

Citizenship Education Curriculum in the Industrial Revolution Era 4.0

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ABSTRACT---General objective of this study was to determine the digital-based Civic Education curriculum in Indonesia in the era of industrial revolution 4.0 The method used in this research is studi libraries or also known as the study of texts. A literature study is used to understand deeply and comprehensively about the curriculum of civic education in the industrial revolution era 4.0. The results obtained showed that the civic education curricula have Identics with citizen rights and obligations, democracy, human rights, nationalism, geopolitical and geostrategic. Civic education curriculum needs to renew the system of learning and teaching model with the times. In practical results of this study can be used as reference material citizenship education further research writing. Then the results of this study can be used as study materials about the course curriculum citizenship education in the era of industrial revolution 4.0.

Keywords---Curriculum, Citizenship Education, the Industrial Revolution 4.0

I. Introduction

Changes that occur in the world requires us to continue to think and find new solutions to deal with it. Acceleration of the production system in many ways can not be separated in the use of technology as supporters. Human dependence on technology as if it never could cut its links, even technology can facilitate the work of man. The human population of the world is increasingly growing, this means that the need for goods and services is increasing all the time. This is the reason that people need something a tool that can speed up the production of goods. Reflecting on the development of the first industrial revolution until the fourth, we derive a lesson that human dependence on technology is not a figment. The first industrial revolution offers technologies that ease the burden on humans. Use of the steam engine in cut production time and labor are discarded human. This step is referred to as the invention of cutting edge technology. The production process is performed faster than when entirely using manpower. Limitations that exist in humans indicated on the slow process of production of goods that do so needs with the availability of goods not in accordance with it should be.

The statement was in line with the opinion of Komalasari (2012) which states that "the University as higher education institution, creating young generation of national leaders has very strategic role in the process of young generation's character building". Facing the era of the Industrial Revolution 4.0 is supposed to education began to improve and adapt the curriculum according to the direction of advancement of age. The study program Pancasila and Citizenship Education is one of the courses that also have to adjust its curriculum in the industry, the 4.0-revolution era. Learning systems that have been implemented in order to adjust back to the start of the digitization of education. The era of the industrial revolution 4.0 or also known as the era of disruption introduce to us that everything can be done by computer.

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Computerization and use of the Internet or there is also the term artificial intelligence or artificial intelligence almost entirely replace human functions as workers. Humans can be humanized in work outside of the production process that has been replaced by technology. Civic education curriculum issues one of which is in majority Program Pancasila and Citizenship Education Study in Indonesia curriculum as a whole has not empower technology as a means of supporting the learning process. Only partially already implementing digital technology in the learning process, and even then limited to the ability or the Human Resources (HR) lecturer. Facilities that can be used by faculty in the use of digital technology studies already available lots. Among Coursera (<https://www.coursera.org/>):

II. Method

This writing method is a method of literature. A literature study also called text study Noeng Muhadjir This research is the study of texts or literature. Studies by Noeng Muhadjir text (2000: 297) includes: first, a theoretical study of a discipline that needs to be continued empirically to obtain empirical truth anyway. Second, the study seeks to learn the whole object of the philosophical or theoretical research and related validity. Third, the study seeks to learn the theoretical linguistics. Fourth, is the study of literature. One reason for using this method is to understand deeply and comprehensively about the curriculum of civic education in the era of industrial revolution 4.0.

Definition of Citizenship Education

Civics is part of or attempt one of the objectives of Education IPS (Social Science Education) which material education is organized in an integrated way (integrated) from various disciplines of the social sciences, the humanities, the document states, especially Pancasila, the 1945 Constitution and state law, with pressure educational materials on the relationship of citizens and with regard to defending the country. Article 39 of Law No. 20 of 2003 stipulates that: Civics is an effort to equip students with the basic knowledge and skills with regard to the relationship between citizens and the state as well as a preliminary study to defend the state in order to be a citizen reliable by nation. Based on the explanation that the Citizenship Education aims to equip students with the basic knowledge and skills including the characters therein to be relied upon by the nation. A similar sentiment was expressed also by Soemantri (2001: 299) as follows:

Eyes Civics are educational programs that core political democracy expanded with sources of knowledge, the positive effects of education schools, communities and parents, all of which are processed in order to train students to think critically, analytically, behave and act in a democratic in the preparation of democratic life based on Pancasila and the 1945 Constitution.

Based on the above explanation that Civic Education is a scientific study that consists of a variety of sources of knowledge that teaches good character in students. While in the Content Standard for Primary and Secondary Education issued by the Ministry of Education (2006: 2) confirmed that: Civics (citizenship) is the subject to focus on the formation of self religiously diverse, socio-cultural, language, age, and tribes to become Indonesian citizens who are intelligent, skilled, and characterized mandated by Pancasila and the 1945 Constitution Based on the above explanation it is said that Civic Education is a scientific assessment has three characteristics, namely the knowledge, skills and character formation of citizens.

Another opinion by Maftuh-Sapriya Bunyamin (2007: 321) explains that the Civics are: Subjects of Citizenship Education is education courses or subjects that have the primary purpose to educate students to become good citizens, democratic and accountable. Citizenship Education Program is looking at students in their capacity as citizens, so that the programs, competency or materials provided to learners is directed to prepare them to live functionally as a citizen and a good citizen. Based on these explanations, citizenship education is a subject that gives provision for learners to improve

multidimensional intelligence to form good citizens (to be good citizenship) who have the knowledge, skills, and character to establish the continuity of life of the nation. Kewarganegraaan educational context in the context of character development we can also see an example in South Korea. Park (2017) explains that citizenship education in South Korea is an education that is more directed his attention to the young active citizen participation and educational characters focused on efforts to encourage the direct a person to develop character through activities based on everyday life at home.

The same thing was said by Neoh (2017), quoting the Ministry of Education of Singapore that "Our education system must ... nurture Singapore citizens of good character, so that everyone has the moral resolve to with stand an uncertain future, and a strong sense of responsibility to Contribute to the success of Singapore and the well-being of Singaporeans ". The opinion means that the importance of the role of civic education in Singapore are used to build good character Singaporean to have moral determination to reach an uncertain future and responsible for contributing to the success and prosperity of Singapore Singapore. The role of civic education in the United States also is driven into the effort to improve public participation. One of the domain of civic education as knowledge of citizenship (civic knowledge) is deemed necessary increased in an attempt civic engagement. As described by Shiller (2013: 70), which says that:

Civic knowledge is important, as Popkin and Dimock (1999) have shown, Because it is correlated with civic engagement. Schools are logical places for improving civic knowledge and engagement among youth, but they need to use the practices that Researchers have shown increase of Reviews their civic engagement.

Knowledge of citizenship is so important because it relates to civic engagement. Efforts to encourage the involvement of young citizens is expected to improve the practices of citizenship. This can be done with school efforts to internalize the learning materials to encourage young citizens to participate actively in society. Civic Education in Indonesia drew attention to the moral which is expected to be realized in everyday life. Behavior that exudes faith and piety to God Almighty in a society composed of various denominations, behavioral and humanity just and civilized behavior that supports national unity in a society that diverse cultures and interests, behaviors that support populist who put the interests of joint above the interests of individuals and groups. So the difference of thoughts, opinions or interests resolved through deliberation and consensus, as well as behaviors that support efforts to achieve social justice for all Indonesian people. Further Soemantri (2001: 154) argues that: Civics is an effort to equip students with the basic knowledge and skills with regard to relations between citizens and the state and civil defense science education in order to become a citizen may be relied upon by the nation and the state.

Based on these descriptions, there are three characteristics that are owned Civics subjects, which include knowledge, skills, and character of citizenship. Thirdly it is a provision for learners to improve multidimensional sufficient intelligence to be a good citizen. Citizenship education perspective can be viewed from various angles. However, civic education while maintaining his identity as a learning promoting change someone's behavior and make it better in the future. As said by Davies (2017: 4) which says that "Academics and professionals who are interested in citizenship and character are Essentially being encouraged to solve problems; or, to put it more positively, to the make the world a better place ". According to Academics and professionals interested in the field of citizenship and character basically encouraged to solve problems or to make the world a better place. In a study of civic education in an effort to improve citizen participation, it is necessary to classify three types of classification of citizens as stated by Knowles (2019) is the first responsible citizens in private marked as citizens who follow the rules. Second, the citizen participatory characterized as priority kesukarelaannya citizens to engage in the common interest. The third was characterized as a justice-oriented citizen citizens who want to change society. Civic education is a branch of the social sciences are studied with the rights and obligations of citizens as a core discussion (chernaya, 2018). Indonesian citizen rights and obligations outlined in article 27 to article 34 of the Constitution of the Republic of Indonesia in 1945. Citizenship education as a science is a science that is evolving with the

wind of democracy that is integrated into the learning material. Democracy is a state system that is considered the most modern and most likely to be used by all countries in the world in modern world today. The democratic system can be accepted by all segments of the world community. Likewise with Indonesia, democracy is a process that is done in achieving a common goal of a prosperous state, just and prosperous. As said by Tobin (2010: 275) states that

The changes that took place in citizenship education in post-Communist countries at the beginning of the 1990s have no equivalent in the history of education. For the first time ever, the education of 'citizens', previously based on the aim of indoctrinating them into being builders of Communism, had to be transformed into the education of citizens living in a democracy.

The opinion means that changes that occur post-communists in the 1990s brought similar civic education in the history of education. Civic education that are switched from indoctrination into an education that teaches about democracy. In line with the opinions Tobin above, Yuen (2016: 72) argues that "There is broad-based agreement in the literature that civic education is needed to prepare students to live in a democratic system. However, the exact nature of such civic education is contentious. that broad-based agreement in the literature that civic education is needed to prepare students for life in a democratic system. Democracy face new challenges and very complex, that is how to provide a definition of citizenship education are very complex background of diverse cultural and linguistic (Mirza, 2011). Democracy is considered as a strong social system that is able to be accepted by society. As stated by Bhimji (2007: 106) which says that

Democracy is best among social systems if one accepts the idea that respect for the worth of the individual human being is the most highly valued of all human attributes. Respect for the worth of the individual means not only that human beings are to be treated with understanding, generosity, kindness, and compassion but that they have a right to be knowledgeable and to Participate with others in making the decisions that concern them and all of society.

It is basically a civic education must abandon practices of indoctrination, but in Indonesia where diintrnalisasikan civic education to the charge Pancasila and the Constitution NRI 1945 certainly can not be fully executed. As said by Sapriya (2007: 328) states that:

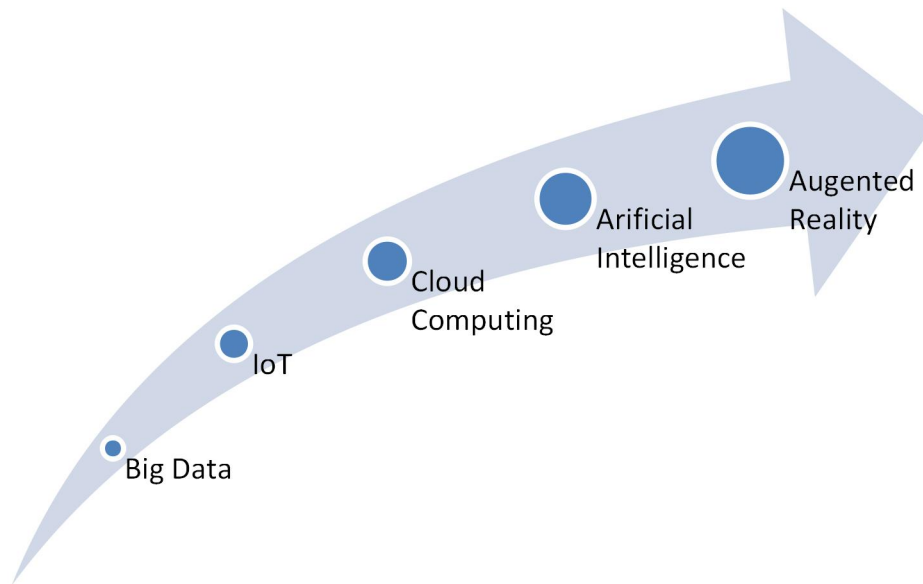
National character building through Civics directed as a vehicle to develop a state of mind, the concept of the intellectual, and the laboratories of democracy, not a tool of indoctrination except in the context of unavoidable indoctrination held at three facilities or educational environment that is informal education, formal and non-formal education, but the means as education is the foundation stone of a family environment (informal).

The opinion means that the State ideology indoctrination and basic laws of the State is still needed in order of value investment NRI ideology Pancasila and the Constitution of 1945.

Citizenship Education Curriculum

Curriculum developed by higher education or in this case as the spearhead courses are required to reconstruct the latest curriculum guidelines customize existing ones. Not change the overall, but adjustments can make the graduate curriculum of courses to compete with other college graduates. Moreover, the benefits can be felt is the students are able to accelerate the process of work with the help of digital technology. According Ellahi (2019: 707) there are five (5) composite variable that should be of concern in the preparation of a higher education curriculum refers to the industrial revolution 4.0 (Ślusarczyk et al., 2019). These five variables include Big Data, Internet of Things, Cloud Computing, Artificial Intelligence, Augmented Reality. The fifth variable is described as follows:

Image 1. Matrix curriculum for the Industrial Revolution 4.0



4.0 Industrial Revolution itself is a development than before the industrial revolution. The objective of the Industrial Revolution 4.0 is not only lies in increasing the productivity of the 21st century but also increase the flexibility and adaptability (Brik et al., 2019). In this era of internet and digitization role getting into all areas of human life. The process can also be regarded as the era of disruption or also known as disruption of technology in human life. Era disruption means the entry of roles unconsciously technologies have changed our lifestyle. The role of technology and digitization also affect changes in the way, the media and the habits of people, especially young citizens in the running of daily life (Machfiroh, Sapriya, Komalasari, 2018). The role of curriculum in this era is to balance and provide the foundation as well as integrate the student's ability to speed the pace of technology (Promyoo, 2019). In line with what is said by Spitzer (1998) which says that the use of technology is to make a person become information literate, and have the ability to locate, evaluate and use information effectively.

PPKn study program is one of the many courses in Indonesia as the spearhead of the implementation of the learning process in the world of higher education. As a program of study, course study program PPKn the course of the learning process in accordance with the rules that have been made through the national standards of higher education (SNPT) set out in the Regulation of the Minister of Research, Technology and Higher Education Republic of Indonesia Number 44 Year 2015 on National Education Standards High. In addition, some legal basis for curriculum development in PPKn study program is:

1. UU no. 20 of 2003 on National Education System
2. UU no. 12 of 2012 on Higher Education
3. Presidential Decree No. 8 of 2012 on KKNI
4. Permenristekdikti No. 32 2016 on Accreditation of Study Programs and Higher Education

Other than that, the course refers to an association agreement which facilitate scientific study program. In PPKn study program, the association called the Association of Professional Indonesia Pancasila and Citizenship Education (AP3Knl). The statement refers to the definition of the term curriculum existing curriculum in Article 35 of the Law No. 12 Year 2012 on Higher Education of paragraph (1) which states bring higher education curriculum is a set of plans and arrangements regarding the purpose, content, and teaching materials and methods used to guide the organization of

learning activities to achieve the objectives of Higher Education. The statement was reinforced by paragraph (2) which states that the Higher Education Curriculum referred to in paragraph (1) is developed by each College with reference to the National Standards of Higher Education for each study program that includes the development of intelligence, character, and skills. The statement in paragraph (2) implies that the curriculum developed by universities should be based on SNPT consisting of 24 (twenty four) standard. According to Article 1 (6) Permenristekdikti No. 44 Year 2015 on SNPT mentioned that the curriculum is a set of plans and arrangements regarding learning outcomes of graduates, the study materials, processes, and assessment used as a guideline study program operations. Curriculum oriented information technology will certainly be opportunities for information that exist throughout the world enter. The entry of global influence will greatly affect the formation of Civics objectives described above. Attempts to create learning methods make it more attractive Civic Education in civics curriculum in fact was never done. One of the efforts that have been implemented are made Civicpedia to aid teaching high school students in schools using digital technology (Abdulkarim, et al. 2018). However, efforts to continue to make civics curriculum and Prodi PPKn should always be pursued to adjust with the times. The entry of global influence will greatly affect the formation of Civics objectives described above. Attempts to create learning methods make it more attractive Civic Education in civics curriculum in fact was never done. One of the efforts that have been implemented are made Civicpedia to aid teaching high school students in schools using digital technology (Abdulkarim, et al. 2018). However, efforts to continue to make civics curriculum and Prodi PPKn should always be pursued to adjust with the times. The entry of global influence will greatly affect the formation of Civics objectives described above. Attempts to create learning methods make it more attractive Civic Education in civics curriculum in fact was never done. One of the efforts that have been implemented are made Civicpedia to aid teaching high school students in schools using digital technology (Abdulkarim, et al. 2018). However, efforts to continue to make civics curriculum and Prodi PPKn should always be pursued to adjust with the times. One of the efforts that have been implemented are made Civicpedia to aid teaching high school students in schools using digital technology (Abdulkarim, et al. 2018). However, efforts to continue to make civics curriculum and Prodi PPKn should always be pursued to adjust with the times. One of the efforts that have been implemented are made Civicpedia to aid teaching high school students in schools using digital technology (Abdulkarim, et al. 2018). However, efforts to continue to make civics curriculum and Prodi PPKn should always be pursued to adjust with the times.

III. Curriculum Citizenship Education in the 21st Century

Process improvements or revisions PPKn Studies Program curriculum tailored to the type of learning that emphasizes the 21st century 4C which include Communication, Collaboration, Critical Thinking, Creative and Innovative are needed in order to develop the ability of prospective teachers PPKn in facing the future. If we look at and carefully, in the 21st century will need the final results in an education is not only humans who can read, write and count. Far from it needs to be the final outcome of a process of education is human beings who are able to communicate, be able to collaborate, think critically and people who have the creativity. The need for a curriculum that prepares graduates capable of courses required PPKn ready to use in answering the challenges of an increasingly globalized world and the availability of existing resources in the world. As said by Teo (2019: 170) which states that "This is in response to a perceived need to help students navigate and optimize the opportunities and resources available in an Increasingly globalized and inter-connected world educational landscape". The statement means that the resources currently available in the world require collective management which ultimately must be collaborated and prepared in a form of education. 170) which states that "This is in response to a perceived need to help students navigate and optimize the opportunities and resources available in an Increasingly globalized and inter-connected world educational landscape". The statement means that the resources

currently available in the world require collective management which ultimately must be collaborated and prepared in a form of education. 170) which states that "This is in response to a perceived need to help students navigate and optimize the opportunities and resources available in an Increasingly globalized and inter-connected world educational landscape". The statement means that the resources currently available in the world require collective management which ultimately must be collaborated and prepared in a form of education.

21st century learning process according to Sahin (2009: 1465) were classified into three broad categories, information and communication skills, thinking skills and problem solving, and interpersonal and self-directional skills.

Table 1. Categories 21st Century Learning

Keterampilan informasi dan komunikasi	Keterampilan pemikiran dan pemecahan masalah	Keterampilan interpersonal dan self directional
<ul style="list-style-type: none">•Keterampilan Informasi dan literasi media•Kemampuan komunikasi	<ul style="list-style-type: none">•Berpikir kritis dan sistem•Identifikasi masalah, formulasi dan solusi•Kreativitas dan rasa ingin tahu intelektual	<ul style="list-style-type: none">•Self-arrah•Akuntabilitas dan kemampuan beradaptasi•Tanggung jawab sosial:Tanggung jawab sosial

Based on the above Sahin opinion, the role of information and media literacy skills are an elaboration of the need for technology to support the learning process to prove that the technology is so important and it is necessary for building a learning process. This is supported by statements Sahin (2009) which states that throughout human history, education shaped by human needs and is set up for it. Because the demand for technology is considered very important for humans, the process of education at every level directed towards improving critical thinking and technology literacy. This is reinforced by the statement that in the future, the use of the Internet will continue to grow taller because of the production of mobile phone devices has exceeded 2 billion and is expected to surpass 2.7 billion (Hanchman, 2011). Translation of the 21st century learning process (Partnership for 21st Century Skills, 2008) can be described in the following points:

1. Emphasize core subjects.
2. Emphasize learning skills.
3. Use the tools to develop the learning skills of the 21st century.
4. Teach and learn the context of the 21st century
5. Teach and learn the content of the 21st century
6. Use of the 21st century ratings that measure 21st century skills

Development of technology and patterns of learning requires participants to be able to adapt to the changing times and were able to welcome a new era in education. As an institution that prepares candidates for educators as a profile of its graduates, PPKn study program must develop a learning curriculum that corresponds to the development of 21st century learning in the 21st century learning is closely related with the development of technology in the learning process. The

problem is that in this era of all parties involved in the world of education should be able to follow and even master the technology in education. Technology is no longer seen as a means of production, and also no longer just synonymous with the world of industry. However,

Image 2 The concept of 21st Century Learning



Seeing the concepts described above it is clear bahwasannya the teacher's role is very important in preparing for life and skills that will be owned by the learners. Teachers should be able to accelerate the ability of learners through their skill. Teachers should be able to master the learning process through a variety of innovations and skills of students through the process of critical thinking, communication, collaboration and creativity possessed. And teachers should be able to master the information, the media and the ability to master technology, especially the technology in the learning process.

Teacher Challenge In The 21st Century by Surakhmad (in <https://www.defantri.com/2018/04/konsep-dan-prinsip-pokok-pembelajaran.html>) Suggests there are four properties that appear in the 21st century that affect the lives and human civilization, namely:

1. That there will be major changes in almost all areas of life, and that the change will take place increasingly accelerated.
2. That the role of science and technology will take a central position that directly affect not only the style of everyday human life, but also affect the values of art, morals and religion.
3. That fight and competition between nations living will not be limited to the economic field, but also in various other fields, including the field of culture and ideology.
4. That because of the influence of science and technology, moral values and religion will be immediately pulled out and is not impossible to generate a different value system than what is known to date. Along with the central role of science and technology, the development of science and technology-based industry will develop rapidly.

Based on these opinions, it can be interpreted that 21st century learning is closely associated with the era of the industrial revolution was 4.0 which requires all stakeholders in education to be able to adapt to changing times. So as to master the technology we need to also be aware of the negative effects caused by the changing times.

The need for skill possessed the ability of citizens in the context of civics called the Civic Skills. The second essential competence of civic education (Civics) in a democratic society is the skills or abilities citizenship (civic skills). Branson (1998: 17) in Winarno (2012: 145) states as follows.

If citizens mempratikkan their rights and fulfill their obligations as a sovereign member of the community, they not only need to master the basic knowledge, as manifested in the five questions as outlined in advance, but they need to have the skills that are relevant intellectual and participatory. Citizenship intellectual abilities though can be distinguished from each other but can not be separated from the content. Critical thinking skills on a particular political issue.

Intellectual abilities that are important for the citizens who are knowledgeable, effective, and responsible, referred to as the critical thinking skills. Intellectual skills that include the ability to identify, describe, explain, analyze, assess, take, and defend positions on an issue (Branson in Winarno, 2012: 146).

Skills nationality mentioned include the skills to participate in the life of the nation, participate actively to make the civil society (civil society), skills to influence and monitor the running of the government and the process of political decision-making, problem-solving skills of social, skill to hold the coalition, collaboration, and manage conflict.

At the same time, according to Setiawan (2014: 64) skill citizenship (civic skills), the skills developed from knowledge of citizenship, so that the knowledge acquired into something that is meaningful, because it can be used in dealing with the problems of the nation and state. Civic skills include intellectual skills (intellectual skills) and participation skills (skills of participation). Intellectual skills are important for the formation of citizens who are knowledgeable, effective and responsible among other critical thinking skills. Critical thinking skills include: identify, describe / describe, explain, analyze, evaluate, determine and hold opinions regarding public issues.

In the context of this study, civic skills or skills of citizens turned its attention to how the student as a candidate for a teacher to have the technological ability khususnya IT technology that is able to facilitate the learning process and being able to innovate in developing content-learning content in accordance with the teaching of the 21st century and advances in the era revolusi industry 4.0.

The importance of citizen skills in accordance with that described by Osman and Marimuthu (2010), which explains that As society changes over time, more skills need to be acquired in order to prepare for a better future. The opinion means that the changes taking place in the world from time to time, make people highly skilled in order to prepare a better future. The future is a future that is prepared with human skills therein. Digitization various aspects of life make the curriculum organized by PPKn Studies Program should be oriented on the skills of the use of technology, especially digital technology.

IV. Conclusion

The problems that arise in the flow of technology and digitization is the conventional attitude that shut out the influence of the technology that goes. In fact, we may not be able to stem the influence of technology. If we look at what has happened in the early 20th century when Henry Ford takes about 20 years to sell 15 million units of cars but this time the smartphone manufacturer has succeeded in marketing the 1.5 billion smartphones in just one year ie 2015. Engineering search like google and Wikipedia as an information center has managed to subvert the encyclopedia Britannica that have been running for 250 years in a row. Then, the time spent by Internet users is more than 20 hours per week (Anonymous, 2016). Recognizing this, naturally the world of education began at this time and especially civic education must adapt to these developments in accordance with the progress of technology and information. Not that replaces the role of an educator in conveying knowledge to students in the context of higher education, but how the one who must begin to adjust to the changing times. Developments in information technology and then not simply eliminate the teachings about morals and character, but setting up the digitization of education is also very important to be implemented. Very large role of universities in fostering students' ability to master the technology.

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