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Increasing Teacher Innovativeness Through Strengthening Creativity, Organizational Support, Emotional Intelligence, And Information and Communication Technology (Ict) Literacy in Private Vocational School Gty Teachers in Bogor District

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ABSTRACT

This research aims to produce strategies and ways to increase teacher innovativeness by strengthening the variables of creativity, organizational support, emotional intelligence, and information and communication technology (ICT) literacy as intervening variables. The research sample was 218 samples taken using stratified proportional random sampling of private vocational school GTY teachers in Bogor Regency. This research uses a survey method with a path analysis approach and SITOREM analysis. The results of this research can be concluded: 1). there is a direct influence of creativity on teacher innovativeness, 2). there is a direct influence of Organizational Support on Teacher Innovativeness, 3). there is a direct influence of Emotional Intelligence on Teacher Innovativeness, 4). there is a direct influence of Information and Communication Technology (ICT) Literacy on Teacher Innovation, 5). there is a direct influence of Creativity on Information and Communication Technology (ICT) Literacy, 6). there is a direct influence of Organizational Support on Information and Communication Technology (ICT) Literacy, 7). there is a direct influence of Emotional Intelligence on Information and Communication Technology (ICT) Literacy, 8). there is an indirect influence of Creativity on Teacher Innovation through Information and Communication Technology (ICT) Literacy, 9). the indirect influence of Organizational Support on Teacher Innovation through Information and Communication Technology (ICT) Literacy, and 10) the indirect influence of Emotional Intelligence on Teacher Innovativeness through Information and Communication Technology (ICT) Literacy.

The results of the SITOREM analysis show that based on the priority order of improving teacher innovation, it is necessary to strengthen creativity, organizational support, and emotional intelligence. Creativity is to be strengthened, so it is done by enhancing indicators that are still weak, namely: smart (acting cleverly in looking for opportunities), habit (behavioral habits in solving problems), originality (originality in developing something new or different), as well as maintaining or developing indicators: openness (open behavior in accepting new ideas and thoughts), interest (behavior interested in complex things), and persistent (acting persistently in trying), organizational support is to be strengthened, then this is done by improving indicators that are still weak, namely: providing justice and leadership support, as well as maintaining or developing indicators: respect from the organization and working conditions, emotional intelligence is to be strengthened, then this is done by improving indicators that are still weak, namely: emotional expression, optimism, empathy, as well as maintaining or developing indicators: adaptability, impulsive behavior, and relationships, information and communication technology (tik) literacy wants to be strengthened, so it is carried out by improving indicators that still weak, namely: user ability, knowledge of data communications, understanding of operational systems, as well as maintaining or developing indicators: understanding of computer application programs, understanding of computers, ability to operate computers, effectiveness and sustainability of use, and efficiency and capacity of use .

KEYWORDS: **Creativity, Organizational Support, Emotional Intelligence, Information and Communication Technology (ICT) Literacy, and Teacher Innovativeness**

Introduction

In the era of industrial revolution 4.0 and society 5.0, innovation has become a global issue that absolutely must be implemented in all sectors of life, including the education sector. The world of education is currently experiencing significant changes, especially in terms of technology. These developments impact the role of teachers as educators in the learning process. In this case, teachers must create a pleasant learning atmosphere and produce student graduates with educational goals. Student learning outcomes will also increase along with innovations carried out by teachers. Therefore, teachers must have high innovation power and be able to create tools that can achieve learning goals. In other words, teachers must be able to innovate

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in learning, teachers must be innovative. Teacher innovation is essential in an era where technology is developing rapidly.

This is shown by several educational innovation studies which found that innovation is a new method that is very important for solving educational problems so that education can survive more completely, sustainably, effectively, efficiently in facing global challenges (Altunoğlu & Bulgurcu Gürel, 2015; Blândul, 2014; Hoffman & Spangehl, 2011; Mykhailyshyn et al., 2018;) Ultimately, this innovation has a positive effect on student effectiveness, satisfaction and learning achievement (Lee, 2011; OECD, 2016; Serdyukov, 2017). On the other hand, without innovation, there will be a lag in the world of education which will impact other aspects of life such as politics, economics, society, culture, etc. (Shalikhah, 2017).

Teachers are the main key that determines the progress, quality, and prosperity of the nation. Where to achieve these goals and ideals, it is hoped that the implementation of education can be carried out as well as possible by directing various factors that support improving the quality of education. Teachers are required to have the ability to create good learning and must be able to manage existing resources, prepare plans, and be able to improve their ability to provide good service to students so that good and enjoyable learning is created.

A teacher as an innovator must have the qualities of a true leader, namely the ability to influence and the ability to create sustainable change in a situational manner adapted to the character of the students in the class they teach. With their ability to innovate, teachers who are innovators are always reliable, always make students have hope, and can make students motivated in learning.

Teachers must also be able to provide solutions to achieve educational goals. The importance of superior teachers is expected to be able to solve educational problems. As stated by the Ministry of Education and Culture, the complexity of the future, if human resources are good, then educational problems will be overcome. The presence of platform 4.0 has an impact on innovation that needs to be implemented by teachers. The presence of platform 4.0 which relies on a cyber-physical system, supported by rapid technological advances, information bases, knowledge, innovation, and networks, marks the emergence of the creative century. Apart from that, the weak mentality of students is also one of the challenges in creating quality education. Following up on these conditions, the Ministry of Education and Culture issued a policy, one of which is called Freedom to Learn. This program is expected to improve the quality of human resources, and independent learning is an effort to create a learning environment that is free of expression and free from psychological pressure. Therefore, teachers are expected to be able to become someone who is motivated to create comfortable and enjoyable learning for their students to achieve learning goals that meet expectations.

In reality, most countries still lack educational creativity and innovation (Baharuddin et al., 2019). Likewise, the Minister of Education and Culture (Mendikbud) Nadiem Makarim stated that the root of the education problem in Indonesia is the lack of innovation (ditpsd.kemdikbud.go.id, 2019). Innovation does not work as expected. Many educational reforms in educational units are still faltering and disappear without a clear evaluation process (Zakso, 2010).

As a result, the quality of education in Indonesia is still far behind that of developed countries, including neighboring countries. For example, the Organization for Economic Co-operation and Development (OECD) noted that Indonesia's Program for International Student Assessment (PISA) ranking over the last 18 years shows that the average score of Indonesian students has not experienced significant changes and is still far behind compared to the average score. average international students.

The government through the Ministry of Education and Culture (Kemendikbud) 2019 launched an innovative policy in a program called "Freedom to Learn". This policy is a strategy to liberate various things in the implementation of education, such as regulations that have previously been considered a burden on teachers. At the educational unit level, these innovative policies will not have much meaning if teachers do not have the initiative to innovate. Minister of Education and Culture Nadiem Makarim in his speech welcoming National Teachers' Day in 2019 stated that change cannot start from the top, everything begins and ends with the teacher. These changes do not have to be big, if these changes are carried out together, then even the smallest changes will provide positive changes to the quality of education.

However, the results of a preliminary survey carried out from 2 to 6 January 2024 on permanent foundation teachers (GTY) who teach at Bogor Regency Private Vocational High Schools (SMK) focused on questions on eight indicators of innovation, namely Preparing Learning Plans, Improving/renewing old/existing products, improving the quality of service facilities, using information technology, updating work planning, developing methods/ways of working, increasing competence and developing professionalism, and improving work governance shows that the percentage of teachers who are not optimal in carrying out innovation is still high. In detail, the results are as follows:

1. *There are 33% of teachers who have not met expectations in preparing learning plans, which can be seen from teachers making learning plans at the beginning of the school year, and preparing supporting learning plans*
2. *There are 35% of teachers who have not met expectations in repairing/renewing old/existing products, where this can be seen from teachers creating an atmosphere so that all students have the opportunity to express their opinions, and motivating students to continuously improve their learning outcomes.*
3. *3) There are 31% of teachers who have not met expectations in improving the quality of service facilities, which can be seen from teachers updating the learning methods used in considering learning time, and expanding the implementation of teaching and learning outside the classroom environment.*

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4. *There are 35% of teachers who have not met expectations in the use of information technology, which can be seen from teachers developing varied learning media, and improving the use of ICT-based learning media*
5. *There are 37% of teachers who have not met expectations in updating work planning, which can be seen from teachers developing learning plans based on student learning needs, and revising learning plans that are prepared periodically*
6. *There are 37% of teachers who have not met expectations in developing methods/ways of working, which can be seen from teachers developing learning methods by learning materials, and expanding student teaching materials from various sources*
7. *There are 36% of teachers who have not met expectations in increasing competence and developing professionalism, which can be seen from teachers reflecting on past learning activities to improve future learning processes and increasing the effectiveness of learning through Classroom Action Research (CAR).*
8. *There are 36% of teachers who have not met expectations in improving work governance, which can be seen from teachers developing transparent student assessments, and developing a system for assessing student learning outcomes using ICT.*

The survey results above show that teacher innovativeness needs to be increased, so it is necessary to find strategies and ways to increase teacher innovativeness. Considering that teacher innovativeness is the key to achieving educational goals, teacher innovativeness is interesting to research

The actuality of the research theme (state of the art) is indicated by the fact that there are still researchers researching the theme of teacher creativity, which indicates that this theme is not obsolete. Widodo's research (2018) shows that teachers still lack new ideas to improve the quality of learning. When the results of the learning evaluation do not meet the standards there is almost no change in approach to the learning process. Wibowo's research (2015) found that teachers' problems in pedagogical competence are weak control of the class, poor innovation and creativity, low interest in reading, lack of mastery of good assessment techniques, and teachers lacking or even no mastery of information technology-based learning media. Research by Isnarto and Abdurrahman, (2017) found that most teacher activities related to the use and development of media were in the low category. 79.63% of teachers, in one semester, use media less than ten times in their learning

Research by Handayani et al., (2017) on Classroom Action Research (PTK) found that as many as 80% of teachers had never carried out PTK activities. Pursitasari's (2014) research on the experiences of teachers who teach Natural Sciences (IPA) in conducting PTK and writing scientific articles involved 35 teachers. The research results showed that 29% of teachers had conducted classroom action research, while only 11% had written articles.

The results of the preliminary survey and several previous research results that have been described above are in agreement, namely that they both show that there are still problems with teacher innovation in all dimensions, both in the dimensions of product innovation, process innovation, and service innovation. This fact confirms that teacher innovation still needs to be improved, including teacher innovation in Bogor Regency. This is important because, as stated at the beginning, teacher innovation influences student learning achievement, which is the ultimate goal of the school process. Apart from that, individual teachers who do not innovate will be left behind or even abandoned by students. Therefore, every reform must begin with changing teacher behavior towards reform (Zakso, 2010). Updating teachers' innovative behavior is very important to improve the quality of learning in schools (Vermeulen et al., 2022).

Teacher creativity is a factor that strengthens the effects of education (Kania, 2013). Creativity is a mental and social process that involves the discovery of new ideas, concepts, or new associations from the creative mind and is very important for innovation (Ng'ang'a & Otii, 2013). There is a significant relationship between teacher creativity and realistic and idealistic approaches. Teachers who have realistic and idealistic approaches are more creative than those who do not (Maktabi et al., 2014). Teachers measure the highest ranking of teaching success based on the highest professional assessment and knowledge. Teachers are considered to lack the ability to increase student engagement and utilize assessment to encourage student learning (Wood, 2014).

It is important to foster thinking and learning from the development of significant interactions with other people, social culture in education, and creativity that provides an analytical framework (Elizondo et al., 2013). Good learning quality and fun learning methods are things that should be created by teachers to guide and provide reinforcement to students in class (Sarjana, 2014). Research by Khayati & Bachelor (2015), Manganganti et al., (2022), Ningrum & Abdullah (2021), Sefriyanti & Ibrahim (2022), and Wulandari & Nisrina (2023), confirms the influence of creativity on teacher innovativeness. The higher the teacher's creativity, the higher the teacher's innovativeness. The role of teacher creativity is not just to help the teaching and learning process by covering just one aspect of the human self but also includes other aspects, namely cognitive, psychomotor, and affective. In general, teacher creativity has the main function, namely helping to complete their work quickly and efficiently.

Teacher innovation is very important in the learning process so schools must optimize teacher innovation through learning organizations (Liao et al., 2008; Škerlavaj et al., 2010). To optimize this, schools must grow into learning organizations that enable teachers to freely carry out innovations in schools, either through opportunity exploration (paying attention to sources of opportunities, looking for opportunities, recognizing

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opportunities, and gathering information about opportunities), generativity (generating ideas or solutions to opportunities, generating representations or categories of opportunities, and generating associations and combinations of ideas and information), informative investigations (formulating ideas and solutions, demonstrating ideas and solutions, evaluating ideas and solutions), championing (mobilizing resources, persuading and influencing, encouraging and negotiating, challenging and taking risks), as well as application (implementing, modifying and getting used to new things) (Kleysen & Street, 2001). Mummedy's (2011) research on 165 respondents. The research results reveal that organizational support has a positive effect on innovation. Other research by Kurtessis et al., (2017) found that organizational support has a positive influence on innovation. Followers who receive high support will express high effectiveness towards the organization.

Research by Izzati (2022), Kananlua (2022), Meidawati et al., (2022), Setyadi (2022), Suhardi (2023), and Winola & Raharja (2023), confirms that the better the organizational support, the better the teacher's innovativeness. Teacher innovation is very necessary for the learning process, so schools need to optimize teacher innovation by revitalizing learning organizations and encouraging a solid teamwork orientation.

From an organizational perspective, innovation means taking creative ideas and turning them into useful products or new work methods (Robbins & Coulter, 2016), the process by which organizations use skills and resources to develop new goods and services or to develop production and operating systems so that it better responds to customer needs (Jones, 2013), the process of implementing new ideas to improve organizational processes, products, or services (Certo & Certo, 2009), the process by which products, processes, materials, and services are developed and transferred to the market appropriate (Rubenstein, in White & Bruton, 2007), and a creation (invention) whose focus is the use of resources (people, time and money) to create or develop new products, services, new ways of doing things, new ways of thinking about things (Ahmed & Shepherd, 2010). From an individual perspective, innovation is the process of taking new ideas and putting them into practice (Wallace, 2017) or the gradual process of recognizing a problem to derive new ideas and solutions, working to advance and build support for them, and producing an applied prototype or model. to be used and benefit the organization or part of it (Carmeli et al., 2006).

Emotional intelligence plays an important role in teacher innovation. Emotional intelligence which is proportional to personal happiness will promote positive things in a person because emotional intelligence can enforce positive actions and habits, improve emotions, and form positive values in a person so that the individual can achieve happiness. Research by Mahrita & Cahyono (2022), Panggabean et al., (2022), Taoefik et al., (2016), and Zebua et al., (2021), confirms that the better a teacher's emotional intelligence, the positive influence it will have on teacher innovativeness. With the increasing function and role of teachers in the era of globalization, the emotional intelligence possessed by a teacher will greatly influence the development of aspects of his personality as an important element in teacher innovation.

Information and Communication Technology (ICT) has had a changing impact on the Indonesian nation, with ICT, it has become easier, faster, and more attractive for people to access various information. However, in reality, some people still have problems accessing information, including low levels of education and access to information (Agbo, 2015; Aramide et al., 2015; Syarifuddin, 2014). Low access to information also occurs among teachers, research results by Park & Ertmer (2007) and Zylka et al., (2015) found that teachers' ability to use and access ICT in learning is in the low category. Park has conducted research regarding teachers' ability to use ICT in learning, but the results are that teachers' ability to use ICT is quite diverse and is in a low category, so these teachers are recommended to take ICT training with different programs to develop their abilities (Park & Ertmer, 2007). In line with that, the demands of vocational school teachers with ICT are expected to be able to develop learning skills by using concepts, and ideas, and concepts in solving problems, being able to use computers, and being able to integrate ICT into learning (Reyna et al., 2018).

Especially for vocational school teachers, because they have different characteristics from SMA/MA teachers and others, the demand for mastering ICT for 21st-century learning is very important. Where vocational school teachers must have competence in digital literacy (Instefjord & Munthe, 2017; Rambousek et al., 2016), technological competence (Uerz et al., 2018), as well as information and communication technology (ICT) competence (Almerich et al, 2016; Kubrický & Částková, 2015b, 2015a). For this reason, vocational school teachers must have high self-confidence, and be critical and creative in utilizing ICT as a requirement for vocational school teachers in the future (Svensson & Baelo, 2015). In addition, vocational school teachers have two roles at once, namely as learners/users and teachers (Instefjord & Munthe, 2017; Uerz et al., 2018), in addition, information technology competence implies that teachers must have pedagogical and technological abilities (Eickelmann & Vennemann, 2017; Uerz et al., 2018).

Apart from the findings of preliminary research showing that teacher innovativeness is not yet optimal, it is necessary to research the influence of teacher innovativeness on creativity, organizational support, emotional intelligence, and information and communication technology (ICT) literacy. The latest information obtained about teacher innovativeness and several factors related to innovativeness are expected to provide benefits for improving the quality of education in the Bogor district, especially for vocational high school education.

Literature Review

1. Teacher Innovativeness (Y)

In modern literature, innovation has very diverse meanings and many perspectives try to interpret it. Kinicki and Fugate (2016) define innovation as the creation of something new that makes money; and finds a path to consumers.

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Furthermore, Kinicki and Fugate divide innovation into four dimensions, namely product innovation, changes in the appearance or performance of a product or service, or the creation of a new one. Process innovation is a change in the way a product or service is conceived, produced, or distributed. Core innovation is targeted at existing customers and relies on optimizing existing products/services for existing customers. Transformational innovation creates new markets and customers and relies on breakthrough developments and creating things that do not exist today.

According to Robbins & Judge (2015), innovation is a new idea that is implemented to start or improve a better product, process, or service. Robbins and Judge divide innovation into three dimensions, namely product innovation starting from small improvements to changing the product. Process innovation is like introducing new ideas in doing work, and service innovation is related to all activities to improve customer relationships and satisfaction.

Uhl-Bien et al., (2014), Innovation is the process of creating new ideas and putting them into practice. Here we will examine it as a process and a separate product from process innovation. Innovativeness is the process of creating new ideas and putting them into practice. We will examine it as a separate process and product from process innovation. The innovation indicators are Process Innovation and Product Innovation.

George & Jones (2012), Innovation, is an organization's ability to make new or improved goods and services or improvements in the way they are produced. Innovativeness is an organization's ability to create new or better goods and services or improvements in the way they are produced. Mota & Scott (2014) also stated that the term innovation is more often associated with novelty, which arises from human creativity. Innovation is central to understanding the process of change. With dimensions 1) novelty in the form of an idea or product; 2) creativity: creating products; and 3) change process: changes in understanding of the organization.

From the explanation of the theories above, it can be synthesized (concept definition) that Teacher Innovation is individual behavior in utilizing new ideas, methods, media, and learning systems to make modifications by adapting to the conditions experienced to obtain interesting and useful results to support the process. more effective and efficient learning. The indicators for Teacher Innovativeness are as follows; 1) Develop a Learning Plan 2) Repair/update old/existing products; 3) Improve the quality of service facilities, 4) Use information technology, 5) Renewing work planning and 6) Develop work methods/ways, 7) Increasing competence and developing professionalism, and 8) Improving work governance.

2. Creativity (X_1)

The definition of creativity is new and adapts to the task or field in which it is being developed (Amabile et al., 2002; Hennessey, 2010; Simonton, 2012; Sternberg & Kaufman, 2019; Weiner, 2000). Creativity is an action or process that is a key element of novelty that is adapted to each field. The development of creativity involves an authenticity or originality approach combined with discovery to find solutions, solve problems, or produce something new. In the creative process, the novelty will reflect a person's imagination, experience, and thoughts. Creative people are not only capable of intellectually generating new ideas, but they are also people who have a creative attitude toward life and approach problems in depth. They are motivated to solve problems in creative ways. Although the average level of creativity may vary from one time or place to another. The main variable in creativity is the mindset toward finding new, surprising, and interesting ways, and this mindset can be taught to students (Sternberg & Kaufman, 2019).

A similar definition from Kreitner & Kinicki (2010), is that creativity is the activity of developing something new or unique. It was further explained that developing unique ideas means being different from existing ones, it can be in the form of verbal (suggestions), processes, (methods), or finished products that are beneficial to the environment (organization). The dimension of creativity arises from the inner drive (intrinsic motivation), using one's knowledge and competence, and enjoying challenging activities or problem-solving (Kreitner & Kinicki, 2010).

According to Sternberg & Kaufman (2019): We are all creative, at least potentially. To create means to bring new ideas or things into existence. Being creative is not a luxury but a necessity in today's changing world. Creativity is the key to success in almost all areas of life, personal and professional. Creativity can and should be educated. That everyone has the potential to be creative. Creativity is needed in facing the changing times which are taking place continuously as the key to success in all areas of life. Creativity must be teachable. Therefore, creative teachers are needed to produce students who are creative too, so that they don't give up easily, are smart in thinking, and are open to new things.

James (2015), in his research, explains that creativity involves the process of observing, seeing possibilities, finding problems, taking risks, making mistakes, failing, then thinking, rethinking, trying new things, solving problems, and sharing processes and products. In his research, James divided the creativity map into 4C forms, namely Big-C creativity: extraordinary creativity whose thinking has an impact on the field of expertise; Professional creativity: creativity that occurs in the profession; Little-c creativity: creativity in everyday life; and Mini-c creativity: creativity experienced by students when they interact with new information and experiences.

From the explanation of the theories above, it can be synthesized (concept definition) that Creativity is the behavior of individuals within their organizations to formulate new ideas, thoughts, concepts, products, services, or methods that aim to solve problems and develop certain fields to provide benefits to achieve organizational success. With indicators of creativity, namely: 1) Habit: Habits of behavior in solving problems; 2) Interest: Behavior that is interested in complex things; 3) Openness: Open behavior in accepting new ideas and ideas; 4)

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Smart: Acting cleverly in looking for opportunities; 5) Persistent: Act persistently in trying; and 6) Originality: Originality in developing something new or different.

3. Organizational Support (X_2)

Organizational support proposes that employees form a general perception regarding the extent to which the organization values their contributions and cares about their well-being (perceived organizational support). Organizational support is related to fairness, human resource practices (human resources), and supervisor support (Kurtessis et al., 2017).

According to Colquitt, et.al. (2014) organizational support reflects the degree to which employees believe that the organization values their contributions and cares about their welfare. Colquitt et.al divides organizational support indicators into five. First, providing adequate. Second, Rewards. Third, protecting job security. Fourth, improving work conditions. Fifth, minimizing the impact of politics. Furthermore, Colquitt and Wesson (2014) describe that organizational support reflects the extent to which employees believe that the organization values their contributions and cares about their well-being. Organizational support indicators; providing adequate, rewards, protecting job security, improving work conditions, and minimizing the impact of politics.

Meanwhile, Salehzadeh et al., (2014) define organizational support as employees' beliefs about the extent to which the organization cares about welfare and values contributions. Furthermore, Salehzadeh, et. al. (2014) divides organizational support indicators into three. First, care about employee welfare. Second, value cooperation with employees. Third, there is appropriate appreciation.

From the explanation of the theories above, it can be synthesized (concept definition) that organizational support is the level of members' confidence in the organization where they work that provides justice, respects contributions, pays attention to welfare, provides recognition for the existence of members, and provides guaranteed working conditions to members. The indicators of organizational support are as follows: 1) Fairness, 2) Supervisor Support, 3) Rewards, and 4) Job Conditions.

4. Emotional Intelligence (X_3)

Humans are creatures who have the mind to think in the working area of the brain, to be precise, the left brain, while feeling is the work of the right side of the brain. So, thinking, feeling, and experiencing spiritual phenomena are all the work of the brain. Intellectual, Emotional, and Spiritual Quotient (IESQ) is brain power, namely the synergy of intelligence, thoughts, feelings, and spiritual experiences. Intellectual intelligence is a matter of logic (right and wrong), emotional intelligence is ethical values (good and bad), and spiritual intelligence is aesthetic values (beautiful and ugly) (Pasiak, 2007).

According to Daniel Goleman, emotional intelligence contains several meanings. Firstly, emotional intelligence does not only mean a friendly attitude, at certain times what is needed may not be a friendly attitude, but a firm attitude that is unpleasant, but reveals the truth that has been faced. Second, emotional intelligence does not mean giving freedom to feelings to have the power to indulge feelings, but rather managing feelings so that they are expressed appropriately and effectively, which allows people to work together smoothly towards common goals (Goleman, 2000).

Emotional intelligence can further be interpreted as a person's skill, cleverness, and accuracy in managing themselves in dealing with other people around them by using all the psychological potential they have such as initiative and empathy, communication, and overall persuasion abilities that have become personal to a person. Emotional intelligence is the ability to manage, control, and neutralize the emotional potential in the human heart so that the positive side is always on the surface and the negative side is always controlled and neutralized (Goleman, 2000). Mikolajczak (2009) Trait EI is a constellation of emotion-related dispositions capturing the extent to which people attend to, identify, understand, regulate, and utilize their emotions and those of others.

Trait EI is a constellation of emotion-related dispositions that captures the extent to which people attend to, identify, understand, regulate, and utilize their and others' emotions. Three dimensions of Trait EI: 1) Knowledge: the knowledge a person has about emotions and how to deal with emotionally charged situations, 2) Ability: the ability to apply a given strategy in an emotional situation, and 3) Disposition: the tendency to behave in a certain way in a situation emotional.

Nozaki (2018), Trait EI refers to a constellation of emotional self-perceptions located at the lower levels of personality hierarchies and measured using self-report scales that assess typical performance. Trait EI refers to a constellation of emotional self-perceptions located at lower levels of the personality hierarchy and is measured using self-report scales that assess typical performance. The dimensions of Intrapersonal EI are as follows: 1) Identification, 2) Understanding, 3) Expression, 4) Regulation, and 5) Utilization. Meanwhile, the Interpersonal EI Dimensions are as follows: 1). Identification, 2) Understanding, 3) Expression, 4) Regulation, and 5) Utilization.

From the explanation of the theories above, it can be synthesized (concept definition) Emotional Intelligence is the nature of a person's awareness of the nature of emotional conditions, both his own and those of others, to be able to know and understand, manage and use these emotions well according to the conditions. With the following dimensions and indicators of emotional intelligence; a) Dimension of Relationships with other people (Interpersonal), the ability to assess and understand the needs of other people, and act according to the way they manage interactions with someone. With the following indicators: 1) Emotional expression, 2) Relationships, and 3) Empathy; b) Dimensions of Relationship with oneself (Intrapersonal EI), abilities related to awareness and knowledge about oneself, being able to understand one's strengths and weaknesses, being able to motivate oneself and exercising self-discipline. With the following indicators: 4) Adaptability, 5) Impulsive behavior, and 6) Optimism.

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5. Information and Communication Technology (ICT) Literacy (X_4)

Technology is a common tool that can save costs to improve productivity, competitiveness, and customer service in an organization. There are 5 (five) most significant digital engagements in business, namely (1) Customer digital engagement; (2) Big data and advanced analytics; (3) Digital engagement of employees and external partners; (4) Automation; (5) Digital innovation (Kinicki & Fugate, 2016).

Technological literacy is a person's ability to use computers, computer programs, and other computer-related applications. Likewise, the definition of information and communication technology literacy focuses on the ability to collect, organize, analyze, and report information using technology. Furthermore, technological literacy is also an individual's ability to adopt, adapt, create, and evaluate technology to positively influence their lives, communities, and the environment (Davies, 2011; Hansen, 2003).

Davies (2011) explains that technological literacy is an individual's ability to adopt, adapt, create, and evaluate technology to positively influence their lives, communities, and the environment. People who have technological literacy can use technology as a tool for organization, communication, research, and problem-solving. Developing technological literacy and applying it well in classroom situations will involve complex interactions between epistemic and pedagogical beliefs, intrapersonal factors, social factors, and the environment.

Furthermore, Bereczki & Kárpáti (2021) new technologies will encourage educational institutions to engage in in-depth reflection and analysis of the entire teaching and learning process. ICT literacy in educational institutions has an important role in introducing and developing new and interesting learning concepts in the form of new ideas, such as e-learning, collaborative learning, learning portals, and action learning. There are 4 (four) social roles in the use of computer technology in the creative process, namely: (1) the computer as a caregiver, namely the capacity of technology to facilitate the management of the creative process by providing a supportive environment and access to creative thought patterns; (2) Computers as pen pals, namely technology can also facilitate communication and collaboration actions during the creative process, thereby allowing students to share points of view which have the potential to produce more creative insights; (3) Computers as trainers, namely computers as expert systems can be used to increase student creativity by providing tutorials and exercises that advance cognitive processes, strategies and techniques relevant to creativity; and (4) computers as coworkers, namely computers can work in partnership with students in the creative process by actively contributing to idea creation, evaluation and refinement. Meanwhile, the benefits of technology in the value dimension are to (1) trigger student creativity, (2) support students to develop and explore ideas, (3) enable students to create digital products, (4) scaffold students' creative thinking and production processes, (5) improve creative collaboration between students, and (6) facilitating evaluation of student creativity results.

Furthermore, ICT literacy according to Doyle (2013) is the ability to understand and master the completeness of computer technology, including hardware, and software, as well as ethics and etiquette in using technology. With indicators of technological literacy abilities as follows: (1) Content: ability to understand hardware and software; (2) Process: ability to use hardware and software. (3) Context: mastery of the use of learning technology concepts; and (4) Attitude: a person's good understanding and attitude towards technological developments.

From the explanation of the theories above, it can be synthesized (concept definition) Information and Communication Technology (ICT) Literacy is the ability of teachers to study, understand, use, and develop the use of information and communication technology for their own needs or organizational progress. With Information and Communication Technology (ICT) Literacy indicators, namely; 1) Financial rewards (salary, wages, honorarium), which are related to the salary, wages, or honorarium received. 2) Job conditions, which include the skills required to carry out specific tasks. 3) Promotion opportunities, which involve opportunities to develop your career while working. 4) Supervision by superiors, namely the level of supervision and guidance provided by superiors regarding work. 5) Relationships with coworkers, which include interactions with coworkers and superiors in the work environment.

Research Methods

This research was conducted at a Private Vocational High School (SMKS) in Bogor Regency. The research object is a research variable or something that is a construct that can produce variable characteristics and traits that will be the focus of the researcher's attention. Referring to the opinion above, the object of research is increasing teacher innovation through strengthening creativity, organizational support, emotional intelligence, and information and communication technology (ICT) literacy.

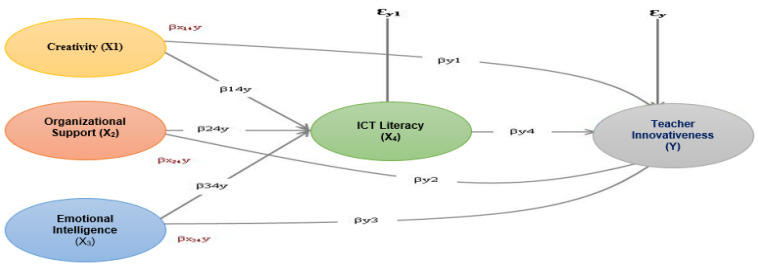

Figure 1. Research Constellation

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The population is a generalization area consisting of objects and subjects that have certain qualities or characteristics determined by a researcher to be studied and then conclusions drawn (Sugiyono, 2017). The population of this study was all private vocational school teachers in two parts of Bogor Regency, especially those with "A" accreditation with status as permanent foundation teachers (1,413 teachers).

The sampling technique in this research used multistage random sampling. Multistage random sampling is a development of simple cluster sampling. Sugiyono (2017) defines cluster sampling as a sampling technique used to determine a sample if the object to be studied or data source is very broad, such as the population of a country, province, or district. In simple cluster sampling, the location of randomness is not carried out directly in the sampling unit but rather in the cluster where the sampling unit is located. The sampling process using the simple cluster sampling method consists of two stages. The first stage is the selection of clusters from the sampling units, and the second stage is the stage of drawing sampling units from the clusters that have been determined in the first stage.

In this research, the sampling technique was carried out by dividing the population from the regional level to the sub-district level. Then, samples were taken from each region proportionally, namely 50%, taken randomly by drawing lots. From the results of the drawing, 8 sub-districts emerged which had an affordable population with a total of 975 permanent foundation teachers, then 50% of that number was taken. This method is used because elementary units have homogeneous characteristics.

The next determination of the number of research samples is to calculate the number of samples using proportional random sampling using the Cochran formula (1991). Based on the sample calculation technique, the sample size was determined to be 218 respondents. Then the number of samples was determined for each school in the sample area by determining the proportion according to the number of principals in the schools studied.

Research data collection was carried out using techniques giving questionnaires to respondents. A questionnaire is a research instrument that asks respondents to fill in questions or statements provided by researchers related to thoughts, feelings, attitudes, beliefs, values, perceptions, experiences, personalities, and behaviors of participants or respondents by the variables being studied.

This research uses path analysis and SITOREM analysis, which is a combination research method that combines path analysis research methods whose results are strengthened using SITOREM analysis. Through SITOREM Analysis, the results of Path Analysis research are analyzed in more detail on research variable indicators, so that indicators can be found that need to be immediately improved and maintained or developed.

This research used a combination research method between Quantitative Research and SITOREM Analysis. The flow of this combined research methodology uses a quantitative research flow which is analyzed using SITOREM analysis. As revealed by Hardhienata (2017), for operations research in education management, we need to add the scientific identification theory mentioned above with a statistical model and steps to obtain an optimal solution. Identification theory mentioned above with statistical models and steps to get the optimal solution.

Research Result

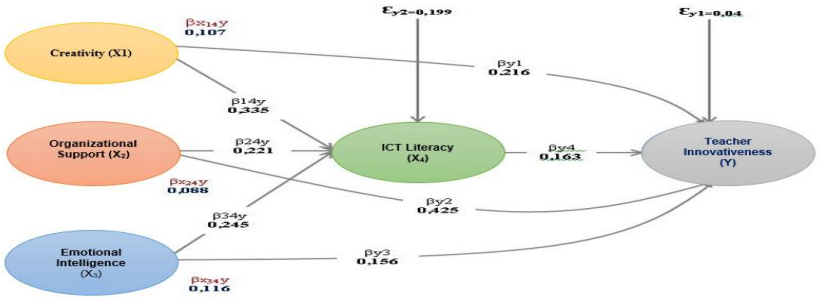

Figure 2. Path Coefficient

After the structural model analysis has been carried out, the calculation results obtained are used to test the hypothesis to determine the direct and indirect effects between variables. The proposed hypothesis is concluded by calculating the path coefficient value and significance for each path studied. The results of the decisions regarding all proposed hypotheses can be explained as follows:

1. Direct positive influence between creativity (X1) on teacher innovativeness (Y)

The first hypothesis was tested by testing the direct influence between creativity (X1) on teacher innovativeness (Y). From the calculation results, the path coefficient value (β y1) = 0.216, with t-count = 14.255, while t-table at the real level α = 0.05, t-table =1.652, then t-count> t-table means that Ho is rejected and H1 is accepted. Thus, there is a direct positive influence of the creativity variable (X1) on teacher innovativeness (Y), meaning that stronger creativity (X1) will increase teacher innovativeness (Y) in Bogor Regency Private Vocational Schools.

2. Direct positive influence between organizational support (X2) on teacher innovativeness (Y)

The second hypothesis was tested by testing the direct influence of organizational support (X2) on teacher innovativeness (Y). From the calculation results, the path

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coefficient value (β y2) = 0.425, with t-count = 9.646, while t-table at the real level α = 0.05, t-table = 1.652, then t-count> t-table means that Ho is rejected and H1 is accepted. Thus, there is a direct positive influence of the organizational support variable (X2) on teacher innovativeness (Y), meaning that stronger organizational support (X2) will increase teacher innovativeness (Y) in Bogor Regency Private Vocational Schools.

3. Direct positive influence between emotional intelligence (X3) on teacher innovativeness (Y)

The third hypothesis was tested by testing the direct influence of emotional intelligence (X3) on teacher innovativeness (Y). From the calculation results, the path coefficient value (β y3) = 0.156, with t-count =2.239, while t-table at the real level α = 0.05, t-table =1.652, then t-count > t-table means that Ho is rejected and H1 is accepted. Thus, there is a positive direct influence of the emotional intelligence variable (X3) on teacher innovativeness (Y), meaning that stronger achievement motivation(X3) will increase teacher innovativeness (Y) in Bogor Regency Private Vocational Schools.

4. Direct positive influence between ICT literacy (X4) on teacher innovativeness (Y)

The fourth hypothesis was tested by testing the direct influence between ICT literacy (X4) on teacher innovativeness (Y). From the calculation results, the path coefficient value (β y4) = 0.163, with t-count = 19.767, while t-table at the real level α = 0.05, t-table = 1.652, then t-count > t-table means that Ho is rejected and H1 is accepted. Thus, there is a direct positive influence of the ICT literacy variable (X4) on teacher innovativeness (Y), meaning that stronger ICT literacy (X4) will increase teacher innovativeness (Y) in Bogor Regency Private Vocational Schools.

5. Direct positive influence between creativity (X1) on ICT literacy (X4).

The first hypothesis was tested by testing the direct influence between creativity (X1) on achievement motivation (X3). From the calculation results, it is obtained that the path coefficient value (β Thus, there is a direct positive influence of the creativity variable (X1) on ICT literacy (X4), meaning that stronger creativity (X1) will increase ICT literacy (X4) in Bogor Regency Private Vocational Schools.

6. Direct positive influence between organizational support (X2) on ICT literacy (X4)

The sixth hypothesis was carried out by testing the direct influence of organizational support (X2) on ICT literacy (X4). From the calculation results, it is obtained that the path coefficient value (β Thus, there is a direct positive influence of the organizational support variable (X2) on ICT literacy (X4), meaning that the stronger the organizational support (X2) will increase ICT literacy (X4) in Bogor Regency Private Vocational Schools.

7. Direct positive influence between emotional intelligence (X3) on ICT literacy (X4)

Testing the seventh hypothesis was carried out by testing the direct influence of emotional intelligence (X3) on ICT literacy (X4). From the calculation results, the path coefficient value (β = 1.652, then t-count > t-table means Ho is rejected and H1 is accepted. Thus, there is a direct positive influence of the emotional intelligence variable (X3) on ICT literacy (X4), meaning that stronger emotional intelligence (X3) will increase ICT literacy (X4) in Bogor Regency Private Vocational Schools.

8. Indirect positive influence between creativity (X1) on teacher innovativeness (Y) through ICT literacy (X4)

The ninth hypothesis was tested by testing the indirect influence of servant leadership (X1) on lecturer performance (Y) through achievement motivation (X3). The obtained Z-count value (4.79) > Z-table value (1.97), with a significance level of α = 5%. And if you look at the probability value (significance) of the t-statistical test for the creativity variable (sig), it is 0.00 < α = 0.05. So H0 is rejected and H1 is accepted, this shows that ICT literacy(X4)can mediate creativity(X1) on teacher innovativeness (Y). From the results of calculating the indirect effect, the path coefficient value (β 13y) =0.107, so Ho is rejected and H1 is accepted. Thus, there is a positive indirect influence between the creativity variable (X1) on teacher innovativeness (Y) through ICT literacy (X4), meaning that stronger creativity (X1) will strengthen teacher innovativeness (Y) through increasing ICT literacy (X4) in private vocational schools. Bogor Regency.

9. Indirect positive effect between organizational support (X2) on teacher innovativeness (Y) through ICT literacy (X4)

The tenth hypothesis was tested by testing the indirect influence of organizational support (X2) on teacher innovativeness (Y) through ICT literacy (X4). The obtained Z-count value (8.11) > Z-table value (1.97), with a significance level of α = 5%. If you look at the probability (significance) value of the t-statistical test for the organizational support variable (sig), it is 0.00 < α = 0.05. So H0 is rejected and H1 is accepted, this shows that ICT literacy (X4) can mediate organizational support (X2) on teacher innovativeness (Y). From the results of calculating the indirect effect, the path coefficient value (β 23y) = 0.088, so Ho is rejected and H1 is accepted. Thus, there is a positive indirect influence between the organizational support variable (X2) on teacher innovativeness (Y) through ICT literacy (X4), meaning that stronger organizational support (X2) will strengthen teacher innovativeness (Y) through increasing ICT literacy (X3) in Bogor Regency Private Vocational School.

10. Indirect positive influence between emotional intelligence (X1) on teacher innovativeness (Y) through ICT literacy (X4)

The eleventh hypothesis was tested for the indirect influence between emotional intelligence (X3) on teacher innovativeness (Y) through ICT literacy (X4). The obtained Z-count value (2.29) > Z-table value (1.97), with a significance level of α = 5%. If we look at the probability value (significance) of the t-statistical test for the emotional intelligence (sig) variable, it is 0.00 < α = 0.05. So H0 is rejected and H1 is accepted, this shows that ICT literacy (X4) can mediate emotional intelligence (X3) on teacher innovativeness (Y). From the results of calculating the indirect effect, the path coefficient value (β34y) = 0.166, so Ho is rejected and H1 is accepted. Thus,

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there is a positive indirect influence between the emotional intelligence variable (X1) on teacher innovativeness (Y) through ICT literacy (X4), meaning that the stronger emotional intelligence (X3) will strengthen teacher innovativeness (Y) through increasing ICT literacy (X4) in Bogor Regency Private Vocational School.

Table 1. Summary of hypothesis testing results

No	Hypothesis	Path Coefficient	Statistic test	Decision	Conclusion
1.	Servant Leadership (X1) on teacher innovativeness (Y)	0,216	$H_0 : \beta_{Y1} \leq 0$ $H_1 : \beta_{Y1} > 0$	H_0 rejected H_1 accepted	Influential Direct Positive
2.	Empowerment (X2) on teacher innovation (Y)	0,425	$H_0 : \beta_{Y2} \leq 0$ $H_1 : \beta_{Y2} > 0$	H_0 rejected H_1 accepted	Influential Direct Positive
3.	Achievement Motivation (X3) on teacher innovativeness (Y)	0,156	$H_0 : \beta_{Y3} \leq 0$ $H_1 : \beta_{Y3} > 0$	H_0 rejected H_1 accepted	Influential Direct Positive
4.	Trust (X4) on teacher innovativeness (Y)	0,163	$H_0 : \beta_{Y4} \leq 0$ $H_1 : \beta_{Y4} > 0$	H_0 rejected H_1 accepted	Influential Direct Positive
5.	Creativity (X1) to ICT Literacy (X4)	0,335	$H_0 : \beta_{X1X4} \leq 0$ $H_1 : \beta_{X1X4} > 0$	H_0 rejected H_1 accepted	Influential Direct Positive
6.	Organizational Support (X2) for ICT Literacy (X4)	0,221	$H_0 : \beta_{X2X4} \leq 0$ $H_1 : \beta_{X2X4} > 0$	H_0 rejected H_1 accepted	Influential Direct Positive
7.	Emotional Intelligence (X3) to ICT Literacy (X4)	0,245	$H_0 : \beta_{X3X4} \leq 0$ $H_1 : \beta_{X3X4} > 0$	H_0 rejected H_1 accepted	Influential Direct Positive
8.	Creativity (X1) on teacher innovativeness (Y) through ICT Literacy (X4)	0,107	$H_0 : \beta 14y \leq 0$ $H_1 : \beta 14y > 0$	H_0 rejected H_1 accepted	Influential Indirect Positive
9.	Organizational Support (X2) for teacher Innovativeness (Y) through ICT Literacy (X4)	0,088	$H_0 : \beta 24y \leq 0$ $H_1 : \beta 24y > 0$	H_0 rejected H_1 accepted	Influential Indirect Positive
10.	Emotional Intelligence (X3) on teacher innovativeness (Y) through ICT Literacy (X4)	0,166	$H_0 : \beta 34y \leq 0$ $H_1 : \beta 34y > 0$	H_0 rejected H_1 accepted	Influential Indirect Positive

SITOREM Analysis

In the context of this research, apart from using Path Analysis, SITOREM analysis is also used. Scientific Identification Theory to Conduct Operation Research in Education Management (sitorem), is a scientific method used to identify variables (theory) to carry out "Operation Research" in the field of Education Management (Hardhienata, 2017). SITOREM analysis is carried out by identifying and analyzing three things, namely: a) Identifying the strength of influence between the Independent Variable and the Dependent Variable; b) Analysis of the value of research results for each research variable indicator, and c) Analysis of the weight of each indicator for each research variable based on the criteria "Cost, Benefit, Urgency, and Importance."

Table 2. Determination of SITOREM Analysis Results

CREATIVITY (βy1 = 0,216) (rank. II)				
Indicator in Initial State		Indicator after Weighting by Expert		Indicator Value
1	Habits	1st	Smart	3.66
2	Interest	2nd	Habits	3.65
3	Openness	3rd	Openness	4.01
4	Smart	4th	Original	3.75
5	Persistent	5th	Interest	4.07
6	Original	6th	Persistent	4.08
ORGANIZATIONAL SUPPORT (βy2 = 0,425) (rank. I)				
Indicator in Initial State		Indicator after Weighting by Expert		Indicator Value
1	Providing justice (Fairness)	1st	Providing justice (Fairness)	3.79
2	Leadership Support (Supervisor Support)	2nd	Leadership Support (Supervisor Support)	3.76
3	Awards from Organizations (Organizational Rewards)	3rd	Awards from Organizations (Organizational Rewards)	4.05
4	Working Conditions	4th	Working Conditions	4.03
EMOTIONAL INTELLIGENCE (βy3 = 0,156) (rank. IV)				
Indicator in Initial State		Indicator after Weighting by Expert		Indicator Value

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1	Emotional Expression	1st	Emotional Expression	3.79
2	Relationships/Relationships	2nd	Optimism	3.85
3	Empathy	3rd	Adaptability	4.10
4	Adaptability	4th	Empathy	3.82
5	Impulsive Behavior	5th	Impulsive Behavior	4.17
6	Optimism	6th	Relationships	4.01

ICT LITERACY (βy4 = 0,163) (rank.III)				
Indicator in Initial State		Indicator after Weighting by Expert		Indicator Value
1	Understanding of Computers	1st	Understanding of computer application programs	0.84
2	Ability to operate a computer	2nd	Understanding of Computers	0.88
3	Understanding of operational systems	3rd	Ability to operate a computer	0.90
4	Understanding of computer application programs	4th	User capabilities	0.71
5	Knowledge of data communications	5th	Effectiveness and sustainability of use	0.89
6	User capabilities	6th	Knowledge of data communications	0.73
7	Usage efficiency and capacity	7th	Usage efficiency and capacity	0.85
8	Effectiveness and sustainability of use	8th	Understanding of operational systems	0.74

TEACHER INNOVATIVENESS				
Indicator in Initial State		Indicator after Weighting by Expert		Indicator Value
1	Develop a Learning Plan	1st	Improved work governance	4.04
2	Repairing/renewing old/existing products	2nd	Use of information technology.	3.79
3	Improving the quality of service facilities	3rd	Develop a Learning Plan	3.76
4	Use of information technology.	4th	Increasing competence and developing professionalism.	4.05
5	Work planning updates	5th	Repairing/renewing old/existing products	4.02
6	Developing methods/ways of working.	6th	Developing methods/ways of working.	3.72
7	Increasing competence and developing professionalism.	7th	Work planning updates	3.77
8	Improved work governance	8th	Improving the quality of service facilities	4.08

SITOREM ANALYSIS RESULT		
Priority order of indicator to be Strengthened		Indicators remain to be maintained
1st	Providing justice (Fairness)	1. Awards from Organizations (Organizational Rewards)
2nd	Leadership Support (Supervisor Support)	2. Working Conditions
3rd	Smart (Acting cleverly in looking for opportunities)	3. Openness (open behavior in accepting new ideas and concepts)
4th	Habit (Habits of behavior in solving problems)	4. Interest (behavior interested in complex things)
5th	Originality (Originality in developing something new or different)	5. Persistent (Acting persistently in trying)
6th	User capabilities	6. Understanding of computer application programs
7th	Knowledge of data communications	7. Understanding of Computers
8th	Understanding of operational systems	8. Ability to operate a computer
9th	Emotional Expression	9. Effectiveness and sustainability of use
10th	Optimism	10. Efficiency and usage capacity
11th	Empathy	11. Adaptability
12th	Use of information technology.	12. Impulsive Behavior
13th	Develop a Learning Plan	13. Relationship / Relations
14th	Developing methods/ways of working.	14. Improve work governance
15th	Work planning updates	15. Increasing competence and developing professionalism.
		16. Repair/renew old/existing products
		17. Improving the quality of service facilities

Conclusion

Based on the discussion outlined in Chapter IV, it can be concluded that a strategy has been found to increase teacher innovation, namely by strengthening creativity, organizational support, emotional intelligence, and information and communication technology (ICT) literacy.

Apart from that, a way has also been found to carry out the strategy above, namely by improving indicators that are still weak and maintaining good indicators for the variables studied. Based on the results of the analysis, discussion of research results, and proposed hypotheses, it can be concluded as follows:

1. There is a significant positive direct influence between creativity (X1) on teacher innovativeness (Y) with βy1 =

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0.216, so strengthening creativity (X1) can increase teacher innovativeness (Y).

2. There is a significant positive direct effect between organizational support (X2) on teacher innovativeness (Y) with βy2 = 0.425 so strengthening organizational support (X2) can increase teacher innovativeness (Y).
3. There is a significant positive direct influence between emotional intelligence (X3) on teacher innovativeness (Y) with βy3 = 0.156, so strengthening emotional intelligence (X3) can increase teacher innovativeness (Y).
4. There is a significant positive direct effect between ICT literacy (X4) on teacher innovativeness (Y) with βy4 = 0.163, so strengthening ICT literacy (X4) can increase teacher innovativeness (Y).
5. There is a significant positive direct effect between creativity (X1) on ICT literacy (X4) with βx1x3 = 0.335 so strengthening creativity (X1) can increase ICT literacy (X4).
6. There is a significant positive direct effect between organizational support (X2) on ICT literacy (X4) with βx2x3 = 0.221 so strengthening organizational support (X2) can increase ICT literacy (X4).
7. There is a significant positive direct effect between emotional intelligence (X3) on ICT literacy (X4) with βx1x4 = 0.245 so strengthening emotional intelligence (X1) can increase ICT literacy (X4).
8. There is a significant positive indirect effect between creativity (X1) on teacher innovativeness (Y) through ICT literacy (X4) with β13y = 0.107 so strengthening creativity (X1) can increase teacher innovativeness (Y) through ICT literacy (X4). ICT literacy (X4) cannot function effectively as an intervening variable between creativity (X1) and teacher innovativeness (Y) because the direct influence is greater than the indirect influence.
9. There is a significant positive indirect effect between organizational support (X2) on teacher innovativeness (Y) through ICT literacy (X4) with β13y = 0.088 so strengthening organizational support (X2) can increase teacher innovativeness (Y) through ICT literacy (X4). ICT literacy (X4) cannot function effectively as an intervening variable between organizational support (X2) and teacher innovativeness (Y) because the direct influence is greater than the indirect influence.
10. There is a significant positive indirect effect between emotional intelligence (X3) on teacher innovativeness (Y) through ICT literacy (X4) with β13y = 0.116 so strengthening emotional intelligence (X3) can increase teacher innovativeness (Y) through ICT literacy (X4). ICT literacy (X4) cannot function effectively as an intervening variable between emotional intelligence (X3) and teacher innovativeness (Y) because the direct influence is greater than the indirect influence.

Implications

Based on the conclusions above, the implications of this research are as follows:

1. If teacher innovativeness is to be increased, it requires strengthening creativity, organizational support, and emotional intelligence as exogenous variables with ICT literacy as an intervening variable.
2. If creativity is to be strengthened, then this is done by improving indicators that are still weak, namely: Smart (acting cleverly in looking for opportunities), Habit (Habits of behavior in solving problems), Original (originality in developing something new or different), and maintaining or develop indicators: Openness (open behavior in accepting new ideas and thoughts), Interest (behavior interested in complex things), and Persistent (acting persistently in trying)
3. If organizational support is to be strengthened, then this is done by improving indicators that are still weak, namely: Providing justice (Fairness), and Leadership Support (Supervisor Support), as well as maintaining or developing indicators as rewards from the Organization (Organizational Rewards), and Working Conditions.
4. If emotional intelligence is to be strengthened, then this is done by improving indicators that are still weak, namely: Emotional Expression, Optimism, and Empathy, as well as maintaining or developing indicators of adaptability, Impulsive Behavior, and Relationships.
5. If information and communication technology (ICT) literacy is to be strengthened, then this is done by improving indicators that are still weak, namely: User ability, knowledge of data communications, and understanding of operational systems, as well as maintaining or developing indicators: Understanding of application programs computers, understanding of computers, ability to operate computers, effectiveness and sustainability of use, and efficiency and capacity of use.

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