

Lecturer Competence In Improving the Quality of 4C of Higher Education Graduates In The Era Of Society 5.0: Literature Review

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Abstrak

Perguruan Tinggi merupakan salah satu lembaga yang berkontribusi dalam kegiatan pendidikan di Indonesia tentunya harus mampu beradaptasi dalam menghadapi beberapa trend yang berkembang tak terkecuali trend Society 5.0. Terdapat 5 kompetensi dari dosen PT yaitu dosen yaitu pegawai yang memiliki jabatan fungsional dan pendidik profesional, dosen berkualifikasi akademik magister dan doktor, dosen seorang pembelajar dewasa, serta dosen merupakan seorang pelayan. Kompetensi ini berpengaruh dalam meningkatkan kualitas 4C lulusan PT yaitu komunikasi (Communication), kolaborasi (Collaboration), berpikir kritis dan pemecahan masalah (Critical Thinking and Problem Solving) dan kreativitas inovasi (Creativity and Innovation).

Kata Kunci: *Society 5.0, Kompetensi Dosen, Kualitas 4C Lulusan*

Abstract

Higher Education is one of the institutions that contribute to educational activities in Indonesia, of course, it must be able to adapt in the face of several developing trends, including the trend of Society 5.0. There are 5 competencies of PT lecturers, namely lecturers, namely employees who have functional positions and professional educators, lecturers with master and doctoral academic qualifications, lecturers who are adult learners, and lecturers who are servants. This competency is influential in improving the quality of the 4Cs of PT graduates, namely communication, collaboration, critical thinking and problem solving and innovation creativity.

Keyword: *Society 5.0, Lecturer Competence, 4C Quality of graduates*

INTRODUCTION

Currently, the development and implementation of the Industrial Revolution 4.0 and society 4.0 revolution in Indonesia is currently still not running optimally. For example, in the industrial field, one of them appears "IT Paradox" where many companies are competing to develop technology and information systems at an expensive cost but have not been effective in achieving goals. In the field of society 4.0, there is still a lack of public insight into digital literacy in the use of technology and the internet in a healthy and positive manner. In general, the development of the Industrial Revolution 4.0 and society 4.0 in Indonesia can be said to have not been implemented perfectly, but the concept of Society 5.0 has already been introduced by Japan to the world (Setiawan & Lenawati, 2020; Ibda 2019; Lian 2019).

Society 5.0 itself is a concept where the development of the Internet of Things, Big Data, and Artificial Intelligence is oriented for a better human life, in contrast to the concept in the Industrial Revolution 4.0 where the technology developed is oriented towards the productivity of business processes. The existence of the Society 5.0 trend has an indirect impact where Indonesia as a developing

country has the right to play an active role in preparing for the future Society 5.0 trend. Higher Education is one of the institutions that contribute to educational activities in Indonesia, of course, it must be able to adapt in the face of several developing trends, including the trend of Society 5.0 (Setiawan & Lenawati, 2020; Arsanti et al 2021; Marlinah 2019).

Regulation of the Minister of Education, Culture, Research, and Technology of the Republic of Indonesia (Permendikbudristek RI) Number 23 of 2023 concerning the Implementation of Higher Education of Other State Institutions Article 1 Paragraphs 1 and 2 states that higher education is an educational unit that organizes higher education. Higher education is the level of education after secondary education which includes diploma programs, undergraduate programs, master programs, doctoral programs, and professional programs, as well as specialist programs, organized by universities (PT) based on Indonesian culture.

Higher Education must take a role in preparing its graduates to be competent and able to enter the jobs needed by the world today. The field of education should be revolutionized oriented towards more modern learning. The learning process at PT is designed to provide competencies to students in both cognitive, affective and psychomotor domains. Through the lecture process, students are equipped with theoretical knowledge about various disciplines according to their educational programs. After students are considered sufficient to master the theory, then students practice the theory through practical courses and activities such as internships, assistance, real work lectures (KKN), and others. Not only mastery of theory and practice, students are also given affective provisions related to attitudes or characters. Therefore, in the education process at PT students are also forged to have a positive character (Hamid 2020; Arsanti et al 2021).

Arsanti et al (2021) stated that PT plays an important role in producing superior human resources (HR) to be ready to face the era of society 5.0. Character education at PT aims to make students have behavior or character that reflects the characteristics or foundation of Pancasila life. These characteristics such as curiosity, initiative, persistence, adaptability, leadership spirit, socio-cultural care. Human character values are very important in facing the era of society 5.0 (Arsanti et al 2021).

The era of super smart society (society 5.0) itself was introduced by the Japanese government in 2019, which was made in anticipation of the turmoil of disruption due to the industrial revolution 4.0, which caused complex and ambiguous uncertainty (vuca). It is feared that this innovation can erode the values of human character that have been maintained so far. Society 5.0 is a representation of the historical form of development of the 5th society. Where chronologically its development is expanded from the era where people have a pattern to hunt (Society 1.0), continuing to the era of agriculture (society 2.0), industry (Society 3.0), and information (4.0). Society 5.0 is a concept developed for the formation of a super smart society that has behavior patterns optimizing the use of the Internet of things, Big Data, and Artificial Intelligence as solutions for better people's lives (Ministry of Education and Culture 2021; Setiawan & Lenawati, 2020; Arsanti et al 2021).

The 21st century competencies according to the Ministry of Education and Culture (2017) are known as 4C, namely Creative thinking (creative thinking skills), Critical thinking and problem solving (critical thinking and problem solving), Communication (communicate), and Collaboration (collaborate). These things can be achieved if the PT already has human resources, especially reliable or competent lecturers. Research from Jumara et al (2016) which shows that the position of professional lecturers is in-depth so that it can produce professional graduates. Research from Dewi (2018) shows that Academic qualifications and the ratio of lecturer competency development to form qualified and competent lecturers can also be seen from the quantity of functional positions carried out by lecturers in the university. Research from Basuki states that students who have good achievements, perceptions of lecturer competence are thought to be more positive than students who have poor learning achievements. Students who have good achievements view the lecturers who guide them as having good competence, because students can distinguish correctly between competent and non-competent lecturers. The purpose of this study is to explain the competence of lecturers and the quality of 4C of PT graduates in a literature review.

RESEARCH METHOD

The method used in this study is a literature study. This research method is carried out by identifying, reviewing, evaluating and interpreting all existing research. In line with the research (Nafisah et al., 2023), journals are systematically reviewed and identified using this method. This research begins with data collection carried out by collecting all research related to mathematics learning problems, analyzing data in articles and making conclusions. Researchers collected journal articles from Google Scholar, Research Gate, SINTA, DOAJ, and Scopus. The essays collected are in accordance with research keywords, namely the problem of lecturer competence and the quality of 4C graduates. Researchers collect articles for the College level. Articles are selected based on the last five years, namely 2019-2023. Researchers

selected 30 appropriate papers and then identified problems at each school level. Then the data obtained are presented in tabular form and analyzed. Analysis was carried out on the problems found from the competence of lecturers to determine the 4C competence of PT. Furthermore, researchers can draw conclusions based on the analysis that has been done.

RESULTS AND DISCUSSION

Our results and discussions are divided into 2 major parts, namely the competence of lecturers and the quality of 4C graduates of PT.

Lecturer Competence

Summarized from various sources, it can be stated that there are at least 5 competencies of PT lecturers, namely lecturers, namely employees who have functional positions and professional educators, lecturers with master and doctoral academic qualifications, lecturers who are adult learners, and lecturers are servants.

1. College lecturers are civil servants who have functional positions. Lecturers are the main professional and scientific educators transforming, developing, and disseminating science, technology and art through scientific research and community service at the higher education level. The need for innovative learning and teaching models, there needs to be an appropriate method, while the concept of learning and teaching methods must follow market needs and the feasibility standards of a lecturer's competence. There is an appropriate method, the SMART Method. The SMART method is an acronym for S=Simple, M=Modern, A=Accountable, R=Responsive, T=Transparent. The basic principle of the process of learning and teaching activities using the SMART method is that all learning and teaching activities, research and publications, as well as community service carried out by lecturers as a form of Tri Dharma PT, must have proof of track records in information systems and digital and multimedia systems, in the form of publication links, event photos, audio and video recordings, and everything is transparent and bids every moment of activity and is equipped with digital documentation. (Windiyani & Suchyadi, 2020; Yasin 2021; Sutarsih & Misbah, 2021).
2. Lecturers are required to have academic qualifications, obtained through accredited postgraduate higher education in accordance with their field of expertise The minimum qualification for lecturers is graduates of master programs to serve in master programs to serve in diploma one, diploma two, diploma three, diploma four or bachelor programs. For postgraduate qualifications must be graduates of doctoral programs. The results of the Bawa study (2020) found that there are 2 main things that are of concern in improving the quality of PT education, namely: 1) the appointment of lecturers needs to consider factors related to academic qualifications, 2) pay attention to the principles and indicators of learning quality in accordance with UNESCO guidelines (Bawa 2020). The results of research from Triastuti & Jayadi (2020), show that there are significant differences in the competence of STIE IPWIJA lecturers in the perspective of students in terms of higher education lecturers. This means that lecturers who have a better level of education give a good perception of students. Research from Dini et al (2023) shows that the increase in Education Level affects the performance of lecturers. This shows that the level of education has an influence on the performance of lecturers of the Makassar Barombong Shipping Polytechnic.
3. Lecturers are mature learners. As mature learners, they certainly have a distinctive way of learning, for example, a lecturer has an independent way of learning, they always use or associate with the knowledge or understanding they have before and make comparisons with science that is developing on an ongoing basis. Lecturers must pay more attention to the way of teaching than just delivering the material taught. Educators are not allowed to have utodriver understanding. Utopian educators are educators who do not want to sweat the type of educators who like to stand idly by while fantasizing that they can produce students who are smart, kind, not naughty, obedient and prettier (Rahman et al 2019; Bastian 2023).
4. Lecturers are servants, therefore the service must be done sincerely wholeheartedly and almost without any pretensions. The quality of service is closely related to the attitude of the person who serves, if the person who serves knows his position as a servant then he will give the best he can give. Research from Firdaus (2021) shows that the quality of lecturer services has a positive and significant effect on student satisfaction and lecturer competence partially has a positive and significant effect on student satisfaction. Simultaneously, the variables of service quality and lecturer competence together (simultaneously) have a positive and significant effect on student satisfaction. Research from Hidayah (2020) shows that there is an influence of service quality on student satisfaction and there is an influence on service quality and lecturer competence together on student satisfaction. Research from Jatmiko (2020) shows that the learning competence and service quality of lecturers are able to influence student learning interest in the learning process so as to improve the quality of PT.

4C quality of PT graduates

The quality of graduates who are competent and competent to become superior human resources in the educational process of students at PT must be trained to master the 4Cs. Because, 4C skills are the provision of students in the world of work in this era of society 5.0. The 4C skills can be described as follows:

1. Communication

Language is the main communication tool in getting along in everyday life. Researchers prove that until now Language is recognized as the most effective medium in doing so, communication in interactions between individuals such as as activities and processes, outreach and training, teaching and learning, meetings at work and others (Muhtadi, 2012).

In the educational process at PT, students are always accustomed to actively expressing opinions both in class and outside the classroom. The presentation and discussion model is very useful for practicing communication skills, starting from thinking about the idea you want to convey to daring to convey ideas or opinions in front of the class. In addition, students can practice using good and correct language in various contexts.

In the world of work, communication is not only interpreted as the process of delivering messages, but more broadly, communication as a strategy to achieve goals. For example, in the openness of proposals to company leaders, employees must be able to attract sympathy through their performance. In order for good performance, it must be done with a good communication strategy. In communicating a person is usually accompanied by expressions, body expressions, intonation, pauses and others. The accuracy of these things will affect the way a person communicates because if it is not right it will affect the value of the taste of the recipient of the message or the interlocutor. A person's communication skills will reflect his qualities. Therefore, in communicating must also pay attention to context, manners (*attitude*), and politeness of language. Similarly, in the world of work, qualified communication skills will support one's performance and performance.

2. Collaboration

In the learning process at PT, students do not always work on assignments or projects alone, but students must also be able to collaborate with other students. For example, in presenting paper assignments, students must collaborate with other students in one class. In doing the assignments given by the lecturer, students go through a long process starting from determining group members, distributing tasks for each group member, working on assignments, and presenting assignments in front of the class.

Students will gain experience when different opinions, dealing with friends with different characters, cultures, thinking skills that are not the same, and others. Students will also gain experience on how to work together to solve problems so that they can achieve their desired goals. This process that afflicts students into strong individuals and can work together or collaborate.

This ability to collaborate is very important, especially to equip students when working. When working, a person does not always work individually, but is often collaborated with others, for example in working on a project given by his superior. The ability to work with this team is also often one of the requirements in employee recruitment. Therefore, the ability to work together or collaborate must also be mastered by students.

Through a collaborative learning model, students will get used to collaborating with other students. Collaborative learning can be informal, that is, it does not have to be carried out in the classroom and learning does not need to be strictly structured (Warsono and Hariyanto (2012). In collaborative learning, students will process so that learning will be more meaningful. Meanwhile, Septikasari and Frasandy (2018) said that in digging for information and building meaning, students need to be encouraged to be able to collaborate with friends in their classes. In working on a product, students need to be taught how to appreciate each person's strengths and abilities and how to take on roles and adapt appropriately to them.

3. Critical Thinking and Problem Solving

Holding the title of being a student is a matter of pride. However, this happiness must be a whip for students to have different thoughts from their younger siblings who are still students. This means that being a student must be able to think at a higher level and be more critical in responding to something. Johnson (2014) explains critical thinking is the ability to argue in an organized way. Critical thinking is the ability to systematically evaluate the weight of personal opinions and those of others. The purpose of this critical thinking is to achieve a deep understanding.

Assignments during learning at PT in addition to increasing knowledge are also to shape the mindset of students so that they can think rationally. Thinking rationally means that students are able to understand the ins and outs of problems, theoretical basis, problem solving, and how to relate in real life. In addition to rational thinking, students must also be able to think critically essentially, which is an active process in which a person thinks things deeply, asks questions for themselves, finds relevant information for themselves rather than accepting things from others (John Dewey in Alec Fisher, 2011). Meanwhile, Faiz,

(2012) suggests that the purpose of simple critical thinking is to guarantee, as far as possible, that our thoughts are valid and correct.

In the world of work, students who are accustomed to critical thinking will tend to think things carefully. With the ability to think critically, students will be able to solve the problems they face carefully, so that the results are better than those that are not thought out critically. The ability to think critically will be closely related to the ability to solve problems. Therefore, the ability to think critically and solve problems is very important for students to have to be ready to step into the world of work.

4. Creativity and Innovation

The next skill that students must have in order to become competent graduates and become superior human resources is creative and innovative. According to Suratno (2012), creativity is an imaginative activity that manifests (embodiment) ingenuity from a powerful mind to produce a product or solve a problem in its own way. Innovation is an idea, item, event, method that is perceived or observed as a new thing for a person or group of people (society), whether it is the result of invention or dissolution. Innovation is held to achieve a certain goal or to solve a certain problem (Sa'ud et al, 2021). Thus it can be concluded that creative and innovative are activities that are realized from ideas or ideas to achieve certain goals and solve the problems faced.

In learning at PT, students are required to always hone creativity in various things, both in academic and non-academic contexts. In the academic context, students are required to be able to create things taught by lecturers and innovate to find new things that are different from existing ones. Creative and innovative in solving problems or in creating new things is very important to do for certain purposes.

In the world of work, creative and innovative are very important to explore new ideas that are more current. Usually, companies will recruit *fresh graduates* who are rich in fresh ideas and recreate with the assistance of seniors. This is because companies want unusual ideas in order to compete with other companies.

CONCLUSION

The conclusion of this paper is that there are 5 competencies of PT lecturers, namely lecturers, namely employees who have functional positions and professional educators, lecturers with master and doctoral academic qualifications, lecturers who are adult learners, and lecturers are servants. This competency is influential in improving the quality of the 4Cs of PT graduates, namely communication, collaboration, critical thinking and problem solving and innovation creativity.

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