The 4C Learning Innovation as an Effort to Improve Teacher’s Professionalism and Students’ Competency at Private Vocational High School of Walisongo 2 Gempol, Indonesia

Afifudin
Graduate School of Vocational Education, Universitas Negeri Malang, East Java, Indonesia
E-mail: afifhasan75@gmail.com

Abstract. This research was conducted to observe the efforts of a private school to improve teachers’ professionalism and students’ competency. This study used a case study model with a descriptive qualitative approach. Here, data collection was done through in-depth interviews, observation, and document study. The results showed that teachers with knowledge and motivation improve their service to students through teaching skills. Teachers’ knowledge was a learning innovation to the better learning process. They had the 4C skills: critical and creative thinking, collaboration, communication, and creativity. Teachers’ professionality then affected students’ competency, be it soft and hard skills. However, the evidence that was found at Private Vocational High School of Walisongo 2 Gempol, Indonesia could not be generalized to all private vocational high schools. Thus, further research on other private schools in Indonesia is needed to develop creativity and innovation to support graduates’ quality.

Keywords: Learning innovation, professionalism, 4C competencies

INTRODUCTION

Private school is also referred to as independent schools since they are not administered by local, state, or national government. They gain the right to select students and are funded in whole or in parts by charging students tuition fees rather than relying on government funding. Private schools are managed by foundations. The existence of private schools is regulated in the Law no. 20 of 2003 Article 55 paragraph 1 concerning the National Education System which states that the community has the right to organize community-based education in formal and non-formal education following the peculiarities of religion, social environment and culture for the benefit of society (Hakim, 2016).

As an organization, private schools cannot avoid various problems, such as in the internal organization. It reflects in behaviours that disrupt learning and ultimately hinder the progress of schools; thus, the assumption that private schools have lower quality than public schools arise. A similar problem occurred in Pasuruan Regency, East Java. It becomes a challenge for private schools (principals) to find ways to change the old paradigm above, particularly in academic and non-academic achievements. Therefore, teachers and educators play an essential role in supporting and motivating students, because the main purpose of learning is to prepare students to become successful workers in the world of work (Jamin, 2018).

The learning process occurs when interactions between teachers and students or vice versa are produced by changes in the behavior of new knowledge, strengthening insights and experiences (Huda, 2015). In 2007, the government through the Minister of National Education issued Regulation number 16 of 2017 stating that a teacher must have four competencies namely, pedagogic competence, personal competence, professional competence, and social competence (Prastowo, 2017). Teacher professionalism is reflected in the implementation of tasks which are characterized by expertise in both material and methods. Professional teachers have social, intellectual, moral, and spiritual responsibilities (Hamid, 2015).

Studies on teacher professionalism have been extensively studied by previous research. This research was a study on improving teachers’ professionalism through Learning Innovation at Private Vocational High School of Walisongo, Pasuruan Regency, East Java. Based on the observations and interviews with subject teachers, teachers’ professionalism level was still low to improve the education quality. The development of their professionalism had yet been optimal and a comprehensive policy model approach was needed from the school level to the ministries so that professionalism could be
developed even with their existing workloads. A professional teacher must understand the ins and outs of education and teaching as well as other knowledge. Teachers must also receive special education to obtain special skills or expertise and gain the competence to become professional teachers. Therefore, one of the learning innovations to increase teacher professionalism and student competence is the 4C learning.

The 4C competencies/skills in question are Communication, Collaboration, Critical thinking and Problem Solving, and Creativity and Innovation. Implementation of well-planned education and teaching supported by adequate teacher skills could teach 4C skills properly. The soft skill education model development through learning found that soft skills could be taught through the designated lessons (Mariyani et al., 2022). It means for all subjects in SMK to design their learning to master hard skills and soft skills. Based on the description above, mastering the 4C competencies (Communication, Collaboration, Critical thinking and Problem Solving, and Creativity and Innovation) was very urgent in vocational high school. Therefore, this study discussed learning that could teach students to master the 4C skills.

METHODS

This research used a descriptive qualitative research method. The said method is aimed to describe and illustrate the existing phenomena, both natural and man-made, which pay more attention to characteristics, quality, and connection between activities. Hence, this study provided an overview of teachers’ professionalism through learning innovation.

The data was collected through observation, interviews, and documentation. The document-collecting technique completed the observation and interview methods in qualitative research. The objects in this research were the principal, vice principal, head of the competency, teachers, and students of Private Vocational High School of Walisongo, Pasuruan Regency, Indonesia. Then, the data were analysed by interactive technique from a Miles and Huberman model.

RESULTS AND DISCUSSIONS

Teachers’ Professionalism

Education is considered a preventive alternative because it builds a new generation of a better nation (Hendriana & Jacobus, 2016). The education system must be able to empower various educational components, which include learning activity programs, educators (teachers), students, learning facilities and infrastructure, funds, community environment, school principal leadership, and others. The most important factor in learning is the teacher (Kuntoro, 2019). A teacher is a profession or job that requires special expertise or teacher professionalism.

A professional is a job or activity carried out by a person and is a source of income for life that requires expertise or skills that meet certain qualities or norms and requires professional education (Sulastri et al., 2020). Professionalism demands adequate seriousness and competence, in which a person is deemed fit to carry out a task (Citrowati & Nurhafizah, 2019). Professional development can be defined as a long career process in which educators refine their teaching to meet students’ needs (Puspitasari, 2015). Professional development is about teachers’ learning, studying how to learn, and transforming their knowledge into practice for the benefit of their students (Fitriyadi, 2015). The development of teacher professionalism is not only due to the demands of the times, but also a must for every individual within the framework of improving the quality of human life in the future (Sahari, 2018). The development of the teaching profession in the educational environment is directed at professional quality, objective, transparent, and accountable performance evaluation, and motivation to improve performance and achievement (Syahputra, 2021).

The study of teacher professionalism through learning innovation is very important in the education world today because the demands for professional teachers in the millennial era never subside. In the process of humanism and humanity, they are present as the most reliable subject who is often referred to as Oemar Bakri (Tamnge et al., 2021). The development of the teaching profession is an important matter to consider to anticipate changes and the magnitude of the demands on the teaching
profession which mainly emphasize the mastery of knowledge (Hamid, 2017). Teacher professional competence can be obtained through professional education in understanding computer-assisted instruction. Some of the main dimensions of teacher competence are pedagogic competence, personal competence, social competence, and professional competence (Herliani & Wahyudin, 2018).

The scope of teacher professionalism is indicated by several indicators: (1) ability to understand and implement educational foundations and student learning theories; (2) ability in a varied learning process, developing and using media, tools, and resources in learning; and (3) ability to organize learning programs and evaluate and improve students' personalities (Dudung, 2018). Also, the professionalism quality can be shown from five attitudes: (1) the desire to pursue professional development and improve the quality of knowledge and skills; (2) pursuing quality and ideals in the profession; (3) improving and maintaining the image of the profession; (4) the desire to always display behavior that is close to the ideal standard; and (5) having pride in their profession (Sastrawan, 2016). There are several indicators of teacher professional development as follows: (1) keeping up with information on science and technology developments that support the profession through various scientific activities, (2) developing various learning models, (3) writing scientific papers, (4) making teaching aids/media, (5) taking part in qualification education, and (6) participating in curriculum development activities (Mulyani, 2019).

Therefore, there are ten basic competencies that a teacher must master: (1) the material/subject; (2) learning programs; (3) classes; (4) media and learning resources utilization; (5) the foundation of education; (6) teaching and learning interactions; (7) student achievement assessment; (8) the functions and services of guidance and counseling; (9) recognition and organization of school administration; and (10) understand and interpret research results for learning purposes (Nur & Fatonah, 2022).

Based on the observations and interviews with subject teachers, teachers' professionalism level is still low to improve the education quality. The development of their professionalism had yet to be optimal and a comprehensive policy model approach was needed from the school level to the ministries so that professionalism could be developed even with their existing workloads. A professional teacher must understand the ins and outs of education and teaching as well as other knowledge. Teachers must also receive special education to obtain special skills or expertise and gain the competence to become professional teachers.

Professional teachers can master the characteristics of teaching materials and students (Lubis, 2017). However, teacher quality is not optimal in realizing professionalism in post-training professional competence, especially in action research; their ability to master subject matter broadly and in-depth is still limited (Susanti & Sa’ud, 2016). This occurrence is due to the teacher's low interest in optimizing references to develop teaching abilities and concept development. Their mastery of learning theory and educational principles of learning is still limited, including an understanding of ideology in education. Professional teachers continue to develop and construct their knowledge both through practice and through literature studies. Only a small number of teachers have a high interest in literature searches and scientific studies on an ongoing basis.

Learning Innovation

Innovation is an idea, concept, or project that is accepted and realized as something new by a person or group to be adopted (Harahap et al., 2022). Meanwhile, learning is defined as a complex system whose success can be seen from two aspects: the product aspect and the process aspect (Devi et al., 2018). Successful learning is considered students’ success through their results and ignoring the learning process. Thus, learning innovation is defined as learning that uses new ideas or methods to carry out steps in the learning process, so that it is expected to obtain the desired progress in learning outcomes (Shalikhah, 2017). Therefore, to understand deeper about the meaning of educational innovation, it is also necessary to know about the notion of discovery and invention, which in
Indonesian means the discovery of something new, whether the item itself existed long ago before being discovered or it is new in the sense that it did not exist before (Kadi & Awwaliyah, 2017).

In innovative learning, the teacher's role is more as a facilitator, mentor, consultant, and study partner with flexible schedules, open as needed on student-directed learning, problem-based, projects, real world, real action, and reflection, design and investigation, computers as tools, and dynamic media presentations. Learning innovations are used to facilitate students through the facilitator to learn and be oriented towards what is the student's learning goals. Therefore, teachers must support students to achieve their goals. Teachers must be able to influence their students (Hazmi, 2019). The following benefits will also be obtained through learning innovation: 1) increasing student learning motivation; 2) improving the learning quality; 3) increasing student interest in subjects; 4) developing knowledge and insight; 5) stimulating students' creativity; and 6) improving previous learning in a better direction (Firmadani, 2020).

Therefore, to create a better quality of education, it is necessary to have various actions that support learning in the classroom. The key to success in the teaching and learning process lies in the teacher's ability to convey the learning material provided (Wahyuni et al., 2022), such as through learning innovation. Learning innovation means a new change related to learning to achieve certain goals. This study aimed to provide an overview of increasing teacher professionalism through learning innovation.

**The 4C Competencies**

The 4C stands for Critical Thinking, Collaboration, Communication, and Creativity following the US-based Partnership for 21st Century Skills (P21) which states that human resources must possess these competencies in the 21st century: (1) critical thinking skills; (2) creative thinking skills/creativity; (3) communication skills; and (4) collaboration skills (Mardhiyah et al., 2021).

Critical thinking skills are thinking skills to solve problems or make decisions about them (Kurniawan et al., 2021). This skill is needed to solve problems and make decisions in real life. Also, these critical thinking skills include the ability to distinguish truth or lies, facts or opinions, or fiction and non-fiction.

Creative thinking skill is the ability to create new ideas or ideas that are different from the preexisted ideas (Patmawati et al., 2019). Being creative is the ability to develop (create) new ideas and ways that are different from before. Meanwhile, creativity is a person's ability to create new things, either in the form of ideas or concrete works. Creativity positively impacts people and the community. Being creative and innovative is often equated by most people. However, they are different. Innovative is manifested in innovation which is a new idea or idea that is obtained through gradual development and is embodied in an idea or work whereas creative thinking skills are innate. However, this skill can also be trained by providing challenges in the form of problems that require finding new solutions, either in the form of ideas or in the form of work in solving these problems.

Communication skill is a skill to convey new thoughts, ideas, ideas, knowledge and information to others through speech, writing, symbols, pictures, graphics or numbers (Nurmala & Priantari, 2017). It includes listening skills, obtaining information, and conveying ideas in front of a large audience. Communicating aims to achieve a better-shared understanding of important issues for all parties involved. It can be trained in all educational institutions and in other institutions by providing challenges to convey ideas to others. Communication is said to be successful when other people understand or agree with the ideas conveyed.

Collaboration skill is a skill of working together, synergizing with each other, adapting to various roles and responsibilities, and respecting differences (Jalmo et al., 2019). Collaboration means filling one’s disadvantages with the owned strength to resolve the problem properly in togetherness. These skills can be trained in learning.
Thus, the 4C competencies are soft skills which in their daily implementation are far more useful than mastering hard skills. Arnyana stated that in addition to having hard skills, graduates from tertiary institutions are also required to have soft skills to be successful in their jobs. The statement is in line with Arif, Kusumastuti and Sohitin (2013) who found that vocational high school graduates with good soft skills have better work abilities than diploma graduates who do not have soft skills.

Therefore, in education and teaching, in addition to teaching hard skills, soft skills must also be trained. Based on this information, learning about soft skills, especially 4C, is necessary for industry 4.0 (Arnyana, 2019). Implementation of well-planned education and teaching supported by adequate teacher skills could teach 4C skills properly. The soft skill education model development through learning found that soft skills could be taught through the designated lessons (Mariyani et al., 2022). It means for all subjects in vocational high school to design their learning to master hard skills and soft skills.

### Learning to Improve the 4C

Critical thinking is logical and reasonable thinking focused on decision-making about the problems at hand. The dimensions of critical thinking are: (1) formulating problems; (2) providing arguments; (3) making deductions; (4) induction; (5) performing an evaluation; and (6) making decisions. A learning approach to train critical thinking skills is learning that its syntax trains each dimension of these critical thinking skills (Kirana & Kusairi, 2019). Thus, students are active in learning while the teacher is only a facilitator.

Communication skill includes listening, obtaining information, and conveying ideas in front of many people. The dimensions of communication can be divided into (1) presenting material in a systematic, logical, and correct manner (exhibiting the thinking ability); (2) using well and easy-to-understand language; (3) using strategies and media/communication tools relevant to the context and audience; (4) analyzing and evaluating thoughts, ideas from communication partners, and providing systematic and logical responses; and (5) mastering themselves and the audience (Hanifah & Putri, 2020).

Based on the communication dimensions above, communication skills can be learned through compiling activity results reports, project task presentations, group/class discussions, online learning, and other activities that lead to interactions between students and other students in the school/campus community. Indicators that are measured in 21st-century communication skills include: (1) articulating thoughts, and ideas effectively and logically conveyed verbally and non-verbally; (2) listening effectively to understand the meaning, including knowledge, values, attitudes and culture, of the person you are communicating with; (3) utilizing various technological media and mastering the effectiveness and impact of these media; and (4) communicate effectively in diverse environments (Palenti & Jasman, 2021).

Collaboration is a necessity for success in the 21st century. No matter how great an individual is, they will not be successful without collaboration with others to achieve goals. Therefore, collaboration skills are necessary for everyone. Collaboration skills are the skills of working together, synergizing with each other, adapting to various roles and responsibilities, and respecting differences. Collaborating could help to cover each other's disadvantages to properly resolve the work/projects/problems. A person is said to have the ability to collaborate if they fulfil the three components of collaboration ability (three dimensions of collaboration): (1) demonstrating the ability to work effectively and respect the diversity of team members; (2) showing flexibility and willingness to accept other people's opinions in achieving common goals; and (3) taking on shared responsibility in working collaboratively and appreciating the contribution of each team member (Muna & Malasari, 2021).
Collaborative skills can be trained through cooperative learning strategies. In cooperative learning, students are taught to collaborate (Arthaningsih & Diputra, 2018). Cooperative learning has many types, but all of them involve students working in small groups or teams that help each other in learning a subject. In the cooperative learning strategy, one can find moral value education such as respect for groups, individual and group responsibility, opportunities to succeed together, fun learning, and working in pairs and groups.

In addition to cooperative learning strategies, another learning strategy to practice collaborative skills is through working in groups, provided it raises group values such as the values in cooperative learning. The intended learning to train critical thinking skills and creative thinking is found in moral value education: respect for groups, individual and group responsibility, opportunities to succeed together, fun learning, and working in pairs and groups (Martati, 2018). In addition to cooperative learning strategies, another learning strategy to practice collaborative skills is through working in groups, as long as it evokes group values such as the values in cooperative learning.

CONCLUSION
Teacher professionalism refers to abilities and expertise in pedagogical, personality, social and professional competencies. During learning, the teacher must be able to develop professional competence to improve the learning quality. The teacher could design a better learning process using their competency. An effort to increase teacher professionalism was learning innovations. Learning innovation improved the previous learning conditions, provided an overview to others to try out the innovations, and encouraged the development of knowledge and insights continuation.

The 4C competencies that human resources must possess in the 21st century are (1) critical thinking skills through a learning approach that trains students to solve problems through problem-based learning, project-based learning, cooperative group investigation, inquiry learning, and others; (2) creative thinking skills/creativity through cooperative learning strategies. In cooperative strategies, the moral values are respect for groups, individual and group responsibility, opportunities to succeed together, fun learning, working in pairs and groups; (3) communication skills through preparing activity results reports, presentations of project assignments, group/class discussions, online learning, and other activities that lead to interactions between students and other students, lecturers, and with other school/campus community members; and (4) collaboration skills through problem-based learning, project-based learning, cooperative group investigation, inquiry learning. Implementing these strategies must be followed by challenges in different ways of solving problems and looking at the problem from various perspectives.

REFERENCES


