The Relationship of Teacher Competency With Student Development Resilience: Reflection of 21st Century Learning During Pandemic

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ABSTRACT

The competence of teachers in 21st century learning is important in order to keep up with the times. A review of qualitative research using a phenomenological approach in this study was carried out in order to be able to adjust the learning experience during the COVID-19 pandemic experienced by the teachers. This research was conducted on high school teachers with a sample of 8 teachers spread across several areas on the island of Java to obtain the complexity of the data results and as a response to the process of adapting research developments during the pandemic with a semi-structured interview process both offline and online utilizing various online platforms. The results of the study showed that teacher competence is closely related to the development of students and 21st century learning during the pandemic. The aspects that have strong relationship are cognitive competencies that require dynamic educators to provide opportunities for students to develop their potential, social competencies possessed by teachers are needed to improve interactive and networked student communication, teacher personality competencies are still needed to strengthen student character, and teachers with professional competence encourage teachers to be proactive in developing skills to strengthen the quality of student learning outcomes.

A. INTRODUCTION

Indonesia has the fourth largest education system after India, China and the United States. Education development in the 21st century can be interpreted as a parameter of the progress of a nation, in this case a nation that has the potential of human resources with good quality education can be said to be a developed country. However, with a large education system, there is an irony in the Program for International Student Assessment (PISA) survey in 2018, relating to the reading ability of Indonesian students got 371 points or 80 points lower than the average of countries members of the Organization for Economic Co-operation. Operations and development (OECD). Based on data released by the OECD, the organization that conducted the PISA survey, in the period 2012-2018, Indonesia was still in the bottom 10 (OECD, 2020). The PISA rankings are a triennial survey that measures the abilities of secondary school students.
This ranking is based on three main components of student ability: literacy, mathematics, and science. Of the three components, Indonesia is always below the average from year to year. This proves that the Indonesian education condition has not yet experienced a significant improvement.

The quality of teachers in Indonesia is not evenly distributed, as evidenced in the results of the average teacher competency test (UKG) carried out by the ministry of education and culture in 2019. Based on the data found on the official website of the Ministry of Education and Culture, the regional education balance website, there is a gap in the UKG average score in Indonesia every province. The provinces that we took as samples were Central Java with an average of 63.29, East Java 60.74, North Sumatra 52.42, Central Kalimantan 51.78, East Nusa Tenggara 50.34, and Papua 49.09 (Kemdikbud, 2019). The lack of professional teachers with a systematic learning process structure has an impact on learning that is not ideal and the results is not optimal (Kong, 2021). The quality of teacher competence is the most important factor in the teaching and learning process, of course this will have an impact on the quality of education and learning outcomes received by students. The condition of education in Indonesia has faced challenges when the covid-19 pandemic has occurred since early 2020. In the end, the government issued a policy in Circular Letter Number 4 of 2020 regarding the Implementation of Educational Policies in the Emergency Period for the Spread of Coronavirus Disease (COVID-19). A concern to the quality of teacher competence is the main issue in the development of education in a pandemic situation.

Strengthening competence must be considered because teachers who are not optimal in providing learning in schools have an impact on students' interest and learning outcomes. Regarding the four teacher competencies and their relationship will be the basis for designing teacher competency programs to improve the lack of competency. Teachers must be able to teach and develop various methods that allow students to learn actively, teachers must also be proud of their teaching profession and be able to convince others to support school progress. Finally, teachers must be proficient with textbooks, have a sense of responsibility in their fields, in accordance to the development of existing knowledge and learn for life.

This research uses the theory of functionalism proposed by Parsons. Functional structural theory in social science discusses balance and order in a social system so that a system can work properly (Parsons & Shils, 2017). All social behavior that appears in all places, times, and models can be explained through a comprehensive theory of society, especially regarding structural functionalism according to Parsons (Izadi et al., 2020). As well as several theories of student development as well as in explaining the various linkages between teacher competence and the resilience of student development. The functionalism perspective and the theory of student development are seen as the basis for identifying the functioning of a social structure in social life and its impact on students. The structure in question is teachers with various competencies, as well as students as part of the learning process that is vital to pay attention in its development. As agents, teachers have the responsibility to provide guidance and discipline in maintaining and increasing student motivation in learning (Maunah, 2019). Collaboration between structures and components of education is felt to be very important, strengthened by the awareness that the novelty of the COVID-19 pandemic has brought many changes in the world of education for teachers and students.

Based on the description above, the research provides an overview of the urgency of learning reflection by looking at the relationship between teacher competence and student development which is very useful for developing pedagogical, social, personality, and teacher.
professionalism competencies. In order to create a more relevant, systematic and directed learning atmosphere in increasing the potential of students in adjusting the development of 21st century learning during the pandemic and post-pandemic.

B. METHODS

Qualitative research is used as a method with the aim of further exploration of the results. The primary data in this study were taken from 8 teachers who teach at the high school level from various regions on the island of Java. Interviews were conducted offline and online, this was carried out due to the ease of online communication and the purpose of data complexity during the pandemic from various situations in several regions. The public high schools included in the sample are located in Surakarta City, Sukoharjo Regency, Boyolali Regency, Ponorogo Regency, Tegal City and Jombang Regency. On this basis, the origin of the different informants' areas is aimed at the complexity of finding the characteristics of teacher competence, as shown in Table 1.

Table 1. Informant Characteristics

<table>
<thead>
<tr>
<th>Informant Code</th>
<th>Gender</th>
<th>Subject</th>
<th>School Area</th>
<th>Interview Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviewee 1</td>
<td>F</td>
<td>Sociology</td>
<td>Ponorogo</td>
<td>Whatsapp Chat &amp; Audio</td>
</tr>
<tr>
<td>Interviewee 2</td>
<td>M</td>
<td>Sociology</td>
<td>Surakarta</td>
<td>Face to face / Offline Interview</td>
</tr>
<tr>
<td>Interviewee 3</td>
<td>M</td>
<td>Sociology</td>
<td>Sukoharjo</td>
<td>Video Conference: Zoom</td>
</tr>
<tr>
<td>Interviewee 4</td>
<td>M</td>
<td>Sociology</td>
<td>Surakarta</td>
<td>Face to face / Offline Interview</td>
</tr>
<tr>
<td>Interviewee 5</td>
<td>M</td>
<td>Sociology</td>
<td>Boyolali</td>
<td>Face to face / Offline Interview</td>
</tr>
<tr>
<td>Interviewee 6</td>
<td>F</td>
<td>Sociology</td>
<td>Jombang</td>
<td>Video Conference: Zoom</td>
</tr>
<tr>
<td>Interviewee 7</td>
<td>M</td>
<td>Sociology</td>
<td>Ponorogo</td>
<td>Face to face / Offline Interview</td>
</tr>
<tr>
<td>Interviewee 8</td>
<td>M</td>
<td>Sociology</td>
<td>Tegal</td>
<td>Face to face / Offline Interview</td>
</tr>
</tbody>
</table>

Primary data collected using a semi-structured interview procedure that provides an opportunity for informants to describe experiences in depth by always guiding the interview procedure and process (Creswell & Poth, 2016). This was done to explore different conditions, situations, and experiences between informants according to the conditions of their respective learning environments. The data is processed to determine the relationship between teacher competence and student development resilience, especially as a reflection of learning during the pandemic. Secondary data is collected to provide reinforcement for the analytical process such as journals, books, mass media, etc.

The data collection technique was carried out by purposive sampling in accordance with the willingness of the informants, several activities were carried out offline and online by utilizing an online platform to facilitate the interview process. Practice interviews with the aim of collecting data can be done through online media using applications such as: WhatsApp, Zoom, Ms. Team, etc (Prihanto et al., 2021). In this research, WhatsApp and zoom are applications that are often used to help the online interview process. In the process of data analysis carried out by data collection, data reduction, data presentation as well as inference and verification (Miles & Huberman, 2014).

C. RESULT AND DISCUSSION

According to Republic of Indonesia Law Number 14 of 2005 concerning Teachers and Lecturers, there are 4 important competencies that must be possessed by a teacher including
pedagogical competence, personality competence, social competence, and professional competence. Attention to teacher competence can serve as an increase in the quality and student learning outcomes (Fauth et al., 2019). There is research that focuses on looking at the development of teacher competencies during the pandemic, in its findings it is necessary to strengthen literacy and science and technology mastery competencies, classroom management skills competencies, and communication and social competencies (Sudrajat, 2020). Meanwhile, some research interprets that aspects of teacher competence have an impact on the learning process in the classroom, because there is a relationship between the quality of learning with teacher competence and student development (Zee & Koomen, 2016). Students in the 21st century need to improve their academic achievement and skills, including: 1) character strengthening, 2) Motivation, 3) Prioritizing, Planning, and Mapping Results, 4) Communication and Collaboration. Teachers should be able to follow the development of the era which will affect the teaching and learning process of children (Hendriyani et al., 2020).

Teachers must also pay attention to teaching and learning activities, by carrying out tasks such as providing learning materials with good interaction and communication. The success of these tasks in the learning process, one of them depends on the competence and qualifications of each teacher (Sopandi, 2019). Good competence can also support the ability of teachers to manage learning activities. In this way, it is hoped that students can also feel the benefits, learn in a conducive, effective atmosphere, and can be a means of improving their quality and abilities.

The findings in this research showed that aspects of teacher competence related to the resilience of students' development in 21st century learning when a pandemic situation occurs are (1) Pedagogical Competence in Dynamic Educators, (2) Social Competence Based on Communication Strengthening, Interactive, and Networking, (3) Adaptive and Independent Personality Competencies, (4) Proactive Professional Competencies for Skill Development. These findings have an impact on the quality of learning provided to today's generation of students. The need for increased competence is felt by teachers as educational actors with complex experience in the COVID-19 pandemic situation.

1. Pedagogical Competence in Dynamic Educators Affects the Development of Interests, Talents, and Potentials of 21st Century Students

During a pandemic, teaching and learning activities that are shifted to online have an impact on the limited access of teachers in reviewing student character development, and vice versa. Teachers must be able to adapt as best they can to existing conditions. Professional teachers have awareness in their main task such as educating, teaching, guiding, directing, training, assessing, and evaluating students (Dudung, 2018). The pandemic condition cannot be used as an excuse for teachers to top the competence development and monitor the progress of students.

Responding to this, one of the subject is a teacher from one of the good high high schools in Ponorogo City, East Java said that the process of strengthening the pedagogical competence of teachers at the school can be represented by providing freedom of talent suitability and developing the potential of each educator in the learning process by good direction.

“So every teacher has their own style so they can't be compared. For example, I am now developing a (strategy) that does not make children the object of learning, so they not only accept what I think, but for now I develop the children's students as learning subjects or as actors” – interviewee 1.
Teachers can experiment with several learning methods in the form of games, discussions, collaborate on a project with group partners, solve the problems, with the aim of minimizing children's boredom when studying, especially when the pandemic changes in online, offline, and sustainable hybrid learning models that occur simultaneously.

Although there are differences in learning models, the teachers at these schools develop good teaching methods, by paying attention to the development of student character such as cultivate empathy, helpfulness, honesty, obeying rules, communication and social skills, and cooperative learning. This is a fact in the field in the learning environment of good high schools. Considering that the COVID-19 pandemic situation has various bad effects on education and mental health, not to mention the unfairness of the learning process due to problems with learning facilities (Sahu, 2020). This condition must be realized by educators to adjust the learning model that students are interested in.

In the dynamic process, the teacher must be able to identify the interests of students on a broad scale, such as adapting to the situation and following the times in order to know the interests of generations. In addition, the resource persons stated that dynamics as a teacher should be used to understand and know the psychological condition of children with the aim that students are in a comfortable learning situation. The personal psychology approach can develop social relationships based on various cultural influences (Agarwal & Roediger, 2018).

Delivered by a high school teacher in Surakarta City who was met offline (interviewee 2) stated that teacher competence has a strong basis in terms of creating harmonious classroom conditions in various situations. Class problems must have their own characteristics during a pandemic, but the teacher believes that educators with good pedagogical competence will be able to represent the right ideas according to the conditions at hand. This means that the informant stated that it was very important for teachers to realize the importance of increasing pedagogical competence during the pandemic for the good of the student learning process.

A good teacher has in-depth knowledge of various learning strategies providing reinforcement for students in understanding conceptual learning materials (Sadler, 2010). Therefore, in optimizing the potential of students, teachers must be able to carry out creative, collaborative, and innovative learning activities in growing and developing their potential and talents. This is obtained from teachers who understand pedagogical competence in a sustainable manner.

2. Teachers Develop Social Competence Based on Strengthening Communication, Interactive, and Networking

Strengthening teacher competencies that have an impact on student development must be correlated with each other. In this case, to create such conditions, teachers must have social competence. It is important since social competence will show the teacher's ability to communicate and interact effectively with students, peers, parents from students to the community (Sundari et al., 2019). Social competence based on strengthening communication, interactive, and networking is seen as having a positive impact on the development of the social aspects of students. This must be understood deeply because students have broad technological skills and complex social media networks. This means that students must be educated and guided by teachers who have strong competence in the development of society 5.0 technology. Furthermore, a teacher from a high school in Sukoharjo Regency said that teachers must have good social competence in order to establish good communication with their students.
“In addition to teaching to deliver the material, I also provide motivation from experience, give an idea of what your future as students will look like, I want to make students more confident by looking at themselves, so that students realize that they have skills” - Interviewee 3

Social competence of teachers is no less important than other competencies, by being equipped with good social competence, teachers can establish good and close relationships with their students. 21st century learning has an urgency to use a classroom-based learning approach that emphasizes democracy and multiliteracy (Mirra & Garcia, 2020). Teachers who have competency skills in using effective learning strategies, maximizing student involvement, as well as emotional factors that support child development are vital aspects of the 21st century classroom environment (Seidman et al., 2018). That is, the development of 21st century learning is in dire need of a teacher who has good social competence.

Another thing was strengthened by high school teachers in Surakarta City through face-to-face interviews which stated that the social competence possessed by teachers could be obtained from staying active in communicating with teacher learning group organizations such as Subject Teacher Conference (MGMP), it would provide teacher benefits regarding solving learning problems that emerged during a pandemic. Even social competence is seen as the basis for developing children’s democratic attitudes, this can happen when children see educators as people who can provide inspiration.

“During the pandemic, communication with teachers through the MGMP organization was helped, when there were difficulties in being able to share experiences with each other, activities like this had an impact on increasing the social value of teachers and positively impacting the learning process with students.” – Interviewee 4

The impact on students directly is to teach networking attitudes, while maintaining social life during a pandemic will make teachers provide examples of good social values and indirectly teach students anti-discrimination attitudes. This has a role in improving students' abilities to become children who understand respect and respect for others in networking in the community or at least when students form a study group. Other statements that corroborate these conditions were conveyed by the informants:

“To instill an attitude of empathy in students, one of them is by giving group assignments, so for example this is a pandemic period so some learning is done online, finally in one group there is an agreement that all of them must be involved, it tries to make team members participate actively” - Interviewee 1

“Instill this collaborative attitude by giving group assignments. That way students, right, can learn how to work in time” - Interviewee 7

This means that it can facilitate the development of communication between students in choosing the right language for daily communication in collaborative activities. Social competence program will change knowledge and competence, the competence of qualified teachers will prevent the emergence of bullying or potential deviations such as bullying in schools (Strohmeier et al., 2021).
Another practice was conveyed by a high school teacher in Boyolali Regency (interviewee 5), who in an offline meeting with researchers conveyed the importance of instilling good social competence for teachers by introducing a contextual-based learning approach. Contextual learning is to invite students to get to know the surrounding environment from various social, economic, and cultural aspects. Introducing students to the potential of the surrounding area, inviting students to think critically about existing problems, to think interactively to find solutions to the potential of the region. The hope is that students become more familiar with the surrounding environment when undergoing the learning process. This was conveyed by the informant because of the teacher’s concern about the lack of social activities played by students during the pandemic.

Erikson’s concept sees child development based on social environmental factors and experiences. If the social environment of a teenager is good, the child’s development will be good because later it will have a good influence on the development of the child’s character, and vice versa if the child is placed in a bad environment then the child’s development will not be good, because later it will have an influence poor in the development of children’s character. One of the vital things is to see the challenges faced by educators with changing physical and social environments (Gomes et al., 2021). The development of 21st century learning provides an opportunity for educational actors to really pay attention to the social environment to form a strong student character.

3. Teachers Have Adaptive and Independent Personality Competencies for Strengthening Students’ Characters

A 21st century teacher still needs to strengthen personality competencies in addition to taking an active role in various formal social activities such as Subject Teacher Conference (MGMP) or non-formal activities such as community activities. Teachers who are expected to be exemplary, mature, can be responsible to their students. According to Danim in (Mustaqim, 2018) it is important to shape the character of good students, but it would be better if the teacher formed his character as an individual. A teacher should reflect the values of norms, morals, aesthetics, and science that will influence the behavior of students (Kuusisto & Tirri, 2019). In improving personality competence, it is also important for teachers to understand the code of ethics as a guide in attitude and behavior that reflects moral and ethical values and norms.

Strengthening personality competence was conveyed by a teacher who teaches high school in Jombang Regency who conveyed his experience when conducting the learning process before or during the pandemic, a teacher must be able to set a good personal example and be able to identify the needs of students, where each student has different traits and characteristics, for example there are some students who have good academic grades, tend to have a quiet character, students have different learning characteristics that are different from one another, independent learning with different learning patterns.

"Before the pandemic, enthusiasm was higher than now, learning methods were limited, so children were bored, and their enthusiasm for learning fell. as a teacher more appreciate the potential that is not the same. Do not force them to master all subjects. And teach them with empathy in the form of making them feel what other people’s position is like. Make them more grateful”-Interviewee 6
From this, a teacher in 21st century learning must be able to have adaptive and independent personality competencies that can be well received by students with various characters, even though this is indeed a complex challenge for teachers. In the interviews with other sources who are also teachers (interviewee 7) at one of the public high schools in Ponorogo Regency, it can be seen that attention to the 4 competencies of educators cannot be ignored, in educating students, not only providing learning materials, but also developing the potential and talents possessed by students. When providing material in class, the teacher is expected to be able to provide maximum teaching according to the needs of each student so that the teacher must know each student’s character. The competence of a good teacher’s personality will have a positive impact on the development of students. Kohlberg states that this moral development explains how a person understands his responsibilities to the social environment where he will be required to help each other, be honest, and share with each other (Sharma & Gupta, 2022).

"Teachers can be seen by their example from their words and actions. as an example the teacher asks students to clean the class but the teacher does not give an example then the teacher is not a good example. On the other hand, a teacher who sets a good example is a teacher with appropriate words and actions"—Interviewee 3

This is still needed because the teacher’s profile as a role model can be related to the character development of 21st century students who require development in the aspects of responsibility, independence, and give inspiration.

4. Teachers with Professional Competence Proactively Follow Skill Development according to the Current Times

Improving the professionalism of teachers in the world of education is the status and role that is carried out regarding what should be done as teachers and educators who have an awareness of competency development. Professional competence is the ability that teachers must have in the process of planning and implementing learning (Salirawati, 2018). According to other sources who met and interviewed offline, a high school teacher in the city of Tegal (interviewee 8) said:

“Teacher professionalism was very visible when faced with a pandemic situation, based on his experience the intensity of student interest in distance learning was far from lacking, even though teachers must remain professional to improve the ability so that students have an interest in the online learning process” — Interviewee 8

Only a few students are enthusiastic when compared to face-to-face learning, this creates a challenge for teachers because they must be able to create a learning ecosystem that easily attracts students’ attention in various online or offline situations with a technological approach. Educational information system management has an effect on teacher professional competence (Lailia et al., 2021). Online learning was developed with the aim of creating an integrated education system and creating connectivity between educational components (Wahyono et al., 2020).

Solutions to these online learning challenges can be done by developing teacher professional competence from the school or independently by holding training activities, webinars, or workshops on ICT, conducting comparative studies to other schools that are
considered more advanced, and carrying out the process and learning by using various learning methods. The proactive awareness of teachers to develop competencies is very influential for the development of students during the pandemic or post-pandemic later.

In an effort to improve and improve professional competence related to the development of students, it can be carried out through a supervision program. Supervision activities at one of the State Vocational Schools in Malang Regency have a positive impact on teacher competency development when academic supervision of supervisors is held at the target schools, teachers experience an increase in skills in online learning (Rahajo, 2021). Teachers in 21st century learning who have professional competence will have implications for continuing education (Zaragoza et al., 2021). Conduct supervision to determine the quality of a teacher and the learning atmosphere in the classroom. This supervision is used to improve the quality of a teacher and the quality of learning media in order to create a higher quality learning process.

Systematic evaluation is very important in order to create the effectiveness of the competency improvement training process carried out by teachers. Teachers must have the ability to evaluate their own competencies so that they always fulfill their professional duties (Romera et al., 2017). Reflection activities can be carried out by all educators to evaluate each other's performance. In a social system that is built on cooperation in the adaptation process, in this case teachers, students, and schools will increase various supports for the success of the educational process during the pandemic. To be a solution, because teacher competence will affect a social phenomenon, the development of students, teacher competence must be considered in practice in the classroom rather than only based on learning outcomes received by students in the form of final grades. The process of transfer of knowledge must certainly affect the development of students to form a good learning ecosystem.

**D. CONCLUSION AND SUGGESTIONS**

This article focuses on having a focus on teacher competence which is closely related to the development of students in any situation. Moreover, the COVID-19 pandemic provides teachers with in-depth experience of the importance of the adaptation process to accept all challenges in the field of education. Based on the theories of structural functionalism (Parsons) and their impact on the educational situation, a social system in this case the school through the teacher will be closely related to the development of students. In educating students, not only providing learning materials, but also need to pay attention to the goals of successful learning and develop the potential and talents of the students. In addition, teachers must also know deeply about their students in order to be able to determine an integrated teaching method for their students fairly.

Thus, pedagogical competence will be effective in assisting the development of students in depth, especially in the cognitive aspect. Then personality competencies which require teachers to have moral and noble personalities so that they can be role models for students and also the community. Then in social competence, it can make it easier for teachers to internalize experiences for students so that they can easily adapt to new values in various social environments. Finally, professional competence that adjusts the teacher's ability to be creative and professional in his work as a teacher will be related to the development of a student's skills.

Recommendations for further research are to focus on deepening one aspect of teacher competence and its relation to the development of post-pandemic learning situations based on social, economic, geographical conditions, or based on certain characteristics. The condition of the ecosystem and learning culture in schools as a functional structural basis for the running of a social system must also be considered by teachers so that they can provide a maximum
educational process according to the criteria set by the school and based on recognized policy standards. Therefore, in the current pandemic, there are opportunities for school institutions to improve the quality of their schools with a progressive approach to improving the quality of teachers, making better regulations than events before the pandemic which are close to the times, technology, as well as the needs of generations, so that changes can be accepted both by the students.

REFERENCES


