transferring information and experience into knowledge, skills, behaviors, and attitudes. In the activity, it is hoped that it can create conducive atmosphere by including students to play an active role in discussing an instructional material. By thinking critically, they take a significant role in discussing it so that they can solve a solution to it. A learning process that does not make students think critically is due to the instructional materials of Pancasila moral values as civic virtues discussed in highly verbal learning and cognitive learning model. As a result, these models make students uninterested and bored with the materials because those are discussed monotonously, theoretically, cognitively, and verbally [32], [43], [44]. Learning model should include cognitive, affective, and psychomotor dimensions [2], [45]. In the civic education learning, three domains are structurally and functionally closely related to one another by employing the concept of civic virtue and culture, including civic knowledge, civic disposition, civic skills, civic confidence, civic commitment, and civic competence. It can thus be stated that the domains of civic education learning in higher are confluent. They are mutually penetrated and integrated in the contexts of substantial idea, values, concepts, morals, Pancasila, citizenship, and democratic attitudes. It will democratically take a positive impact on students Higher Order Thinking Skill (HOTS) development. The research on civic education and political socialization has a broader scope than its classical counterpart [33], [50]. Not only social, economic, family and school factors are taken into account, but also the impact of youth culture, peer groups, and mass media. Another innovative aspect is that more attention is given to non-conventional forms of political patterns not related to the electoral process. The introduction of civic education in Serbia in 2001 marked a beginning of an all encompassing. Reform that set the tone for future changes designed to support the country’s democratization [8], [46]. Since 1925, the Lebanese government has attempted to foster harmony and nation wide social cohesion by creating a standardized national civic school curriculum [18], [48], [49]. Young age cohorts are not interested in just practicing politics in the same way as their parents do. They also develop new forms of civic engagement [13], [47]. The alleged decline of civic values and political participation habits among younger age groups has become a major reason for concern, both in academic research and among political decision makers [31], [39], [51]. Political apathy, lower rates of participatory action, especially voting and party membership, and lower levels of knowledge of the political system have been noted, especially among adolescent and ethnic and cultural minorities [27], [53]. The awareness of these social problems has put political socialization high on the agenda of governments and...
education agencies [9], [11], [62]. In contrast to the rather pessimistic mood of the 1970s, some recent studies have suggested that civic education efforts actually have positive and significant effects on the levels of political engagement among adolescents and young adults [21], [55].

Research in other democracies has demonstrated a decline in young people’s willingness to take part in conventional political participation [28], [38]. Civic education programs at schools are often called upon as a solution for this emerging social problem [6], [52]. One of the HOTS positive effects on civic education is that it can give contribution to students to solve a nation’s problems. The Indonesian people’s problems can be seen on television media, on-line news, social media, and printed media. These media can be useful for informing them actual news or reports of events or happenings. Some have been broadcasting controversial issues implicitly and explicitly. As a sort of instructional material, civic education focuses on content embedding values and learning experiences demonstrated in daily attitudes and behaviors [4], [54], [60]. Referring to competency development, three components discussed in the Department of Pancasila and Civic Education included civic knowledge, civic skills, and civic dispositions. The research by Yepaneshnikov, et al in 2016 [41] stated that the essence and functions (cognitive, ethical humanist, connotative) of students’ civic education; the content of civic education; pedagogical conditions of students’ civic education (the formation of civil consciousness; the development of civil initiative and civil responsibility; participation in civic activities). Furthermore, it is stated that the essence of civic education reflects the purposeful process of formation of sustainable civil qualities characterizing their owners as entities of legal, moral, political, social and economic relations in public education. The combination of civic qualities (civic duty, civic responsibility, civic conscience, civic activity, respect and acceptance of civic rights and responsibilities, civic consciousness) is a civic education. The research paper discusses a model of civic education learning development based on controversial issues in the mass media (electronic and printed) in collaboration with active learning to increase the democratic HOTS.

2 Literature Reviews

2.1 Higher Order Thinking Skills

King, Goodson, and Rohani in 2004 [23] state that HOTS consist of critic, logic, reflective, meta-cognitive, and creative thinking. Students empower these when facing unfamiliar and uncertain as well as unquestionable problems. According to [3], the HOTS comprises these aspects: 1) analysis, evaluation, and creation; 2) logical argument or logical reasoning; 3) decision making and critical thinking; 4) problem solving; and 5) creativity and creative thinking. Heong, et al in 2011 [16] stated that higher order thinking means thinking widely to find a new challenge. It demands someone to apply new information or knowledge that he has got and manipulates the information to reach possibility of answer in new situation. Brookhart in 2010 [3] suggests that higher-order thinking is conceived of as the top end of the Bloom’s cognitive taxonomy. The teaching goal behind any of the cognitive taxonomies is equipping students to be able to do transfer. Being able to think means that students can apply the knowledge and skills, they developed during their learning to new contexts. The term new means applications students have not thought of before, but it is not necessarily something universally new. Likewise, higher-order thinking is conceived as students being able to relate their learning to other elements beyond those they were taught to associate with it. To develop the ability to think critically, there are five lessons that can be taken, namely: (1) determine the learning objectives, (2) teach through inquiry, (3) practice, (4) review, refine and improve understanding, and (5) practice feedback and assess learning [25], [56]. Higher order thinking skills refer to the top three levels of Bloom’s taxonomy (or revised Bloom’s, referred to as RBT): analysis (analyzing), evaluation (evaluating), and synthesis (creating). Analyzing is defined as breaking material into constituent parts, determining how parts relate to one another and to an overall structure through differentiating, organizing, and attributing. Evaluation is defined as making judgments based on criteria and standards through checking and commenting on. Creating, considered the highest level of thinking, is defined as putting elements together to form a coherent or functional whole, recognizing elements in a new pattern through generating, planning, or producing [1], [57].

HOTS have been defined in the literature as occurring when a person takes new information and information stored in memory and interrelates and/or rearranges and extends this information to achieve a purpose or find possible answers in perplexing situations [24], [61]. Crawford and Brown in 2002 [7] further defined HOTS as being composed of three categories: content thinking, critical thinking, and creative thinking (p. 6). By using the North Carolina Levels of Thinking adopted from Marzano [17], applying, analyzing, generating, integrating, and evaluating would be considered higher-level thinking skills. According to Rajendran and Idris in 2008 [29], HOTS is the expanded use of the mind to meet new challenges. Moreover, he viewed HOTS as a thinking function of the minds ability to solve challenging situations. The question is what is HOTS just about the extended use of the mind? The research findings have revealed more about the overview and importance of HOTS in the teaching and learning process. HOTS involves analyzing information to determine the problem, evaluating the problem, and creating new workable solutions. The continuous development of higher order thinking skills is a direct determinant of continuous practice, and involving in tasks that stimulates the thinking faculties.

3 Research Method

3.1 Research Design

The research took a two-year period of 2017 and 2018. The first period of 2017 was a basis for the next period. Because of this, a period from the first to second was related to each other and integrated for a problem solving as formulated in the research. The study was developmental research. Therefore, it was oriented to a product development, its development was described in process, and the product was evaluated. In the research, the product as formulated was a model of HOTS
development through civic education learning at the students of Pancasila and Civic Education Department, Faculty of Teacher and Training Education, Universitas Muhammadiyah Surakarta, Surakarta, Central Java, Indonesia. Using the research and development was said to be proper because the objective of the study was increasing the HOTS through civic education learning base on controversial issues in the electronic and printed. It was very meaningful for systematic and cyclic procedures as well as need and real situation of higher education.

3.2 Research Procedures
The study was an intensive research and employed the research & development. The research was followed up by developments of survey and observation, model design, model design test, and model validation in a systematic and cyclic procedure. It consisted of three stages. The early or introductory stage was related to the survey as a basic model development. It was realized with observation, interview, and questionnaire of learning process. The second stage was related to model development. The results of the early stage and FGD (Focus Group Discussion) were used to formulate a model of civic education learning at the students of Pancasila and Civic Education Department base on controversial issues in the mass media (electronic and printed) in collaboration with active learning for HOTS development. The study referred to action research, including plan, do, observation, and reflection (Hopkins, 1993). The last stage evaluated the effectiveness in hypothetic model that has been completed with experiment.

3.3 Data Collection and Research Instrument
The qualitative research data were collected with observation, survey, interview, and informants. The quantitative ones as supplement information were gathered by using the instruments of class observation sheets and questionnaires. The early stage analyzed the research problem and model design by using a qualitative approach. The second stage tested and validated the model by using a quantitative approach. The first stage encompassed the following items: (1) literature reviews for gathering materials of HOTS development model by the students of Pancasila and Civic Education Department; (2) civic education learning development in higher education; (3) tentative model design formulation by analyzing need assessments, formulating model design concept, making participative and collaborative workshop as an early step for validating model design concept; (4) testing the HOTS development model through civic education learning based on controversial issues in the mass media in collaboration with active learning; and (5) completing model so that it is reasonable to be a reference. The description of the model finding was used to be a reference to formulate a tentative model design. The research data was obtained from in-depth interview, observation and survey, and documentation. The interview was structured and unstructured. The first was an unstructured interview and the second was a structured one. The structured interview was based on the information that has been conveyed by the respondents. The results of the interview were used to formulate a number of the questions that were more structured in order to obtain the accurate data. In the study, the researchers used three types of approaches. These comprised (1) making informal conversation or dialogues in spontaneous and relaxing situation, (2) using the sheets inscribed with topics for conversations or dialogues, and (3) using the questionnaires in more details, but these were opened and these have been prepared. The questionnaires asked were based on research problems in order. The data were collected with direct observation. The researchers employed a formal and formal observation in the location. For obtaining the information of the events empirically, they played a silent role in civic education learning process. The other data collection techniques to complete the data were analyzing the questionnaires answered by the respondents, documents, and literature reviews in relation to the HOTS development and civic education learning based on controversial issues in the mass media in collaboration with active learning.

3.4 Data Validation
The data were validated by checking reliability and references and employing triangulation. The study applied a source triangulation. It means to compare and check reliable information based on time and different instruments in a qualitative method. The researchers compared the data obtained from observation and survey with the results of the interview and those with the documents available. Also, the study used a peer-debriefing model by discussing the results of the study with the experts with relevant competencies. The use of the model was intended to validate the results that were argumentatively and logically tested so that it was obtained very accurate data.

3.5 Data Analysis
The data were analyzed with an interactive model of data collection, data reduction, data display or presentation, and verification and conclusion [26], [58]. The components were closely related to one another, beginning from the early stage of the study to completing the results or findings of it. In addition, the components were realized in cycle and in a long-term period. For these, the data could be concluded accurately and making a conclusion of the data was accurate.

4 Research and Discussion

4.1 Processes and Actions by the Lecturers, Students (Presenters and Participants), and the HOTS Impacts
Model design of civic education learning based on controversial issues in the mass media (electronic and printed) in collaboration with active learning to increase the democratic HOTS comprised the components of a-perception, presentation and discussion, in-depth material understanding, validation, and closing. The processes and actions by the lecturers, students (presenters and participants), and the HOTS impacts can be seen in TABLE 1.
TABLE 1

<table>
<thead>
<tr>
<th>Processes</th>
<th>Actions by Lecturers</th>
<th>Actions by Students</th>
<th>HOTS Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-perception</td>
<td>Building an attention and early interest in topics and encourage to think about controversial issues discussed.</td>
<td>Understanding and preparing themselves physically, mentally and socially</td>
<td>Understanding and preparing themselves physically, mentally and socially</td>
</tr>
<tr>
<td>Presentation and discussion</td>
<td>Facilitating and observing the students as a presenter or participant</td>
<td>Displaying controversial issues in the mass media related to materials discussed adopted from the mass media</td>
<td>Comprehending the content and description controversial issues; preparing questions and responses</td>
</tr>
<tr>
<td>In-depth material understanding modified with active learning</td>
<td>Observing in-depth material understanding and making a note for clarification</td>
<td>Managing in-depth material understanding modified active learning</td>
<td>Running a scenario of in-depth material understanding modified with active learning and adhere rules of game as approved</td>
</tr>
<tr>
<td>Confirmation and closing</td>
<td>Making a conclusion; Correcting a group’s or individual student’s opinions or ideas; making a group for the next presentation; and making a strategy and rule of game</td>
<td>Understanding lecturers’ conclusion; making a summary; and revising materials discussed or presented</td>
<td>Understanding lecturers’ conclusion of materials and making a conclusion. For a student who will present in the next session, he or she has prepare controversial issues in display for the next material</td>
</tr>
</tbody>
</table>

In the FGD, it is stated that learning means making students take an active role in it. Students and materials are one integrated system. Both of these cannot be separate to each other. In a student-centered model, learning is a constructivism paradigm; it is not an instructive paradigm. Therefore, a proper terminology is learning; it is not teaching. Learning is a model for encouraging students to take an active role in a problem solving. Learning is not only one-way model and knowledge transfer one (know what); it emphasizes on value transfer (know how). Civic education learning design based on controversial issues in the mass media in collaboration with active learning to increase the democratic HOTS attitude, students need to be designed and tested repeatedly so that civic education learning model can be as a reference. Civic education and social studies are issue-centered education and included in the Reconstructionist philosophy. Social studies educators have long asserted that studying and discussing issues are important to democracy. Social studies and civic education make students be able to solve social problems and controversial issues of public policy in the tradition of reflective inquiry. The objective of the tradition is the enhancement of the students’ decision making abilities, for decision making is the most important requirement of citizenship in a political democracy (Barr, et al., 1978: 111).

4.1 Strengthening Democratic HOTS

The democratic HOTS developed through civic education learning model based on controversial issues in the mass media can be seen from different abilities, including analyzing information of controversial issues, conveying critic and rational ideas, assessing other people’s ideas, giving wise

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responses, arguing logically, arguing politely and hospitably, solving a problem or giving a solution to problems smartly, and solving a problem or giving a solution to problems wisely and being responsible for solution. The civic education learning model based on controversial issues in the mass media has been tested for one semester in a five-learning process. Each learning process was collaborated with different active learning. The first test was collaborated with the strategy of start with question; the second test with the strategy of everyone is a teacher here; the third test with the strategy of physical self-assessment; the fourth test with the strategy of point-counter point; and the fifth test with the strategy active debate. Some refer to the strategies as proposed by [42], [59].

**TABLE 2**

D emocratic HOTS through Civic Education Based on Controversial Issues in the Mass Media

<table>
<thead>
<tr>
<th>Democratic HOTS</th>
<th>Averaged scores of pre-actions</th>
<th>Averaged scores of test 1</th>
<th>Averaged scores of test 2</th>
<th>Averaged scores of test 3</th>
<th>Averaged scores of test 4</th>
<th>Averaged scores of test 5</th>
<th>Averaged scores of Strengthening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyzing information of controversial issues</td>
<td>65</td>
<td>77</td>
<td>80</td>
<td>84</td>
<td>85</td>
<td>87</td>
<td>22</td>
</tr>
<tr>
<td>Conveying critic and rational ideas</td>
<td>64</td>
<td>74</td>
<td>79</td>
<td>83</td>
<td>84</td>
<td>86</td>
<td>22</td>
</tr>
<tr>
<td>Assessing other people’s ideas</td>
<td>70</td>
<td>84</td>
<td>86</td>
<td>89</td>
<td>90</td>
<td>94</td>
<td>24</td>
</tr>
<tr>
<td>Giving wise responses</td>
<td>68</td>
<td>83</td>
<td>83</td>
<td>86</td>
<td>89</td>
<td>91</td>
<td>23</td>
</tr>
<tr>
<td>Arguing logically</td>
<td>66</td>
<td>78</td>
<td>84</td>
<td>87</td>
<td>88</td>
<td>90</td>
<td>24</td>
</tr>
<tr>
<td>Arguing politely and hospitably</td>
<td>70</td>
<td>83</td>
<td>86</td>
<td>87</td>
<td>89</td>
<td>93</td>
<td>23</td>
</tr>
<tr>
<td>Solving a problem or giving a solution to problems</td>
<td>63</td>
<td>79</td>
<td>80</td>
<td>84</td>
<td>86</td>
<td>87</td>
<td>24</td>
</tr>
<tr>
<td>Solving a problem or giving a solution to problems</td>
<td>67</td>
<td>82</td>
<td>82</td>
<td>83</td>
<td>84</td>
<td>85</td>
<td>18</td>
</tr>
<tr>
<td>wisely and being responsible for solution</td>
<td>67</td>
<td>82</td>
<td>82</td>
<td>83</td>
<td>84</td>
<td>85</td>
<td>18</td>
</tr>
</tbody>
</table>

Based on the results of test 1-5, it is stated that the scores of all the components increased. Averaged scores of strengthening democratic HOTS are described as follows:

1. 22 points for analyzing information of controversial issues;
2. 22 points for conveying critic and rational ideas;
3. 24 points for assessing other people’s ideas;
4. 23 points for giving wise responses;
5. 24 points for arguing logically;
6. 23 points for arguing politely and hospitably;
7. 24 points for solving a problem or giving a solution to problems smartly; and
8. 18 points for solving a problem or giving a solution to problems wisely and being responsible for solution.

The learning model is stated to be effective in increasing quality. It is relevant to the research by Smith and McGregor in the research paper entitled What is Collaborative Learning. They proposed that collaborative learning is an umbrella term for a variety of educational approaches involving joint intellectual effort by students, or students and teachers together. Usually, students are working in groups of two or more, mutually searching for understanding, solutions, or meanings, or creating a product. Similarly, the learning model could develop students’ potency so that they could use the HOTS and perform good deeds. According to [19] and [60], the objective of civic education learning is developing the competencies of

1. thinking critically, rationally, and creatively to response citizenship issues;
2. participating smartly, being responsible, and performing consciously for people, nation, and country;
3. developing positively and democratizing to build themselves based on Indonesian characters so they could survive in running interaction with other people from other countries; and
4. interacting with other nations by using ICT (Information and Communication Technology).

**5 CONCLUSION**

Model design of civic education learning based on controversial issues in the mass media (electronic and printed) in collaboration with active learning to increase the democratic HOTS comprised the components of a-perception, presentation and discussion, in-depth material understanding, confirmation, and closing. The model can increase the scores of democratic HOTS as demonstrated by abilities including

1. analyzing information of controversial issues (22 points);
2. conveying critic and rational ideas (22 points);
3. assessing other people’s ideas (23 points);
4. giving wise responses (23 points);
5. arguing logically (24 points);
6. arguing politely and hospitably (23 points);
7. solving a problem or giving a solution to problems smartly (24 points); and
8. solving a problem or giving a solution to problems wisely and being responsible for solution (18 points).

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REFERENCES


"Understanding Teaching in Context" dalam Educational Leadership, 37, (3),


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