



# STRATEGIES FOR DEVELOPING TEACHERS' COMMUNICATION, COLLABORATION, CREATIVITY AND CRITICAL THINKING SKILLS IN IMPROVING THE QUALITY OF LEARNING SERVICES AT YUPPENTEK 1 HIGH SCHOOL, TANGERANG CITY

Dimas Kurnia Robby<sup>1)\*</sup>, Siti Zulaikha<sup>2)</sup> Anisa Listiyanti<sup>3)</sup>

Author Affiliations

<sup>1,2,3</sup> *Faculty of Education, Jakarta State University, Jakarta, Indonesia*

Author Emails

<sup>a)</sup> [anisa.listiyanti88@gmail.com](mailto:anisa.listiyanti88@gmail.com) <sup>2)</sup> [Siti-Zulaikha@unj.ac.id](mailto:Siti-Zulaikha@unj.ac.id)

Corresponding author: [dimaskurnia@unj.ac.id](mailto:dimaskurnia@unj.ac.id)

**Abstract.** This research aims to determine strategies for developing 4C teacher skills in improving the quality of learning services at SMA Yuppentek 1 Kota Tangerang. This research uses a qualitative approach with a descriptive method. Data collection was carried out through interviews, observations, and documentation studies. The data that has been collected is analyzed through data reduction, data presentation, and drawing conclusions. To test the validity of the data used credibility of the data by triangulation of sources, techniques, sources, transferability, dependability, and confirmability. The results of the research show that (1) Planning is carried out by analyzing needs based on school resources, setting teacher qualifications and competency standards, maximizing competence or excellence possessed, and distributing human resources; (2) Strategy implementation is carried out by carrying out several activities consisting of IHT (In House Training), Community of Practitioners, MGMP, workshops, and comparative studies; (3) Factors supporting the implementation of the strategy are the school's status as a driving school, the availability of adequate facilities and infrastructure, and having teachers who have the potential to improve school quality. The inhibiting factor is that it is difficult to change the mindset of senior teachers due to a lack of understanding of the 4C skills.

**Keywords:** Strategy, Teacher Development, 4C Skills, Quality of Learning Services

## 1. INTRODUCTION

Education is the basis for a person to gain knowledge which can play an important role in individual development. That's why currently education is expected to provide positive changes for the development of a more advanced nation and country. Students and teachers involved in the learning process must always be ready and quick to face all existing advances. Because with increasingly advanced times, education is also increasingly adapted to various aspects of life. Apart from that, with the industrial revolution 4.0, major changes have occurred in education.

To adapt to all the very rapid and complex changes and challenges, educational institutions must make various efforts to improve the quality of graduates, academic products and other educational services which can be achieved through improving the quality of education (Rosita & Alfarisa, 2015). The quality of education is assessed as a system that depends on the quality of the components that make up the system, as well as the results of the ongoing learning process (Bernike Yoangka, 2019).

Improving the quality of education can be achieved by maximizing several inputs, namely teaching and education staff, students, learning media and curriculum, facilities and infrastructure, and the educational environment. Among these factors, teachers are the key to the success of the learning process. This statement is supported by the results of research conducted by Heyneman & Loxley in (Prayudha & Hidayah, 2019) which states that among the various inputs required in the implementation of education, teachers are the input that most determines the success of education. Quality and professional teachers can be the foundation of a quality education process. Therefore, quality teachers are an important requirement for quality education practices and systems.

In improving the quality of education, teachers must have the necessary criteria in the teaching process so that learning can take place actively involving all students. The criteria and provisions that teachers must have are written in Law of the Republic of Indonesia Number 14 of 2005 concerning Teachers and Lecturers Article 10 Paragraph 1 which states that teacher competence includes pedagogical competence, personality competence, social competence and professional competence. However, apart from having these four competencies, teachers are needed who are able to compete not only in terms of intelligence but also by maximizing creativity and acting intelligence (hard skills-soft skills) due to the emergence of various challenges that are more complex than before.

There are 5 (five) skills that must be possessed by every individual, including teachers, who play an important role in education in order to survive and be able to compete in life in the 21st century, including: 1) Work Ethics, namely a moral principle in performance or rules of behavior in performance. 2) Collaboration, namely the skill of working together with other people. 3) Good Communication, i.e. skills to communicate effectively and efficiently with others. 4) Social Responsibility, namely a person's ability to participate in social responsibility. 5) Critical Thinking and Problem Solving, namely critical thinking and problem solving skills. To prepare superior human resources who have these skills is a challenge for teachers at all levels of education (Mus seen, 2020).

In line with increasingly advanced developments, schools as educational institutions are required to familiarize themselves with creative thinking skills, critical thinking and problem solving (critical thinking and problem solving), communicate (communications), and collaborating (collaboration) or what is usually called 4C (Septikasari & Nugraha Frasandy, 2018). This is also in line with Partono et al (2021) who state that the skills that workers must have in the 21st century include the 4Cs (Critical Thinking, Communication, Collaboration, Creativity). Apart from that, Risdianto (2019) also stated that skills or expertise in the field of 21st century education currently focus on 4C which includes creativity, critical thinking, communication and collaboration.

These four skills are references from Learning to Do which is one of the four pillars of education which is considered still relevant to current educational needs and can be developed. In principle Learning to Do Provide an understanding that to be able to adjust and adapt in a society that is developing very quickly, then individuals need to try to create something. Both students and adults need academic and applied knowledge that can connect knowledge and skills, be creative and adaptive, and be able to maximize all these aspects into the required skills (Zubaidah, 2016). This means that both students and teachers also need to develop these skills so they can adapt to very rapid development survive and become quality human resources.

So by looking at the urgency based on these statements, this research focuses on strategies for developing teacher skills in communication, collaboration, creativity and critical thinking. These skills are considered to have an

important role in education because they can improve human resource competence and are expected to be able to answer the challenges of teachers in the 21st century.

One of these skills is teacher creativity in presenting learning. Creativity in teaching can be seen from the learning methods used so that students become enthusiastic about what the teacher conveys. Then teachers are also required to master communication and collaboration skills so that communication in the classroom and outside the classroom can run effectively. Then, the current progress in education requires teachers to always be open and collaborate with parties who play a role in improving the quality of education, such as students, fellow teachers and the surrounding community. Next in Having the ability to think critically will be useful for teachers, one of which is when there are obstacles to teaching in class that require problem solving and when the teacher filters all the information obtained.

Teachers' communication, collaboration, creativity and critical thinking skills can be developed by seeing that these skills are included in the four basic competencies that teachers must have. In creativity skills, one of the abilities that teachers must master in pedagogical competence is carrying out a learning process that is pro-change (active, creative, innovative, effective, experimental, and fun) (Sagala, 2013). This statement is supported by Law of the Republic of Indonesia Number 20 of 2003 concerning the National Education System Article 40 Paragraph 2 which states that educators and education personnel are obliged to create an educational atmosphere that is meaningful, fun, creative, dynamic and dialogical.

Then in the Government Regulation of the Republic of Indonesia Number 19 of 2005 concerning National Education Standards Article 28 Paragraph 3 it is explained that an educator is required to master social competence where educators are required to have the ability to communicate and socialize effectively with students, fellow educators, education staff, student parents, and the surrounding community. Apart from that, teachers are also required to always actively hone their mindset for critical thinking in everyday life because it will influence the resolution of problems they face, both personal problems and problems related to teaching activities in the classroom so that Teachers find solutions to various problems and obstacles that occur by utilizing their critical thinking patterns. Apart from that, teachers also need to receive HOTS skills training ( Higher Order Thinking Skills) so that teachers get used to thinking critically, creatively, innovatively, analytically, and able to solve problems (Umar & Teguh, 2019).

Teachers as educational resources also need to develop 4C skills which are also included in 21st century life skills so that teaching and learning activities run optimally. By mastering 21st century life skills, it is hoped that teachers will become creative individuals, able to teach and educate, and become...example which is inspiring. Apart from that, current teachers are expected to be able to become driving teachers like those in the Ministry of Education and Culture's program. Driving teachers who take more initiative in making changes, always prioritize students, are able to make the right decisions, and continue to innovate in the teaching process (Laila & Hendriyanto, 2019).

Seeing the importance of 4C skills in the world of education today, providing 4C skills is very necessary. Implementing 4C skills provision is not easy, so it is necessary to implement strategies that can be used by all educational institutions. The school as an educational institution has a responsibility to facilitate the development of teacher skills. With develop competence, teachers can increase their knowledge and skills which can support overcoming obstacles in the teaching and learning process at school and can maximize their role in school Teacher development can improve the quality of learning because high competence and skills will result in good teacher performance so that they are able to achieve quality learning and ultimately obtain maximum student academic results.

If the development of teachers' 4C skills is pursued through appropriate strategies, teacher competence and skills can have an impact on improving the quality of education. An effectively designed strategy will make it easier to organize the organization's resources into a system that can be maintained. In organizational dynamics, strategies are needed for various organizational development needs, including teacher empowerment (Widodo & Sriyono, 2020). If related to this research, this means that strategy is very influential and needed for organizational development, including efforts to develop teacher competencies and skills to produce quality teachers in a school.

Developing teacher skills in this case, especially 4C skills, can be implemented through strategic steps, both by the government, the school, and from teacher self-awareness. However, currently teacher development strategies in schools are still not being implemented so that teacher competence and skills are not running optimally (Idris & Yunus, 2020). Efforts that can be made to improve the quality of teachers as educational human resources must be through continuous coaching and development. Therefore, to achieve this, a strategy is needed development of 4C teacher skills in schools. This strategy can be implemented through education and training as well as other activities that can

encourage teachers to develop their skills. Schools, education offices and training providers have a responsibility to provide support to teachers in trying to improve the quality of education (Ulandari & Santaria, 2020).

With the statements above, this research is based on activities or programs organized by Yuppentek 1 High School in an effort to develop the skills needed by teachers in teaching, namely communication, collaboration, creativity and critical thinking skills. Then it can be seen that these skills are important to apply because they will support teachers in achieving the ideal quality of learning services.

## 2. METHOD

This research uses a qualitative approach and descriptive methods. Qualitative research is research that aims to understand phenomena or problems experienced by research subjects such as motivation, behavior, actions, perceptions, and others thoroughly and objectively which are described through words and language on a particular topic using relevant scientific methods (Moleong, L, 2017). The descriptive method is used because the data collection process in this research comes from words both verbally and nonverbal which is then to interpret something phenomena so that systematic, factual and concrete conditions of reality regarding the thing you want to research can be obtained.

Researchers in this research act as planners, implementers, data collectors, data analysts, data interpreters and pioneers of data results. The research was carried out by communicating intensively with educational human resources involved in the learning program, namely school principals, teachers and informants who understand the research topic in order to obtain accurate data regarding the development of teachers' communication, collaboration, creativity and critical thinking skills as well as supporting and inhibiting factors.

This research was conducted at Yuppentek 1 High School which is located at Jalan Perintis Independen I No. 1, RT.007/RW.003, Babakan Village, Tangerang District, Tangerang City, Banten. The time for carrying out this research began when the researcher conducted the GTO in February 2022. The data sources in this research came from primary data using interview techniques with research informants and also observation techniques. The next data source is secondary data sources using documentation study techniques in the form of organizational structures, lists of teachers and educational staff, lists of study groups, school work programs, lists of student achievements, photos of teacher development activities, school facilities and infrastructure, accreditation certificates, teaching modules, supervision results, and so on.

In analyzing the data obtained, researchers used data reduction analysis techniques, data presentation, and data conclusions/verification. Furthermore, in testing the validity of the data so that the data obtained is valid, this research uses credibility criteria with triangulation techniques of theory, techniques, sources, transferability, dependability and confirmability.

## 3. RESULTS AND DISCUSSION

### **Strategic Planning for 4C Teacher Skills Development in Improving the Quality of Learning Services**

The planning is carried out in relation to the status of Yuppentek 1 High School which has become one of the driving schools and has implemented an independent curriculum system where in this program teachers are required to be able to communicate and collaborate with various educational stakeholders, apply creativity in learning, and be able to think critically well in teaching. and daily life. The school carries out a planning process for developing teacher skills based on the school's asset-based needs related to the driving school, namely only for the scope of Yuppentek High School 1. The principal carries out an analysis of the school's needs based on subjects, age, level of certification, and pedagogy. Apart from that, the school also formed an internal team called the Practitioner Community whose planning process began in July 2020.

The parties involved in the 4C teacher skills development planning process are management or

leadership staff consisting of the education office represented by the school supervisor, principal and deputy, treasurer and head of administration.

In planning the right strategy to develop teachers' 4C skills, schools determine qualification standards and teacher competency standards which will later support the quality of learning services in schools. The teacher qualification standards at Yuppentek 1 High School are a minimum education level of Bachelor's degree and teaching experience. Meanwhile, the competency standards that Yuppentek 1 High School teachers must have can be seen from the suitability (linearity) of the field they master with the subject they will teach, the level of pedagogical ability that can be seen through tests, and their ability in the field of technology.

Apart from that, Yuppentek 1 High School is considered to have different competencies or advantages in terms of the discipline of teachers entering class, the level of class management services, and having a vision and mission that prioritizes aspects of devotion and knowledge. Then the Yuppentek 1 High School teachers have teaching discipline. This discipline can be seen from teachers entering class according to the specified schedule and routinely following the school agenda, as well as prioritizing classroom management services which consist of the learning process of teachers and students.

Planning also involves carrying out the vision and mission of SMA Yuppentek 1 well. The vision of Yuppentek 1 High School is "Excellence in IMTAQ and Science and Technology, Character and Environmental Insight". Then, to achieve the vision and shape the character profile of Pancasila students, Yuppentek 1 High School also has several missions which also lead to the actualization of communication, collaboration, creativity and critical thinking skills for all school members. These missions include:

- a. Develop and implement HOTS-based learning and build 6 basic literacy skills (reading and writing literacy, numeracy literacy, scientific literacy, digital literacy, civic cultural literacy and financial literacy).
- b. Develop critical, creative, communicative and collaborative attitudes through intracurricular and extracurricular activities.

### **Implementation of the 4C Teacher Skills Development Strategy in Improving the Quality of Learning Services**

Yuppentek 1 High School makes several efforts to develop teachers' 4C skills. The form of strategy or effort can be seen from several activities based on IHT (In House Training) central programs and LMS (Learning Management System), workshops, and comparative studies with other schools that have the status of driving schools. As for IHT activities related to central programs, they are initially organized by the ministry and are initially attended by selected teachers. The selected teachers are subject to IHT for approximately one month until they receive a certificate. After the teachers have attended IHT training, they then have an obligation to carry out the training. So in August 2021, they will hold training or IHT at school to use what they have gained.

In terms of communication and collaboration skills, the school carries out programs at MGMP (Subject Teachers' Conference) both at the internal school level and at the city level. Teachers are

included by MGMP to discuss with each other in creating new teaching modules following the provisions of the independent curriculum. During this activity, teachers who are members of MGMP routinely communicate intensively and discuss with each other to improve the teaching module and determine the follow-up to these activities. Apart from that, teacher communication and collaboration skills are also developed in the project to strengthen the Pancasila student profile (P5) contained in the independent curriculum. In P5, teachers across subjects will collaborate. In the sense that teachers between subjects will be integrated with each other to work together in directing students in completing projects. Furthermore, comparative study activities carried out with other schools also aim to ensure that schools and teachers synergize with each other in improving the quality of schools both in terms of infrastructure and the condition of human resources.

The majority of training that has been held is aimed at improving teachers' pedagogical competence, within which competence there are teaching creativity skills that must be mastered. Apart from that, the school's efforts to develop teachers' creative skills in teaching can be seen from various training related to learning media. One of these trainings is IHT LMS (*Learning Management System*) *Moodle* and *Wordwall*. In this training, they are taught to make learning more interesting, accompanied by a games mode.

The material that teachers receive in training is usually delivered by resource persons, namely expert trainers. The expert trainers invited by the school came from the central government, namely BPMP (Education Quality Assurance Agency), P4TK, and the education office. Apart from providing materials, the government also provides assistance on a scheduled basis school which appointed as a driving school. Teachers who have received training will return it then they prepare committees, IHT schedules and so on.

Apart from parties from the government, SMA Yuppentek 1 also invited third parties who were competent and professional. If the central government delivers more material related to the Ministry of Education and Culture's programs, while third parties play a greater role in increasing teachers' ability to master the LMS (*Learning Management System*) for example in the use of learning media.

There is no definite training agenda for the 2022-2023 academic year. However, in the previous school year, the training was still adjusted to the needs of teachers and the programs to be implemented. Then specifically for the internal practitioner community as scheduled by the school principal, the training was held on the 25th or one day outside the schedule of teaching and learning activities. The budget for organizing training comes from two sources, namely BOS funds (School Operational Assistance) and community funds (Student Tuition Fees Every Month). So each training event will be allocated specifically from these funds.

As for the evaluation of training activities, it is carried out at the end of the semester along with an evaluation of all school activities and an assessment of teacher performance during teaching in one semester. The results of the training received by the teacher will be seen from the way the teacher teaches during class, whether there are any changes or positive impacts teaching or there is no

significant change. If a teacher's way of teaching is still considered monotonous and undisciplined, the school principal will re-evaluate the training required by the teacher.

### **Supporting Factors and Inhibiting Factors for Implementing the 4C Teacher Skills Development Strategy in Improving the Quality of Learning Services**

The supporting factors can be seen from the status of Yuppentek 1 High School as a driving school. Becoming a driving school is one of the supporting factors because in obtaining this status there is a school quality eligibility process that must be fulfilled. Then another supporting factor is because SMA Yuppentek 1 has teachers who have the potential to improve the quality of the school. This potential can be seen from teachers who have good literacy and numeracy skills so that these teachers have an important role in advancing school programs and have the opportunity to become driving teachers. Furthermore, supporting factors can also be seen from the aspect of existing infrastructure at the school. The school management has made good efforts to use existing facilities and infrastructure at Yuppentek 1 High School.

Likewise, there are inhibiting factors in schools' efforts to develop teachers' communication, collaboration, creativity and critical thinking skills. These obstacles come from the difficulty of changing *mindset*. The senior teacher also relates to the lack of understanding of 4C skills so there is a lack of awareness to innovate in the teaching process.

There are obstacles to implementation when collaborating and being creative with students in the classroom occurs when students are too picky in choosing group mates for a project. As a result, students prefer to group with friends who they think have already or are used to working together. This ultimately makes it quite difficult for teachers to apply the 4C skills in the independent curriculum.

## **4. DISCUSSION**

### **Discussion of 4C Teacher Skills Development Strategy Planning in Improving the Quality of Learning Services**

This research found several process aspects in planning that have been adjusted based on strategy components and the main stages in preparing strategic planning. Meanwhile, the planning aspects consist of different competencies, scope, distribution of resources. With development aspects of education in a more modern direction, educational institutions need to make significant changes, developments and quality improvements. One effort that educational institutions can make to improve the quality of education is by seeking quality human resources. In achieving education, teachers are one of the most determining factors. Therefore, teachers who have good teaching qualities will become the foundation of the educational process. To ensure that teachers have good teaching quality, SMA Yuppentek 1 has made several efforts, one of which is planning to develop teachers' communication, collaboration, creativity and critical thinking skills. According to Chandler, strategy is a long-term organizational goal that is used to achieve certain goals by utilizing and coordinating resources (Sedarmayanti, 2018). Development is the process of describing planning details into concrete form

(implementation) and in a special sense is the process of creating assessment instructions (Julita et al., 2017).

Strategic planning for developing teachers' communication, collaboration, creativity and critical thinking skills is to understand and demonstrate different competencies. The competencies possessed by Yuppentek 1 High School teachers have different values or advantages from other schools, namely that teachers have the ability to provide good classroom management services as evidenced by the teacher's discipline when teaching which can be seen from the teacher's entry according to the specified teaching schedule and routinely following the school agenda. .

Yuppentek 1 High School teachers also master the field of knowledge being taught and implement a superior vision in science and technology. Therefore, to realize this vision, all teachers are required to understand technology, at least understand the learning technology used. This is in line with the theory which states that different competencies are something that the organization has better if compared to other competitors. In the sense that this competency is an advantage that the organization has compared to other organizations (Rahman, 2018). Later, these standards and excellence will be managed by school management to improve school quality.

The next component in planning strategies for developing teachers' communication, collaboration, creativity and critical thinking skills is determining the scope. The scope of this research shows that the teacher skills development activities or programs implemented include the Yuppentek 1 Tangerang High School environment by utilizing the available facilities so that all activities can run efficiently. Rahman stated that scope is the organization's area of operation. Therefore, the strategy you want to implement must pay attention to the scope of the organization so that its operational activities can run smoothly.

Selection and determination of scope can be carried out simultaneously by analyzing the environment of Yuppentek 1 High School. This analysis can be carried out by examining various factors that can influence teacher 4C skill development activities. This is also in line with the theory which explains that analyzing the environment requires analysis of external and internal factors because these factors must be in accordance with the objectives and can influence the school to develop.

Then there are other components needed to plan a strategy the development of teachers' communication, collaboration, creativity and critical thinking skills is the distribution of resources. Resource distribution is an organizational process in using and coordinating its resources to determine the strategy that will be implemented. The school principal mobilizes human resources or parties involved in the planning process for developing teacher 4C skills. These parties are the management or school leadership staff consisting of the principal and deputy, treasurer and head of administration. Meanwhile, parties originating from the center or external are the ministry of education and the education office represented by school supervisors. In the research it was found that schools did planning process development the teacher's skills are based on the school's asset-based needs. The school principal carries out an analysis of school needs which is also adjusted to competency standards and teacher



qualification standards. As for the competency and skill standards for teachers set by SMA Yuppentek 1, they can be seen from their suitability (linearity) the field mastered with the subjects to be taught, the level of pedagogical ability as seen through tests, as well as having abilities in the field of technology. Meanwhile, the teacher qualification standards include a minimum education level of Bachelor's degree, teaching experience, teacher age and certification level.

The next finding is choosing the best alternatives and implementing planning, namely by carrying out the vision and the mission of Yuppentek 1 High School well. The vision of Yuppentek 1 High School is "Excellence in IMTAQ and Science and Technology, Character and Environmental Insight". Then, to achieve the vision and shape the character profile of Pancasila students, Yuppentek 1 High School also has several missions which also lead to the actualization of communication, collaboration, creativity and critical thinking skills for all school members. The implementation of this mission can be said to be in line with the theory which states that managers choose the best preferences in carrying out inventories to achieve goals more effectively. Then, simultaneously with the implementation of planning, all preferences are designed by formulating clearly and in detail the operational activities that will be implemented (Rahman, 2018).

### **Discussion on the Implementation of the 4C Teacher Skills Development Strategy in Improving the Quality of Learning Services**

This section will explain the implementation of strategies that have been adjusted based on strategy implementation. The main aspects of strategy implementation consist of programs, procedures, as well as evaluation and control.

The strategies implemented by schools to develop teachers' 4C skills are divided into several activities or programs. Programs are activities that require completion of planning. The program carried out involved restructuring and changes that occurred in the company (Rahim & Radjab, 2017). These programs are:

- a. IHT (In House Training): One of the trainings carried out internally at a school or certain designated area. This development strategy is carried out by paying attention to the efficiency of activities because basically an activity aimed at an ability does not have to be carried out externally, but efforts to improve it can also be carried out through teachers learning from each other (Mahsunah, 2012). Apart from IHT which discusses central programs such as P5 or driving schools, IHT is also carried out independently by schools to use LMS learning media, one of which is Moodle for developing teacher creativity.
- b. Workshop: Activities aimed at producing a product that can be used in the learning process to increase competency and develop teacher careers (Mahsunah, 2012). The workshops held are also related to the creation or preparation of teaching modules which can be said to be creativity development because each teacher is obliged to develop them independently and as creatively as possible by taking into account the needs, characteristics of students and subjects.

- c. MGMP: Subject Teachers' Conference both at internal school level and city level. In MGMP teachers communicate with each other intensively by holding discussions related to the fields they master. This communication can be done online through groups or offline by holding internal meetings. If teachers are used to communicating and interacting in a group, it will make their task of teaching easier, namely explaining material in communicative language that is easy for students to understand.
- d. Community of Practitioner: An internal team of teachers who are assigned to take part in activities organized by the center and are obliged to impart their knowledge to other teachers by creating *workshops for* IHT required. These trainings also focus heavily on teachers' pedagogical competencies, where 4C skills are also among the skills that must be sharpened. As for the schedule of Practitioner Community activities, they are held every month outside of teaching and learning activities.
- e. Comparative Study: Activities to mutually review schools that have the status of driving schools with the aim of ensuring that schools see each other's quality of progress that can be implemented and teachers can work together in synergy in providing input related to improving teaching competency.

In addition to the activities or programs described on, there are components that support its implementation as well as aspects that also determine the quality of learning services, namely curriculum aspects, teacher teaching quality, facilities and infrastructure, fund management, and a school relationship with stakeholders.

The material is presented in stages according to the needs and competencies that the teacher wants to achieve or improve. In accordance with the theory, training is carried out by taking into account needs and materials new curriculum that needs to be discussed. Furthermore, in training-based activities and non-training activities, teachers can obtain various skills and competencies in accordance with National Education Standards, thereby increasing their performance. This is in accordance with the training objectives which lead to the development of teacher skills covered in the SNP as well as the demands of the latest curriculum (Idris & Yunus, 2020).

Assessment, measurement and evaluation activities need to be carried out as an effort to improve the quality of education from all aspects of the educational process, including the quality of learning services. By implementing a structured measurement system, it can make it easier for education professionals to review and document the added value of implementing education quality improvement programs, both for teachers, students, parents and the community (Bernike Yoangka, 2019). In carrying out the role of monitoring the quality of education, the school principal monitors and evaluates all school activities on a routine and scheduled basis which are carried out every middle or end of the semester. Evaluation is included in the components that can improve the quality of learning (Bernike Yoangka, 2019).

Evaluation can also be used to see teacher performance during teaching in one semester.

Teacher performance assessment involves students' opinions because students are more objective and they really feel the performance, personality and habits of each teacher. Then the results of the training received by the teacher will also be visible from the way the teacher teaches during class, whether there are changes and positive impacts in teaching or no significant changes. The final results will be analyzed by the school principal when providing supervision, whether a teacher deserves reward or punishment.

### **Discussion of Supporting Factors for Implementing the 4C Teacher Skills Development Strategy in Improving the Quality of Learning Services**

In 21st century learning, there are several aspects that must be applied and mastered by both teachers and students. In connection with the independent curriculum which has only been implemented for two years, communication, collaboration, creativity and critical thinking skills are skills that are very necessary to support quality learning.

Therefore, implementing efforts to develop teacher skills in communication, collaboration, creativity and critical thinking is very necessary so that teachers, as the determining factor in educational success, can master these skills so that they can apply them well in the educational process. However, the efforts made by schools are not free from factors that influence them. Moreover, these four skills can be indicators of teacher competency which can have an impact on the quality of learning services.

There are supporting and inhibiting factors in schools' efforts to develop these skills, both for teachers and students. The supporting factors can be seen from the status of Yuppentek 1 High School as a driving school. Becoming a driving school is one of the supporting factors because in obtaining this status there is a school quality eligibility process that must be fulfilled, making it easier to increase the required teacher competency and skills with direct assistance from the center.

Then another supporting factor is because SMA Yuppentek 1 has teachers who have the potential to improve the quality of the school. This potential can be seen from teachers who have good literacy and numeracy skills so that these teachers are considered better able to understand and support various independent school and curriculum activities and can play an important role in advancing school programs. Furthermore, these potential teachers are included in learning committees or practitioner communities which aim to improve the quality of the driving school program.

Furthermore, supporting factors can also be seen from the aspect of existing infrastructure at the school. The availability of complete facilities and infrastructure is of course an important support for the quality of learning services. The school management has made good efforts to use the existing facilities and infrastructure at Yuppentek 1 High School so that it is hoped that the learning process will run smoothly because it makes maximum use of the available infrastructure.

### **Discussion of Inhibiting Factors for Implementing the 4C Teacher Skills Development Strategy in Improving the Quality of Learning Services**

Likewise, there are inhibiting factors or challenges in schools' efforts to develop teachers' communication, collaboration, creativity and critical thinking skills. If in the supporting factors there are

young teachers who have quite good potential, but the inhibiting factor lies in the difficulty of changing the mindset of senior teachers related to the lack of understanding of communication, collaboration, creativity and critical thinking skills, resulting in a lack of awareness to innovate in the teaching process. Then these senior teachers also still use old learning systems such as the lecture or teacher center method.

But not all senior teachers are closed to learning new things. Based on interviews, there are also senior teachers who like to learn new things. This can be seen from several senior teachers who actively use varied learning media. However, teachers understand the 4Cs better and actively carry out the process student centered will provide mutual input to senior teachers who are deemed to have difficulty understanding and applying 21st century learning.

Therefore, the Principal and his staff continue to make efforts to prevent this from happening gaps the teacher's abilities are too far away. These efforts are made by always educating and providing outreach that the current learning system has made many advances and is very varied. Apart from that, school management also often holds trainings that invite expert trainers on different topics according to teacher needs. If there are still teachers who use old learning patterns, then these teachers are considered irrelevant and not in line with the goals of the driving school.

Furthermore, there are still obstacles in implementing 4C skills, especially when implementing collaboration and creativity with students in class. Barriers to collaborating in class occur when students are too picky in choosing group mates for a project. This could be a tendency because you are not used to communicating comfortably with all your friends. As a result, students prefer to group with friends who they think have already or are used to working together. This ultimately makes it quite difficult for teachers to apply the 4C skills in the independent curriculum.

Teachers play a very important role in prepare students to collaborate with each other and work together. Therefore, the teacher must be able to make a decision that each group member distribution is determined by the teacher. The aim of dividing student groups is to ensure that the abilities in each group are fair and equitable and to provide a forum for sharing knowledge between peers.

## 5. CONCLUSION

Based on the research results presented in the previous section, it can be concluded that:

### **Strategic Planning for 4C Teacher Skills Development in Improving the Quality of Learning Services**

This is done by analyzing needs based on existing resources. These basic needs consist of subjects, age, certification level, and pedagogies. Then, based on these needs, schools set teacher qualification and competency standards, namely a minimum education level of Bachelor's degree, teaching experience, level of pedagogical ability, and linearity in the scientific fields mastered and taught. Furthermore, the school will maximize the different competencies or advantages it has as seen in terms

of teacher discipline, level of class management services, as well as being able to implement a superior vision in IMTAQ and science and technology, character and environmental insight. The human resources or parties involved are the education department represented by the school supervisor and management and school leadership staff. Implementation of the 4C Teacher Skills Development Strategy in Improving the Quality of Learning Services

By carrying out several activities based on school needs. Development activities originate on the basis of central programs and internal guidance from schools, namely IHT activities (*In House Training*), Practitioner Community as a follow-up to the central IHT program, MGMP (Subject Teachers' Conference), *workshops*, and comparative studies. The school organizes development and training every month on one day outside of KBM, the material of which is adapted to the needs of the school program and curriculum. Expert trainers come from the center, BPMP, P4TK, and the education department. The teacher development budget is allocated specifically from BOS and community funds. The principal carries out evaluation and control which aims to evaluate all school activities and teacher performance which is routinely carried out at the end of the semester.

### **Supporting Factors and Inhibiting Factors for Implementing the 4C Teacher Skills Development Strategy in Improving the Quality of Learning Services**

The supporting factors are Yuppentek 1 High School which has become a driving school, the availability of adequate facilities and infrastructure, and having teachers who have the potential to improve the quality of the school.

Meanwhile, the inhibiting factor is that it is difficult to change *mindset in* senior teachers this is related to a lack of understanding of communication, collaboration, creativity and critical thinking skills so that awareness of innovation in the teaching process is still minimal. Then these teachers also still use old learning systems such as the lecture method or teacher *center*.

## **6. REFERENCES**

- Bernice Yoangka, E. (2019). Manpower Management in Improving the Quality of Learning Services at SMA YPK Sentani Jayapura Regency [Indonesian University of Education].
- Idris, AN, & Yunus, M. (2020). Competency Development Strategy for State Primary School Teachers 22 Maros Regency. *Bosowa Journal of Education*, 1(1), 9–15.
- Julita, N., Arum, WSA, & Zulaikha, S. (2017). Strategy for Developing Teacher Quality Through the Sustainable Professional Development Program at Al-Bahri Bekasi Vocational School. *Improvement: Scientific Journal for Improving the Quality of Educational Management*, 4(1).
- Laila, K., & Hendriyanto. (2019). Preparing Professional Educators in the Era of Society 5.0. Ditpsd Kemdikbud. <http://ditpsd.kemdikbud.go.id/article/detail/preparing-professional-educators-in-the-50-era-society>
- Mahsunah, D. (2012). Teacher Professional Development Activities. 194.

- Moleong, L. J. (2017). *Qualitative Research Methods* (36th ed.). Teenager Rosdakarya Offset.
- Deception. (2020). *Developing Teacher Personality Competencies from 21st Century Education Perspectives*. Deepublish. Partono, Wardhani, HN, Setyowati, NI,
- Tsalitsa, A., & Putri, SN (2021). Strategy to Improve 4C Competencies (Critical Thinking, Creativity, Communication, & Collaborative). *Journal of Educational Science Research*, 14(1), 41–52. *Republic of Indonesia Government Regulation Number 19 of 2005 concerning National Education Standards*.
- Prayudha, MY, & Hidayah, PN (2019). Improving 4c Skills To Strengthen The Quality Of Education In Indonesian. *Becoming an Excellent Student in the Era of Industry 4.0 and Society 5.0*, 33–37.
- Rahim, AR, & Radjab, E. (2017). *Strategic Management*. LPP Muhammadiyah University of Makassar
- Rahman, A. (2018). Padang Luar Traditional Market Development Strategy to Increase Trader Satisfaction According to Sharia Economics. 80.
- Risdianto, E. (2019). Analysis of Indonesian Education in the Era of Industrial Revolution 4.0. *Researchgate*, 1–16.
- Rosita, R., & Alfalisa, F. (2015). Teacher Professional Education (PPG): Strategy for Developing Teacher Professionalism and Improving the Quality of Indonesian Education. *National Seminar on Economic Education FE UNY*, 671–683.
- Sagala, S. (2013). *Professional Abilities of Teachers and Education Personnel*. Alfabet.
- Sedarmayanti. (2018). *Strategy Management* (3rd ed.). Refika Aditama.
- Septikasari, R., & Nugraha Frasandy, R. (2018). 21st Century 4C Skills in Basic Education Learning. *Al-Awlad Tarbiyah Journal*, 8(2), 107–117.
- Ulandari, W., & Santaria, R. (2020). Teacher Professional Development Strategy Through Education and Training. *Journal of Islamic Education Management*, 5(1), 57–68.
- Umar, & Teguh. (2019). *FSGI: Teachers Must Think Critically*. Republica. <https://www.republika.co.id/berita/pl88uo377/fsgi-teachers-should-think-critically>
- Law of the Republic of Indonesia Number 14 of 2005 concerning Teachers and Lecturers.*
- Law of the Republic of Indonesia Number 20 of 2003 concerning the National Education System.*
- Widodo, W., & Sriyono, H. (2020). Teacher Empowerment Strategy in Improving the Quality of Education. *Educational Scientific Journal*, 7(1), 7–12.
- Zubaidah, S. (2016). 21st Century Skills: Skills Taught Through Learning. *National Education Seminar with the theme "Strategic Issues in Mathematics and Natural Sciences Learning in the 21st Century, December, 1-17.*

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

