

# Indonesian Youth Readiness in Supporting Unlimited Education Society 5.0

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**Abstract-** Over time, Indonesia increased its behavior and their internet usage, one of which is social media. The results of this study analyses the changes in internet use behavior and collaborative education strategies in welcoming unlimited education society 5.0. The method in this study is a mixed-method (mix method design) with the type of embedded congruent which quantitative and qualitative data collected in a one-time step, where quantitative data is more dominant than qualitative. Data collection technique is cluster random sampling with a population of 1000 people with a sample of 480 people is a teenager with an age of 11-19 years old. We analyze data using descriptive statistics from the average frequency. The results of this study show that (1) internet users are increasing with 99% using mobile phones, an average of 90% surfing the internet using mobile phones for 2-3 years; 99% internet usage with mobile data; most popular social media is Facebook and Instagram; and 90% of the users do not cross-check the content (2) strategies for teenagers in welcoming an unlimited education society 5.0 is collaborative education with a controversial approach to utilize technology.

**Keywords:** *teenager, unlimited education, society 5.0, collaborative*

## I. INTRODUCTION

The development of technology is rapid or disruptive and currently known as the new civilization of the industrial revolution 4.0. It causes changes in the human lifelines in their economy, politic, culture, and social aspect. The nation and state of Indonesia need to prepare the alertness for this alteration, especially for the young generation. International political events will come, and the developed countries will crush the other countries who are unable or not having the skill to manage technology. It is following the proverb of who controls the technology will master the resources. Indonesian teenagers must know the cautious aspects of the digital age.

The origin word of digital comes from Greek with the meaning of fingers. However, based on Ribble and Mike (2016) [1], digital is a mathematical code media that can be projected and accessed by humans as users. The cognitive domain, according to Ki Hajar Dewantara, is known for Cipta, which means the cognitive domain from low order thinking to high order thinking. Bruner (1973) state that knowledgeable people are skilled or capable of solving problems. It starts from social interaction, hypothesis making, and ending with generalization. Based on Bruner's

analysis (1987), suitable learning is inquiry and discovery ([http://www.psych.nyu.edu/people/faculty Bruner](http://www.psych.nyu.edu/people/faculty/Bruner)). In this study, the development of knowledge corresponding to Jerome S Bruner because the cognitive revolution theory is based on psychological culture, which is seen from a historical perspective and social context.

Digital media includes information and communication, indicate how to obtain and generate knowledge and communication tools to obtain and disseminate knowledge (Schroeder, 2018) The world of education has an important role in preparing students, especially teenagers in the digital age because of the tremendous enhancement of knowledge in the use of new media (Gates, 1996).

Digital media, especially social media, has become an inseparable part in the lives of Indonesian children and teenagers today. It is related to the lifestyle of children and adolescents in Indonesia today. In this case, efforts are needed to increase awareness, knowledge, and skills with internet security. It is necessary to know important information about how young people use social media, the motivation for using the communication media, and the potential risks in the digital world.

From the beginning of the decade of the development of the internet in the 1990s Indonesia internet users have changed very rapidly. The last ten years of use, there has been a very rapid change in the use of digital media from an infrastructure perspective (APJII, 2018). Therefore, technology as a medium for preparing Indonesian youth in welcoming Rev 5.0 and the need for collaborative education and learning methods between parents, schools, and the environment.

## II. THEORETICAL REVIEW

Ribble and Mike (2016), digital is a mathematical code media that can be projected and accessed by humans as users. In the 21st Century competence (21 Century skill), it can be strengthened related to digital skills according to Van Der Djik (2012, p. 49) that "there are 6 digital skills that must be possessed by citizens in the digital era, namely operational, formal, information, communication, strategic, and content creation. The explanation of every skill that must be possessed by citizens is: the ability to operate technology means to be able to use technological devices (operational); the next step is able to browse and navigate (formal);

selecting the browsing and navigating results and evaluating information obtained from digital media (information), the ability to communicate through social media (communication), being professional in using digital media (strategic), contributing in digital media (content creation) (Van Der Djik, 2012).

Trilling and Fadel (2009) reveal three 21st century competencies that often referred to as "rainbow 21st-century knowledge skills", namely:

1. "Life and career skill" competence state that education must be able to prepare teenagers having the skills to live and have a career. It means students should have the skills to live independently and ready for the world of work later.
2. Competence of "learning and innovation skills" means education must be able to create a learning process that develops young people's learning and innovation skills.
3. "Information media and technology" competence, namely education must prepare youth as students to have skills in the use of information and technology media or information and technology media literacy.

### III. RESEARCH METHODS

The method in this study is a mixed approach method of the survey and sequential explanatory. The research location is the city of Bandung with the object of research are middle school students, teachers, and citizenship education experts. The data collection technique is questionnaires and interviews with junior high school students in Bandung with a sample of 480 people. Besides, we collect data through observation and documentation. Data analyses using descriptive statistics with weight mean scores.

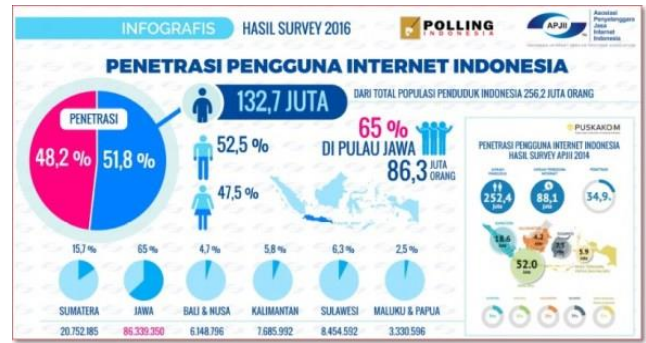
### IV. RESULTS AND DISCUSSION

#### A. Internet Usage

Social media has become an inseparable part of the lives of Indonesian children and teenagers today. It is related to the lifestyle of children and teenagers in Indonesia lately. In this case, efforts are needed to increase awareness, knowledge, and skills with internet security. It is necessary to know important information about how young people use social media, the motivation for using the communication media, and the potential risks in the digital world. From the beginning of the decade of internet development in the 1990s Indonesia internet users have changed very rapidly. The last ten years, the use of social media also changes its physical infrastructure from a PC to a smartphone.

According to the survey results of the Indonesian Internet Service Providers Association (APJII) in 2017 conducted on 2000 internet users in 42 cities in Indonesia both rural and urban shows that the penetration of internet users in the 2017 survey results showed 54.68%. The Association of Indonesian Internet Service Providers (APJII) revealed the number of internet users in Indonesia reached 132.7 million by the end of 2017 can be seen in the following table.

Figure 1. Data of internet user in Indonesia



(Source: www.apjii.com survey result 2017, accessed at 6 September 2018)

Based on the above table shows that the largest amount of internet users is 16.4 million in West Java. On the other hand, East Java has 12.1 million users, and Central Java has 10.7 million users. The fact is internet users in Indonesia increasing. The survey results of the Ministry of Communication and Information and UNICEF in 2012 tracing online activities from a sample of children and teenagers with the age of 10-19 years old (400 respondents) indicate that 79.5% using the internet.

The Indonesian Internet Service Providers Association (APJII) classifies the level of internet usage in Indonesia based on gender, age, length of access, and motivation to use the internet as described in the following explanation.

#### 1. Gender

A survey conducted in 2017 showed that there were more male internet users than female internet users. It shows a difference between the results of the 2014 survey state that there were more women than men. The majority of these internet users live in urban areas. Meanwhile, the results of the 2017 APJII research still show the same phenomenon, that most internet users live in Western Indonesia. Almost all provinces in Indonesia have the same gender ratio.

Two of the three provinces, Riau and East Kalimantan, are dominated by male internet users. The number of male internet users in the Riau and East Kalimantan is 77% and 67% respectively. Meanwhile, the number of internet users in DKI Jakarta province is 73% and dominated by women. Besides, the number of male and female internet users is only 23%.

#### 2. Age

Based on user age, the majority of internet users in Indonesia are aged 18-25 years old, which is equal to almost half of the total number of internet users in Indonesia (54.68%). It means that the segment of internet users in Indonesia are those who fall into the 'digital natives' category. Digital natives are users who are born along with the existence of the internet.

#### 3. Access time

More than 80% of internet users in Indonesia access the internet at least once a day. The average internet user in Indonesia accesses the internet for 1 hour per day, which is 35.3% of the total internet users in Indonesia. For a long time

using this internet, there is no difference between internet users who are male and female. Compared with the 2014 survey of internet users in East Nusa Tenggara, West Nusa Tenggara, Maluku, and Papua were the most widely accessing the internet for one hour, in 2017 for 4 hours.

#### 4. Internet Usage Motivation

APJII 2017 survey data states that there are three main reasons Indonesians use the internet. The three reasons for internet usage are to access social/communication facilities (72%), daily information sources (65%), and follow the changing times (51%). The three main reasons for accessing the internet divided into four main activities, namely using social networks (87%), finding information (69%), instant messaging (60%) and searching for the latest news (60%). The results of the 2017 APJII survey indicate that there is a great necessity to obtain information from the internet by downloading information. 60% of all internet users in Indonesia claim to download information in a large capacity.

In the 2014 survey, online shopping began to bloom in Indonesia. Nevertheless, most internet users in Indonesia are not too brave to take part in this online shopping. According to this survey, female internet users are more willing to shop online (58%) than male internet users (42%). Almost 72.7% of internet users said they had never done online shopping. The main factor that discourages internet users from doing online shopping is a long process, and the goods are not the same as in the picture with a percentage of 59.5% and 38% respectively. It is different in the 2017 survey that 72% of internet users have done online shopping, where women (63%) are more dominant than men (37%). The five commodities of internet users in Indonesia are fashion (72% of users), cosmetics (20% of users), gadgets/communication devices (17% of users), travel services (9.7% of users) and books (9.7% users). The largest online transaction value at a value between 200,001-300,000 (24.1%). The internet used for online sales is 14% because of the fear of being deceived.

Unlike the results of a survey conducted by the Ministry of Communication and Information in 2012 that children and teenagers have three main motivations for accessing the internet: to search for information, to connect with friends (old and new) and for entertainment. Information search is often because of schoolwork, and the use of social media and entertainment content is because of personal needs.

#### B. Collaborative Education With Controversial Approach To Welcoming To Rev.5.0

Digital media, as new media entering the 21st century, has become an inseparable part of the daily lives of children and teenagers in Indonesia. Education becomes essential in preparing 21st-century students to increase their awareness, knowledge, and skills of internet security. The results of a survey from the Ministry of Communication and Information of 2012 showed that children and teenagers know how important it is to use passwords in personal accounts. It includes understanding how they interpret and use digital technology, online communication, and risk or insecure behavior. Education has a role in preparing the skills and competencies of students or teenagers facing the digital era. Trilling and Fadel (2009) reveal three 21st century

competencies that often referred to as "rainbow 21st-century knowledge skills", namely:

1. "Life and career skill" competence state that education must be able to prepare teenagers having the skills to live and have a career. It means students should have the skills to live independently and ready for the world of work later.
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In the 21st Century competence (21 Century skill), it can be strengthened related to digital skills according to Van Der Djik (2012, p. 49) that "there are 6 digital skills that must be possessed by citizens in the digital era, namely operational, formal, information, communication, strategic, and content creation. The explanation of every skill that must be possessed by citizens is: the ability to operate technology means to be able to use technological devices (operational); the next step is able to browse and navigate (formal); selecting the browsing and navigating results and evaluating information obtained from digital media (information), the ability to communicate through social media (communication), being professional in using digital media (strategic), contributing in digital media (content creation) (Van Der Djik, 2012).

Based on survey results of APJII, the Ministry of Communication and Information Technology and Van Der Djik (2015), the importance of competencies that young people must-have in the digital era, shows that children and young people are interested in learning the internet, so the security education is needed. Campaign actions or programs that are designed to meet these needs must be based on empirical evidence and involve children and teenagers themselves so that the campaign or program is right on target. However, the results of a survey conducted show that some parents do not assist the use of the internet and not being friends in social networks (supervision). The parents and teachers need to supervise and accompany their children in their digital activities, and involved in it. For example, parents can become 'friends' on children's social networking accounts, because this is where children and teenagers 'play' in cyberspace. Between children, parents, schools and the media must collaborate in one forum so that intensive communication with children is created to create a safe and positive environment for the growth and development of their children in the cyber world.

Social media, as part of the digital age technology, caused a shift in both habits and values of society almost all over the world. Social media addiction makes a person spends a lot of time on social media and always forces curiosity on social media that affects virtual tolerance and virtual communication (Sahin, 2017, p. 120). People who spend too much time on social media tends to cause virtual tolerance and virtual problems. We should avoid spending too much time on social media.

Lately, the values that should be held and become part of the development of noble morals began to fade with the development of the digital era. We should anticipate the development of digital habits. Concerns about the impact of social media were also expressed by Allen, Ryan, Gray, McInerney, & Waters (2014, p.30) that people use social media because of entertainment and social activities such as playing online games, posting photos, participating in online donations, communication. Wasting time becomes the anxiety and contrary to noble morals.

However, there are positive digital habits that help develop noble morals, one of which occurs in the pattern of managing student learning media in schooling. Al-Dheleai's research (2017, p.176) revealed the benefits of using Facebook as a learning connector directly or indirectly. Facebook, as one of the social media platforms in the digital era, shows the development of positive perceptions on student interactions with peers. Facebook becomes a discussion tool when students face difficulties during the study. Virkler (2016) revealed that social media and Google helped students to find the information needed when doing assignments.

Development of noble character through good digital habits following the data reported by McGraw-Hill Education's Higher Education Group '2017 Digital Study Trends Survey'. They asked more than 1000 students about the use of technology in universities and schools. The results show that digital technology has helped in the learning process where as much as 65% have improved grades, 61% of students feel helped in preparing for examinations with digital technology, 82% of students study and do assignments using laptops, 35% of students work on cellphones to complete homework and preparing for exams (Virkler, 2016).

Based on 2017 Digital Study Trends Survey data, there are positive impacts obtained from developments in the digital era to increase student interest in learning. This benefit connected in the context of the development of noble character. Because with the sincerity and usefulness felt by students related to the digital era platform can more or less encourage students to optimize their abilities to get the best learning results.

Civics is a transdisciplinary education of all social sciences, including scientific and humanist education and religious norm. Education science must exist because it is a method of education itself. Civics as a transdisciplinary discipline as a combination of political science and education are based on the nation's fundamental principles and religious values so that what must be developed by the community of scholars is the body of speaking, the body of writing, the body of thinking (Somantri, 2016).

According to Somantri (2016), controversial issues will be dominant in civics study because civics educators/teachers must get used to learning methods with a controversial issues emphasis. It needs to do to make young people accustomed to the way of life-related to controversial issues. Hess (2002) shows that the discussion of controversial public issues can increase students' willingness to participate in politics. Civic teachers/lecturers are required to have broad knowledge and

material substance to deal with various controversial issues. We need various technical demanding on teaching such as decision, making process, resolution, conflict approach, problem-solving approach, and so on. Winataputra and Somantri (2017), the teacher/lecturer should have the role of a scientist, well informed, and well-dedicated teachers.

According to Winataputra and Somantri (2017), teachers of Civics and Social Sciences must have a high profession that classified into 3 groups, there are:

#### 1. Didactic group role

Didactic roles are conventional roles that can develop into a scientific role. The lecturer should make a good question and model to build a good role model. Nowadays, education in Indonesia has begun to train teachers to create high-level or C4 level questions. In this role, the teacher must be active in reading and searching for the latest information about controversial issues from various sources and theories. The teacher will strengthen related to the nation fundamental rules and 4 national pillars as a rationale for students before entering the discussion of controversial issues. It is necessary because the controversial issue is very susceptible to misunderstanding in thinking because it is only at the level of logic.

#### 2. Reflective role

The reflective role is the role of science; how scientists / social scientists think. We did not need to use this role continuously because the process requires a long time, so we need to leave it and use it occasionally. In this role, the teacher can give assignments to inquiry-based students. Learners conduct mini-research ranging from setting the problem to the follow-up in determining the proposed policy and reflecting on the results of the activity.

#### 3. Affective/Evaluative role

The affective/evaluative role starts with perception, hesitation, hypothesis making, and cubicle test. In this role, students discuss and solicit opinions about controversial issues then test their hypothesis in the reflective (inquiry) role. After each end of the lesson, an evaluation is carried out.

The three roles/rules above must be carried out in a balanced and integrated way in civics study. Any role that will be performed by a good teacher/lecturer if he plays it in a balanced manner, and depends on the condition of something and other independent variables such as the quality of the content, eternal environment, educational media, schools, and the nation and state community.

In the digital era, the teacher has an important role as the director that understands each student and makes the learning process more meaningful, so the goals achieved. It is consistent with Davies and Ellison (1999, p. 10) that educators have a fundamental role in the learning process. Somantri (2016) explains that civic is a power that has a deeper meaning. Brameld (1950), [18] declares education as the power that competent and strong enough to enable us, the majority of people, to decide our hope. It means education has a strong authority to determine what kind of the world we want and what kind of way used to achieve that goal. Brameld believes that creating a developed country can use education.

Based on the Minister of Education and Culture Regulation No. 22 of 2016 concerning the Basic and Secondary Education Process Standards explains that teachers in achieving the 2013 curriculum must:

1. Be a role model for students in living and practicing the teachings of their religion and creating harmony in life together. live and practice honest behavior, discipline, responsibility, care (mutual cooperation, cooperation, tolerance, peace), polite, responsive and proactive and show attitude as part of the solution to various problems in interacting effectively with the social and natural environment and in placing itself as a reflection of the nation in the world community.
2. The teacher adjusts the seating arrangements of students and other resources according to the objectives and characteristics of the learning process.
3. The volume and intonation of the teacher's voice in the learning process must be well heard by students.
4. The teacher is obliged to use polite words, straightforward, and easy to understand by students.
5. The teacher adjusts the subject matter with the speed and learning the ability of students.
6. The teacher creates order, discipline, comfort, and safety in organizing the learning process.
7. The teacher provides reinforcement and feedback on students' responses and learning outcomes throughout the learning process.
8. The teacher encourages and appreciates students to ask questions and express opinions.
9. Teachers dress modestly, cleanly, and neatly.
10. At the beginning of each semester, the teacher explains to students the syllabus of the subject;
11. The teacher starts and ends the learning process according to the scheduled time.

Based on the explanation in the regulation of the Minister of Education and Culture above, it is clear that in the 2013 curriculum, it has directed the teacher as director of learning.

## V. CONCLUSION

Technology as a medium for preparing Indonesian youth in welcoming Rev 5.0 and the need for collaborative education. Internet users an Indonesian are increasing with 99% using mobile phones, an average of 90% surfing the internet using mobile phones for 2-3 years; 99% internet usage with mobile data; most popular social media is Facebook and Instagram; and 90% of the users do not cross-check the content. Strategies for teenagers in welcoming an unlimited education society 5.0 is collaborative education with a controversial approach to utilize technology.

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