

The Implementation of Higher Order Thinking Using Project Citizen in Escalating Students' Hard and Soft Skills

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Abstract: On recent years, the development of technology and information requires the citizens' skill to implement and adapt their self to the changing and expanding of the global flows. This attention is needed by the students to make them to able to engage their linear and relevant ways of thinking, hard skills and soft skills to mobilize technology and information through the workings of Project Citizen as a problem selection and problem solving. Therefore, the ability of Higher Order Thinking Skill (HOTS) must be prioritized for students to this matter, accordingly this way of thinking is an instrument for the students to be self-sufficient in facing their entire life. As it is informed previously from the theme above, higher level thinking ability can be reached through Project Citizen. This writing was based on the attention of the importance of higher order thinking as a root foundation for producing students to improve their hard skills and soft skills to be able to make decisions and have the ability in making the right decision and can be accounted for. These abilities and skills are a major issue among the students to give birth students who have knowledge, abilities, and skills in the amid of global technological and information advances.

Keywords: Higher Order Thinking Skill, Project Citizen, Hard Skill, Soft Skill.

1. Introduction

In the midst of the development of technology and information and communication, the millennial generations, especially students, are preoccupied with instant digital information which has a negative effect makes students lazy to read the library[1]. They consume information through technology without doing proper selection and are easily consumed by incorrect issues (hoax), such situations require critical thinking skills in responding to information by analyzing and solving problems. This phenomenon will go wild and will result in weakening students' thinking abilities. The ability to think scientifically is still low which will impact the waning existence of a nation's identity [1] [2].

The challenges to young generations towards the development of technology and information require sensitivity and attention in processing information to make a change in realizing the ideals of a nation. Sensitivity to think critically in responding to global and national issues is a priority for citizens. However, the ability to think critically among youngsters in responding to to these issues is inadequate. This fact can still be observed in the context of nation and state such as national disintegration which is

feared to spread among students as the next generation. Problems such as moral degradation, drugs, terrorism, free sex and other problems are types of problematic disintegration which are still preying among citizens. The problem is increasingly widespread in recent years so that the existence of national identity is fading. Therefore, the needs to overcome these problems as a serious matter is needed from the side of education.

In 2018, the data taken from Human Development Index, Indonesia was in alarming situation with a ranking of 116 out of 189 countries (United Nations Development Programme, 2018). These results indicate that the quality improvement efforts that have been carried out so far have not been able to solve the basic problems of education in Indonesia. This HDI is an important index taken from sequence of data on the achievement of three basic dimensions in human development, namely: (1) a long and healthy life, (2) knowledge and (3) a decent standard of living [3].

International comparative data also shows that the quality of education in Indonesia before was also less than satisfying. The Human Development Index (HDI) in Indonesia ranks 102 out of the 105 countries surveyed, one rank below Vietnam[3]. According to the Human Development Report in 2002, the value of the Human Development Index (HDI) in Indonesia scored 0.684 or 110 under Vietnam with 0.88 in 109th, China with 0.762 in 96th position, the Philippines with 0.754 in 77th, Thailand with 0.762 in 70th, Malaysia with 0.782 in 59th, Brunei with 0.856 in 32th, Singapore with 0.885 in 25th, Japan with 0.933 in 9th.

The 21th century is marked with the development of technology and information which needs the ability of the citizen (civic skill) to master linear and releant ways of thinking which covers the element of hard and soft skill, thus there must be an extra attention to run and adapt their way of thinking with the technology development[4][5][6].

This attention is expected to able to mobilize whether the development of citizens' knowledge, character, and skill. The competency must be mastered by every citizen in political life and society to be a qualified and responsible citizen[4][7][8][9][10].

To prepare students as a forum for the nation's next generation and to be able to compete with other countries, the Project Citizen learning model is an Instructional Treatment is expected to able to deal with problems found in society. The Project Citizen also develops the knowledge, skills and character of democratic citizenship that enables and encourages the participation of students as democratic citizens and can assist in facing problems that can be learned, and trained according to the situation of the environment they face by anyone such as many things that studied in terms of education, government, society, and family [11] [12].

Today, most countries have prepared their citizens to face life's challenges [13]. High-level thinking (HOT) in the 21st century is a very necessary thing in education to be the focus of current attention [14][15]. Therefore, it is very important to instill knowledge in critical thinking skill that is currently very relevant to teach 21st-century students who face complex real-life problems.

The ability to think about solving problems in contemporary times builds productivity and creativity in the level of critical thinking skills increasingly required. By implementing problem-based learning, identifying problems and problem-solving processes in teaching and learning might build students' critical thinking skills in HOTS such as thinking content, critical thinking, and creative thinking so that they find something new[16][17][18].

Project Citizen gives steps of the importance of learning through experience, thus with those experiences students will be able to develop knowledge, skills, and disposition (civic knowledge, civic skill and civic disposition) so it is expected to be able to sharpen their higher thinking ability in interacting with the society and the government[19]. The project citizen learning model is not only a ceremonial learning model but it offers youngsters to involve in the democracy in the future to be more interactive in comprehending national problems, it also a learning model which gives positive impact into students' critical thinking to the learning content[6][20].

Based on the preceeding elaboration, the importance of higher thinking ability has been found significant to be possessed by every students. Accordingly, this study aims to picture of how Project Citizen can be used to escalate students' ability of higher-order thinking, thus students are not only productive on rational competence but also on the skill competence such as hard and soft skill.

2. Methods And Research Design

This study is descriptive research with qualitative approach. The focus is a comprehensive depiction of high-level thinking and improvement of hard and soft skill for students through Project Citizen. The implementation of this research tries to see the development of citizenship on the side of knowledge, skill, attitude and value, and citizen action. The researcher describes and explains the situation based on the analysis carried out on this study. The approach is used in order to know more about Project Citizen and its effect on hard and soft skills and students' higher-order thinking skills. This method is in line with Moleyong's opinion which states "qualitative methodology" as a research procedure that produces descriptive data in the form of written or oral words from people and observable behavior [21]. In other words, this research is called qualitative research because it is a study that does not make calculations. In line with this definition, Kirk and Miller define that qualitative research is a particular tradition in social science that is fundamentally dependent on observations in humans both in the region and in disputes [21]. Qualitative methodology is a procedure that produces descriptive data in the form of written data or images that support the research process.

3. Results

3.1 Higher-order Thinking in Tertiary Level

One of the general goal of a learning process is to develop students' higher-order thinking skill[22][23]. This way of thinking is expected for the students' to be able to excel and reach the intellectual freedom. Thinking is a cognitive process which is used to understand reality which will enable these students to ask their daily assumptions and lead them to a new solution which will positively impact to their life's quality. The result of this research shows the higher-order thinking skill of the students was increasing by the application of Project Citizen as a learning model into pedagogical process[6].

Active learning through Project Citizen makes learning more fun for both lecturers and students and the most visible thing seen from the results of study is that the process can improve their thinking skills at a higher level. This was realized because the Project Citizen learning process was developed from a critical or reflective thinking approach model pioneered by John Dewey with the paradigm of "how we think" or "reflective inquiry." The Project Citizen model is able to become a medium to deal with shifts or changes in student life activities by involving students through these learning practices to provide provisions for the student's future. Project Citizen is not just ceremonial but it creates students to be actively involved in present and future democratic life[8][23][20].

The results of the study show that by increasing students' knowledge, whether from the the ability in analyzing and making decisions that are the goals in the learning process, can provide positive experiences for students and have an impact on the community environment. This is in line with the Project Citizen model itself which is focusing on developing citizenship knowledge, the virtue of citizenship, citizenship skills that have a sense of student confidence. Moreover, Project Citizen develops a high commitment from a learner and increases competencies that lead to skills in making decisions and being responsible.

Practical learning processes in Project Citizen provide opportunities for students to learn and collect data and information independently. Data and information collected by students were obtained from observations, interviews with the public or government agencies, newspapers, reading books, the internet, and other relevant sources. Students can also get some material exposure through pre-class reading and public lectures, a correct understanding of the material occurs when they are actively involved with and reflect on the meaning of what they are doing.

Material development and discussions conducted by students related to high-level thinking can be done by referring to the processes or stages of Higher-Order Thinking Development, including: (1) Determining Learning Objectives; (2) Teach Through Questions; (3) Practicing Before Appraisal; (4) Reviewing, Revising, and Improving; (5) Providing Feedback and Learning Assessment. The stages or higher-level thinking process can direct students to use the results of the analysis that has been produced to be implemented in the process of making a portfolio and as a presentation (showcase). Project Citizen that is used appropriately will result in increasing activities and student's achievement results. Thinking skills can be applied in almost all teaching or training settings to create more active learning environments and to move students to higher level thinking.

3.2 Improving Students' Hard and Soft Skills

There are three alternative institutions to implement hard and soft skill including educational institutions, companies, and industrial institution. In this study, the researcher applied the implementation of hard and soft skill in educational institution [25]. Tertiary education or university becomes the aim of this study to combine hard and soft skill to the students. In this article, the researcher tried to describe the development of hard and soft skill through Project Citizen learning model. The analysis of the development of hard and soft skill aspects is explained below:

a. Hard Skill Ability through Project Citizen

As a learning process, Project Citizen applied in University by the researcher produces a positive impact on the development of student thinking. Learning with the Project Citizen model combines the classroom with the community, in other words, these two things are learning tools for students to hone their thinking skills. Based on this, the Project Citizen learning model has six instructional steps starting from identifying the problem, choosing the problem, determining the problem, finding a solution, and displaying the result document. Students' thinking skills were increasing through Project Citizen with steps such as assigning assignments to students such as choosing problems and identifying cases and problems that exist in government and society. Thus the work of students in the learning process has a positive impact on thinking and hard skills to create alternatives for the community as a future government program.

Students also realize how to become active citizens who can solve potential problems, also it invited students to be able to show (promote) changes to state administrators or the government so

that they can do it according to the wishes of the community. From the results of the study, the researchers concluded thinking skills through steps and stages can sharpen the ability of students' hard skills in solving problems in the world of education and the age of working after they graduate from Higher Education[26]. Moreover, the researcher also found that thinking skills in improving hard skills through Project Citizen can aim to open up modern ways of thinking to help students move beyond the cognitive domain, low-level knowledge, and understanding, to higher-order thinking skills, applications, analysis, synthesis, and evaluation.

b. Soft Skill Ability through Project Citizen

On the soft skill side, the study concluded that there are 7 skills found from the implementation of Project Citizen in the class such as problem solving, confidence, teamwork, the ethic of value, decision making, communication, and critical thinking[25]. This learning model brought a positive change to the students such as the soft skill improvement in youngsters. The study reveals that the ability of solving-problem must be put as a priority and must be improved among the students among other soft skills. Although skills such as negotiation and communication are needed but it is important to the students to master the problem-solving skill first. Other than that, Project Citizen also helps students to improve their soft skill before they bump into their career in the future.

4. Conclusions

Based on the finding, the implementation of Project Citizen in escalating students' higher-order thinking skill to improve hard and soft skill is effective in learning process. It could be seen from the research applied in this study that this learning model was attractive and important to improve students' higher-order thinking skill. On the other hand, the result of students' hard and soft skill was improved when the Project Citizen was used as a learning model in the learning process.

References

- [1] Brookfield S. D. 2012. *Teaching for Critical Thinking Tools and Techniques to Help Students Question Their Assumptions*. Printed in the United States of America.
- [2] Tilaar H. A. R. 2000. *Paradigma baru pendidikan nasional*. Jakarta: Rineka Cipta.
- [3] Anwar. 2015. *Pendidikan Kecakapan Hidup (Life Skills Education)*. Alfabeta. Anggota Ikatan Penerbit Indonesia (IKAPI). Bandung.
- [4] Sapriya. 2008. *Pendidikan IPS, Bandung*, Laboratorium PKn UPI Bandung.
- [5] Wahab, A. A. 2011. *Politik Pendidikan dan Pendidikan Politik: Model Pendidikan Kewarganegaraan Indonesia Menuju Warganegara Global*. Pidato Pengukuhan Guru Besar Tetap dalam Ilmu Pendidikan pada Jurusan FIPS IKIP, Bandung.
- [6] Nusantarariya, Y. H. *et al.* I 2013. Developing Critical Thinking In Civic Education Teaching Using The Project Citizen. *Cakrawala Pendidikan* November 2013, TH. XXXII, NO. 3
<https://journal.uny.ac.id/index.php/cp/article/view/1631/1363>
<http://dx.doi.org/10.21831/cp.v3i3.1631>
- [7] Banks. J. A. 1985. *Teaching Strategies for The Social Studies. Inquiry, Valuing, and Decision-Making*. Longman. United States of America.
- [8] Budimansyah D. dan K. Suryadi. 2009. *PKn dan Masyarakat Multikultural*. Bandung. Program Studi Pendidikan Kewarganegaraan Universitas Pendidikan Indonesia. Bandung. Aksara Press.
- [9] Setiawan. D. 2009. Paradigama Pendidikan Kewarganegaraan Demokratis di Era Global. *Acta Civicus*. Volume 2, Nomor 2. April (2009).

- [10] Wahab, A. A. 1996. *Politik Pendidikan dan Pendidikan Politik: Model Pendidikan Kewarganegaraan Indonesia Menuju Warganegara Global*, Pidato Pengukuhan Guru Besar Tetap dalam Ilmu Pendidikan pada Jurusan FIPS IKIP, Bandung.
- [11] CCE. 1998. *We The People*. Project Citizen, Teacher's Guide, Calabasas.
- [12] Budimansyah D. 2008. *Inovasi Pembelajaran Project Citizen: Menyemai Warganegara Demokrasi Konstitusional*. Bandung: Program Studi Pendidikan Kewarganegaraan SPS UPI.
- [13] Malathi B. *et al.* | 2016. Enhancement of Higher Order Thinking Skills among Teacher Trainers by Fun Game Learning Approach. World Academy of Science, Engineering and Technology. *International Journal of Educational and Pedagogical Sciences* Vol:10, No:12, 2016.
- [14] Yen, T. S. and S. H. Halili. 2015. Effective Teaching Of Higher-Order Thinking (HOT) In Education. *The Online Journal of Distance Education and e-Learning*, April 2015 Volume 3, Issue 2.
- [15] Gulistan A. M. *et al.* | 2015. Teaching Strategies for Promoting Higher Order Thinking Skills: A Case of Secondary Science Teachers. *Malaysian Online Journal of Educational Management (Mojem)* October 2015, Volume 3, Issue 4, 16-30 E-Issn No: 2289-4489.
- [16] Raiyn, J. and O. Tilchin. 2017. A Model for Assessing the Development of HOT Skills in Students. *American Journal of Educational Research*, 2017, Vol. 5, No. 2, 184-188 Available online at <http://pubs.sciepub.com/education/5/2/12> Science and Education Publishing DOI:10.12691/education-5-2-12.
- [17] Polly, D. & L. Ausband. 2009. Developing Higher-Order Thinking Skills through WebQuests. *Journal of Computing in Teacher Education* 29 Volume 26/Number 1 Fall 2009 Copyright © 2009 ISTE (International Society for Technology in Education), 800.336.5191 (U.S. & Canada) or 541.302.3777 (Int'l), iste@iste.org, www.iste.org
- [18] Lewis, A. & D. Smith. 1993. Defining higher order thinking. *Theory Into Practice*, Volume 32, Number 3, Summer 1993 Copyright 1993 College of Education, The Ohio State University.
- [19] Fry, S. W. & A. Bentahar. 2013. Student Attitudes Towards and Impressions of Project Citizen. *Journal of Social Studies Education Research*, 4(1), 1-23. (5-1-2013, ISSN: 1309-9108) https://scholarworks.boisestate.edu/cifs_facpubs/120/.
- [20] Morgan, L. A. 2016. Developing Civic Literacy and Efficacy: Insights Gleaned Through the Implementation of Project Citizen. i.e.: *Inquiry in Education*: Vol. 8: Iss. 1, Article 3. (2016) <http://digitalcommons.nl.edu/ie>
- [21] Moleong, L. 2002. *Metodologi Penelitian Kualitatif*. Bandung: PT. Remaja Rosdakarya.
- [22] Wahono, M. 2015. Pengembangan Karakter Bangsa pada Warga Negara Muda Melalui Model Project Citizen (Studi Kuasi eksperimen di SMA Negeri I Ciwidey, Kabupaten Bandung). *Integralistik* No.2/Th. XXVI/2015, Juli-Desember 2015 Dosen Jurusan Politik dan Kewarganegaraan, Fakultas Ilmu Sosial Universitas Negeri Semarang.
- [23] Halpern, D. 1999. Teaching for Critical Thinking: Helping College Students Develop the Skills and Dispositions of a Critical Thinker. *New Directions for Teaching and Learning*, no. 80, Winter 1999 © Jossey-Bass Publishers.
- [24] Hartini, N. 2017. Implementation and Learning Outcomes: The Application of Citizen Project Through Visual Audio Media to Increase Grade 4 Students PKN Learning Outcomes State Elementary School 2 Gambirmanis Wonogiri. *IJPE: International Journal of Primary Education* Volume 1 Number 1 April 2017 Copyright @ 2017 IJPE International Journal of Primary Education.
- [25] Widarto, W. N. dan Pardjono. 2012. Pengembangan Model Pembelajaran Soft Skills Dan Hard Skills Untuk Siswa Smk. *Cakrawala Pendidikan*. November 2012, Th. XXXI, No 3.
- [26] Bradshaw, A. C., J. L. Bishop, L. S. Gens, *et al.* 2002. The Relationship of the World Wide Web to Thinking Skills. *Education Media International*. ISSN 0952-3987 print/ISSN 1469-5790 online © 2002

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