

# Critical Thinking Skills of Civic Education Teacher Candidates in Digital Age 21 Century

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**Abstract.** The purpose of this article is to describe the need for critical thinking skills of Civic Education teacher candidates in the digital era in PPKn department of Pasundan University. Through a qualitative approach with descriptive methods and data collection using observation, interviews and documentation, the results show that the critical thinking skills of Civic Education teacher candidates in the PPKn department of Pasundan University are needed to face the challenges of the digital era. Therefore critical thinking skills for teachers candidates must be improved to prepare graduates as teachers who are ready to use in the school environment. This is reinforced by various efforts by the PPKn department of Pasundan University in improving the thinking skills of teacher candidates through curriculum updating, improving the quality of human resources and utilizing technology in learning process with the concept of blended learning.

**Keywords:** Critical Thinking, PPKn Teacher Candidates, Digital Era, *Blended Learnig*.

## 1 Introduction

The development of science and technology are increasingly advanced make challenges and opportunities in the field of education, especially higher education levels. The rapid changes in information and communication technology in the digital age have led to disruptive changes. Disruptive changes provide ease of accessibility of information through the use of the internet, also has an impact on changing the mindset, attitude patterns, and patterns of citizens' actions to become fast, and easy [1]. Therefore, various adjustments must be prepared in the face of all changes that occur in the digital era as it is today. Higher education institutions face a number of opportunities and challenges as the result of the digital revolution. This is because higher education institutions perform a number of scholarship functions including teaching and research which are affected by the availability and usage of digital technologies [2]. One of the abilities that must be possessed by academic people in higher education is critical thinking skills, this skill becomes very important especially the many challenges that need to be faced in future generations. Chruchill [3] say, Power in the future is the power of thought.

Critical thinking as an element of the nation's intelligent character must be developed in the world of schooling to tertiary institutions. This was stated by Wahab which said that teachers sometimes only use convergent thinking while thinking divergent is very lacking, whereas thinking like this is very important for student [4]. On the other hand, Sapriya perceives that there is a tendency that there has not been a high level of awareness among educators in schools to teach students about the rapidly developing world conditions which demand a response with critical thinking [5]. Enis (defines critical thinking as 'reasonably going about deciding what to believe and do' [6]. In other words critical thinking means being

able to use the right mindset in deciding what will be accepted or believed and what will be done or done. To improve critical thinking skills in students, the main role that influences it is the teacher. Teachers in the 21st Century are not proficient teachers in every topic in the curriculum, but must become experts in finding out together with their students, knowing how to do something, knowing how to know something or how to use something to do something new. An important role of a 21st century teacher is their role as a role model for trust, openness, perseverance and commitment for students in the face of uncertainty in the 21st century [7].

Based on the description above, it is necessary to strengthen the critical thinking skills of students who are studying teacher training in an effort to prepare prospective teachers who are qualified especially in critical thinking skills. As a Civic education teacher candidates in the face of the digital era, he must be able to master his critical thinking skills which will later be applied in his life as a Civic Education teacher at school. Teachers in the digital era have several challenges as Diplan pointed out that the challenges of teachers in the millennial era are very heavy compared to teachers in the previous era. In addition to mastering aspects of scientific material being taught. Teachers are required to understand technology and always be a creative and innovative person. Teachers must become role models for students in the millennial generation, so that students understand the Challenges of Educators in the Digital Age technological boundaries, so as to avoid the wrong use of using technology [8]. Furthermore, other opinions reveal technology changes how we think, gather and produce information. In particular, the Internet changes our lives and ways of thinking [9]. Another opinion suggests that New technologies may help our students augment their personal and collaborative intellectual resources in a way that makes knowledge creation feasible. This does not happen without scaffolding of the surrounding learning environment and more experienced peers, parents, and teachers [10]. This revealed that students need teacher guidance in the use of technology in learning so that they will develop their knowledge and thinking abilities.

Based on description the purpose of this study is to identify critical thinking skills of Civic Education teacher candidates and also how the PPKn department's role in improving critical thinking skills 21 century digital era. Therefore the researchers focused their research on Civic education teacher candidates in the PPKn department of FKIP Pasundan University.

## **2 Research Method**

The research method is a way of working to collect data and then process data so as to produce data that can solve research problems. The method used in this research is a case study with a qualitative approach. Case studies are research strategies in which researchers investigate carefully a program, event, activity, process, or group of individuals. Cases are limited by time and activity, and researchers gather complete information using various data collection procedures based on a predetermined time [11].

The choice of method is carried out by the authors by adjusting the characteristics of the problems faced. As revealed by Yin states that "case studies are a more suitable strategy if the main question of a study regarding the how or why, if research has little opportunity to control events to be investigated, and when the focus of the research lies in contemporary (present) phenomena in the context of real life. [12]. Data and information obtained through interview techniques, observation and documentation studies. Interviews were conducted to the leaders

of the study program, lecturers and students as informants, with a purposive sampling. The number of samples used is 1 head of the study program, 2 lecturers and 6 students, then observations were made in the learning process to observe student activities in learning, while documentation is carried out on supporting documents such as curriculum structure, academic documents and others. After the data is collected, analysis is performed using display reduction and verification techniques.

### **3 Results and Discussion**

#### **3.1 Result**

Research findings related to the need for critical thinking skills in PPKn teacher candidates in the PPKn department of Pasundan University that PPKn teacher candidates who are currently studying will face various challenges along with the development of science and technology.

To complement the data that will strengthen why PPKn teacher candidates need critical thinking skills, researchers are using data collection techniques through interviews conducted by the Chairperson and lecturers of PPKn department of Pasundan University researchers conducted to dig up information about the special program PPKn department of Pasundan University in dealing with 21st Century learning and implementation of the program. The resource person gave an answer that the PPKn department of Pasundan University had several special programs that could support the improvement of critical thinking skills of prospective teacher students in the digital era, namely the use of technology in learning. PPKn department of Pasundan University has given policies to all lecturers and students to provide learning services using technology,

Furthermore, information from sources relates to prepare graduates who will become teachers with the challenges of learning in the 21st century. Speakers said that it has always been prepared with a learning process that utilizes technology and problem analysis. digital era.

Information obtained from resource persons regarding learning strategies in the in the digital era, the resource person stated that as an educator he prepared it by providing understanding to the challenges faced in 21st century digital learning. Then he also used problem-based media in learning to train students in critical thinking. While other speakers stated that they used a strategy in the method of presentation and group discussion in an effort to get used to students to become prospective teachers who would face students in later learning.

Based on the findings of research conducted by researchers at the PPKn department of Pasundan University shows that PPKn teacher candidates must fulfill critical thinking skills in the face of digital age learning. This is an effort to meet various adjustments in the context of PPKn learning which increasingly require innovation and strategy in the learning process.

PPKn department of Pasundan University is committed to improving critical thinking skills for prospective PPKn teacher candidates. Some things that become an effort in improving critical thinking skills are curriculum updating, curriculum updating arranged to support the development of student academic skills. The effect of the curriculum on the achievement of graduates is significant, therefore the preparation of the curriculum becomes the main focus in efforts to improve the skills and quality of graduates in the PPKn department of Pasundan University. The next effort is to improve the quality of lecturers. Based on

observations from the PPKn department of Pasundan University, lecturers are in accordance with their qualifications. In addition, the lecturer periodically participates in training in various fields both improving the quality of learning, research and community service. In the case of online learning, lecturers of the Study Program have attended training in order to increase the understanding of lecturers in mastering learning technology. Furthermore, efforts to improve the quality of learning. Based on the observations of the researchers the learning process in the PPKn department of Pasundan University runs in accordance with the provisions and requirements contained in the applicable curriculum standards which consists of face-to-face learning and online learning. Online learning process is carried out in a number of courses that are tailored to the demands of the curriculum. Online learning uses 2 types of media, the first is learning with moodle applications that are integrated with the FKIP domain of Pasundan University. and the UBL LMS CLOUD application with the Pasundan university domain

### **3.2 Discussion**

In learning, the achievement of understanding and critical thinking skills is far more important than learning achievement he argues that they are more likely to be motivated to provide solutions that resolve contradictions. This shows that Critical thinking skill can be fulfilled with researching, differentiating and evaluating information and reflecting information that will be used to make judgments and make decisions.

Based on the description above the researcher believes that critical thinking skills for Civic education teacher candidates are a need that must be met especially in the 21st century digital era. Teacher candidates in the PPKn department of Pasundan University need a skill that will accompany them in their activities as academics and later become a practitioner in an educational environment. In the 21st century digital education, teachers are required to have a more improved mindset than before. Eggen and Kauchak emphasized that standards for 21st century or digital age schools for teachers and students relate to the application of technology in learning. Teachers must be able to prepare their students to live in the digital age, one of which uses their knowledge of subject matter [13].

Based on interviews with leaders of the PPKn department of Pasundan University and Pasundan University PPKn Lecturer Study staff that teacher candidates of the digital age teacher in the 21st century must be prepared to become professional teachers with expertise in managing learning well, improving the quality of thinking and utilizing technology in the learning process. He also conveyed that critical thinking skills in the world of education are the main objective of the success of a learning process. Becoming a citizenship education teacher must also have good information and literacy skills, given the broad field of study of these subjects, in addition to that the civic education teacher also needs to give students opportunities to explore their abilities. The challenge for teachers in learning the digital age is how they are able to improve students' critical thinking skills as revealed by Szabo that The challenge for teacher educators is to use this environment in a way that offers high-quality educational experiences which promote critical thinking skills. Blackboard discussion forums offer one tool to accomplish this goal. [14].

Based on the description above it can be seen that improving critical thinking skills requires efforts by education providers in this case PPKn department of Pasundan University has made various efforts in preparing professional teacher candidates. Some of the efforts made are described as follows,

First, updating the curriculum. Determination of a curriculum will affect how achievement and goals of an educational organization will be achieved. The results of updating the

curriculum in the PPKn department of Pasundan University can encourage prospective teacher students to improve critical thinking skills. This is evidenced by changes in the preparation of graduate learning outcomes or CPL that direct graduates to adjust to the learning of the 21st century digital era which has the characteristic of changing mindset on learning high-level thinking that includes critical thinking skills. In addition to the achievement of graduate learning outcomes of curriculum renewal that leads to the 21st century digital education namely the establishment of several elective courses that support the challenges of 21st century education including, interpersonal skills courses that students can choose in this final semester facilitate students in developing their potential possessed so as to improve the quality of capabilities. In addition there are also digital-based learning media courses that aim to prepare prospective teacher students in facing technological developments in the learning process. Interpersonal skills courses that students can choose in this final semester facilitate students in developing their own potential so that they can improve the quality of their abilities. In addition there are also digital-based learning media courses that aim to prepare prospective teacher students in facing technological developments in the learning process. Interpersonal skills courses that students can choose in this final semester facilitate students in developing their own potential so that they can improve the quality of their abilities. In addition there are also digital-based learning media courses that aim to prepare prospective teacher students in facing technological developments in the learning process.

Second, the efforts made through the development of the quality of the PPKn department of Pasundan University. In addition to the curriculum the factors that influence the success and quality of learning outcomes are human resources, as lecturer educators in the PPKn department of Pasundan University have qualified capacity in implementing the tri dharma of higher education. In the learning process the lecturers of the PPKn department of Pasundan University have adapted methods and media to the demands of the development of science and technology. This is in line with Corebima et al suggest that critical questions and quality answers will never arise from the class as long as the teacher has never modeled them [15].

In addition, the lecturers of the PPKn FKIP Pasundan University periodically always try to improve the quality of the profession by attending various national and international training and workshops. Likewise with research and community service, based on the results of observation and documentation on the research documents and devotion of lecturers. Lecturers of the PPKn department of Pasundan University routinely carry out research and community service in accordance with their fields of science and studies and are published in national and international reputable journals.

Third, efforts to improve the quality of learning. In accordance with government regulations No. 19 of 2005 concerning National Standards of Education, the implementation of learning at all levels of education is expected to be held interactively, inspirational, fun, challenging, motivating students to participate actively, as well as providing sufficient space for initiative, creativity, and independence according to their talents, interests, and physical and psychological development of students [16].

The learning process carried out in the PPKn department of Pasundan University is used with two types of learning methods namely face-to-face learning and online learning (e-learning) which is then referred to as the combination of learning or Blended Learning. Blended learning is a learning model that combines face-to-face learning (face-to-face) with e-learning. Blended learning is a new concept in learning where the delivery of material can be done in class and online [17]. The face-to-face learning process is prioritized for student activities and interactions and focuses on students as a learning center. One factor determining the success of forming students' critical thinking skills is expertise in selecting

and using appropriate learning models. This will encourage students to be actively involved in the process in the classroom. In addition, some courses also use a presentation method where students as presenters of the material and other friends as listeners through this method of communication between students have been seen in the learning process in class but students still need increase the confidence to dare to convey ideas in the learning process.

Then in the learning process of using two alternative media used with the domain of the institution, the first is moodle media which has the FKIP domain of Pasundan University. And then UBL / LMS CLOUD with Pasundan University domain. Both of these media are used by PPKn department of Pasundan University lecturers in supporting online learning. One of the goals of using online learning in the PPKn department of Pasundan University is as an effort to improve students' critical thinking.

Based on the results of research on the PPKn Study Program FKIP Pasundan University showed quite good results. This can be seen from the data on student activity in online lectures which shows enthusiasm and increased thinking creativity in presenting assignments given by lecturers in online learning.

#### **4 Conclusion**

Based on the analysis of the findings and discussion of the research process, several conclusions can be drawn as follows.

First, education in the digital era demands a variety of changes, one of which is to improve the quality of thinking of students in learning activities. Skills in this century require teachers to be able to create a learning climate that encourages interaction between students and educators. Therefore, in order to prepare qualified prospective educators, prospective teacher students are required to master critical thinking skills in facing the challenges of the 21st century digital era, these skills are the key to success in facing various obstacles encountered in 21st century education. Student teacher candidates must master a variety of skills which is relevant to the learning process in the digital era in order to be able to implement in carrying out activities as a professional teacher.

Second, that the PPKn department of Pasundan University has various efforts that have been and continue to be done in improving the critical thinking skills of prospective teacher students in the digital age. These efforts are carried out to improve the quality of graduates as the need for graduates of the school environment, this includes efforts in curriculum updating tailored to the context of the development of science and technology, improving the quality of Human Resources in this case lecturers as educators, and improving the quality of processes learning using the concept of combined learning (blended learning) that combines face-to-face learning through lectures in the classroom and online learning through systems and applications that are developed.

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