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The Influence of Elementary School Teachers' Community in the Use of Digital Media on Self-Efficacy and Information and Communication Technology Skills in The Cut Nyak Dien Cluster, Cilacap Selatan

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ABSTRACT

This study was done to know the effect of elementary school teachers' Community in the use of digital media on self-efficacy and ICT skills due to the importance that teachers should have ICT skills in learning activities in the classroom. Digital media used are Ms. Word. Excel and Canva. The purpose of this study was to determine the effect of elementary school teachers' community in the use of digital media on self-efficacy and ICT skills. This study used survey research by collecting data or information about a large population using a relatively small sample. According to the results of the study on the influence of teachers in the use of digital media on self-efficacy and ICT skills in the Cut Nyak Dien Cluster, Cilacap Selatan increased the self-efficacy and ability of the teachers for learning activities in their classrooms. This Study find that 1) 100% of respondents experienced an increase in both dependent variables, 2) Self-efficacy increased by an average of 43.1% after the training, 3) ICT skills increased by an average of 52.0% after training, 4) There were no respondents who experienced a decrease in both aspects. This is great, because the use of digital media really influences student learning outcomes. Therefore, this training should always be carried out continuously so that teachers' self-efficacy keeps increasing and ICT skills become improved.

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1. INTRODUCTION

In an era of globalization marked by the rapid development of information and communication technology (ICT), teachers not only act as the main source of knowledge, but also as facilitators who help students develop critical, creative, and collaborative thinking skills. One important aspect in this process is the mastery of ICT skills by teachers. One of the concepts in developing learning is a learning community. This learning community (kombel) is formed because people want to learn intensively about something by someone or everyone in the learning community wants to learn/know.

Yarnit (2015:127) defines a learning community : "*a learning ciommunity addresses the learning needs of its locality through patnership. It uses the strengths of social and institutional relationships to bring about cultural shifts in perceptions of the value of learning. Learning communities explicitly use learning as a way of promoting social cohesion, regeneration and economic development which involves all parts of the community*".

Teacher learning community activities are expected to have an impact on improving student learning outcomes in literacy, numeracy, and character, through improving the quality of learning in each classroom. The objectives of the learning community according to Medira Ferayanti (2022: 1) are to: 1. Improve the competence of educators and education personnel. 2. Build a sustainable culture of collective learning. 3. Facilitate interaction and collaboration between community members for sustainable learning. 4. Build confidence for members to be active participants in the community. 5. Implement the learning outcomes obtained from the community in their daily work. 6. Reflect on the outcome of the learning implementation to get feedback to improve the quality of learning more effectively.

Digital media is one of the media that can be utilized for learning activities. Digital media are the components in the form of computers, internet, gadgets, and other digital devices (Kurniasih, 2019). Digital media is a media that can be created, viewed, sent, or modified, and used by digital electronic devices (Fitria et al., 2021). In this process, the input of digital media is in the form of data that will be processed into text, images, etc. and the final results of digital media can be stored in print, memory drive, digital disk, or online storage (Alrasydin, 2023).

Some of the statements above can be concluded that digital media is a component in computers, the internet, gadgets, applications and other digital devices. Digital media is also a media that can be created, viewed, sent, or modified, and used by digital electronic devices. Digital media can also be used to stimulate student learning interest, attention, and student activity so that the learning process can achieve its learning objectives.

Some examples of digital media that are developed in this training are the use of Word, Excel and Canva applications. These applications can support teachers in the learning process in the classroom. Digital media can be used from the preparation process by preparing modules and making attractive presentation media through Canva. The use of excel can be used in analyzing assessment results and analyzing learning outcomes.

Self-efficacy is belief in personal ability to complete a task in order to achieve the goals and overcome the barriers encountered. Self-efficacy is self-perception regarding of what is capable of functioning in a given situation. Self-efficacy is related to the belief that the self has the ability to perform the expected actions (Alwisol, 2016: 303).Self-efficacy is the belief that someone can master the situation and produce positive results. (Santrock, 2017: 266)

The key to change behaviors in Bandura's system is change in self-efficacy expectations, self-efficacy can be obtained, changed, increased, or decreased, through one of four sources of self-efficacy, namely: 1) Performance experience (performance accomplishment), 2) Experience of others (vicarious experience), 3) Social persuasion, 4) Emotion generation (emotional / psychological states)

Based on the experience of others, someone can be able to see and have an image of doing a job successfully. The effect of other people's experiences will provide a very strong stimulus to someone's belief through a concept of “Because he can do it, then I can too”. By observing others, an individual will indirectly get information about what it takes to perform a task successfully so that it can increase their confidence in their capability. (Garett N. Howardson, 2015: 237)

An emotional situation that is followed by an activity will affect the efficacy in that field of activity. High emotions, fear, anxiety, stress, can reduce self-efficacy. But it can happen, the increase in emotion (which is not too much) can increase self-efficacy. The source that comes from this emotion generator is an internal source or within a person. Alwisol (2016: 289)

Albert Bandura (1997: 56): 1) Level / magnitude (level), 2) Strength (strength), 3) Generality (general). This is an explanation of each aspect.

Level / magnitude (level) is related to the degree or level of task difficulty when the individual believes they are able to do it. This aspect has an impact on the level of behavior selection that the individual considers themselves to be able to do and avoid behaviors that are out of their perceived ability.

Strength is related to the strength of assessment of individual skills. This dimension is related to a particular person's self-efficacy when dealing with the demands of a task or a problem. Generality is related to the area of behavior where the individual is confident in their abilities. An individual can be confident in his or her abilities. Whether this is limited to a particular activity and situation or to a range of varied activities and situations.

Indicators of self-efficacy in this study refer to the dimensions of self-efficacy according to Albert Bandura (1997: 56), which are level, strength, and generality, by looking at these three dimensions, there are several indicators of self-efficacy, such as.

1. Confidence in personal ability to overcome task difficulties
2. Teachers' confidence in dealing with the difficulty of finding references or library sources.
3. Individuals are diligent in completing tasks.
4. Individuals are able to overcome the barriers in achieving goals.
5. Individuals are able to use their life experiences as a step to achieve success.

Umar (2016:222) explains that Information and Communication Technology (ICT) as part of Science and Technology (Science and Technology) in general is all technology related to the capture, collection (acquisition), processing, storage, dissemination, and presentation of information. Wina Roza, Guspita Sari & Putra (2023: 1) explain that information and communication technology is an indivisible part that contains a broad meaning of all activities related to processing, manipulation, management, and transfer or transfer of information among media.

Zeni Gunawan (2024: 1) explains that information and communication technology (ICT) is a technology both hardware and software used to manage data/information and communication. Data/information is managed and generated in the form of various media, such as text, graphics, still images, photos, films, animations, and simulations. The way of communicating allows it to be done in a virtual way.

Information and communication technology according to some of the experts above can be concluded that the definition is a technology used to handle information and help communication with the help of computers to convert, change, process, send, receive information so as to produce quality information.

In this study, some of the ICT skill indicators used were:

1. The ability to use ICT to study teaching materials, prepare and evaluate teaching, and school assignments (Ability to use ICT to study teaching materials using Ms. Word and excel)
2. Ability to use ICT in the classroom (Using Canva for material presentation)
3. Ability to assist students in the use of ICT

2. RESEARCH METHODS

The research method that researchers use is survey research. Survey research is used to collect data or information about large populations using relatively small samples. The survey model is most often used as a research report (Gay, 1987). This model provides an opportunity for researchers to collect data from the population to determine the status of the population with respect to one or more variables.

The model has been used in various fields, e.g. politics, economics and education. The research survey model is a constructive research methodology and can be considered a systematic data collection tool used in large-scale investigations (Borg and Gall, 1989; Smith et al., 1994). The advantages of survey research are more economical design and speed in presenting research data (Creswel, 2020: 210). This study used the survey model developed by Gay (1987).

3. RESULTS AND DISCUSSIONS

The digital media training conducted for teachers in the Cut Nyak Dien Cluster in Cilacap Selatan aims to improve teachers' ability to use technology in the learning process and strengthen their self-efficacy in facing the challenges of 21st century learning.

1. Improvement in Teacher Self-Efficacy After Training

The statistical test results using the Wilcoxon **Signed-Rank Test** showed that there was a significant difference between the teachers' self-efficacy scores before and after the training. The significance value (p-value) <0.05 indicates that the training has a real influence on improving teachers' self-efficacy.

This result is confirmed by the effect size analysis using Cohen's d formula, which shows a value of 2.92. Based on Cohen's classification (1988:40), the effect size score above 0.8 is classified as a large category, so it can be concluded that the training conducted has a very strong influence on increasing teacher self-efficacy. "Effect size d = 0.8 or more is considered large. This indicates changes that are not only statistically significant, but also practically significant." (Cohen, 1988, Statistical Power Analysis for the Behavioral Sciences, p. 40)

These results are aligned with Tschannen-Moran & Hoy (2001:783), teacher self-efficacy is related to learning innovation and perseverance. Teachers who believe they are capable will be more accepting of digital media and innovative learning approaches. “Teachers with high efficacy are more resilient and more likely to try new teaching strategies.” (Teaching and Teacher Education, 17(7), p. 783). Self-efficacy is a person's belief in their ability to carry out tasks or face specific targets. According to Bandura (1997), self-efficacy influences how individuals think, feel, motivate themselves and act.

In the context of teachers, self-efficacy is very important because it relates to the belief in the ability to manage the class, deliver material, master learning technology, and overcome student learning barriers. Teachers with high self-efficacy tend to be more innovative, more determined in overcoming difficulties, and have a positive effect on student learning outcomes (Tschannen-Moran & Hoy, 2001: 783). “Teachers with high self-efficacy are more likely to implement innovative teaching methods and persist longer in the face of difficulties.”(Tschannen-Moran & Hoy, 2001, Teaching and Teacher Education, p. 783)

2. The Importance of Training in Improving Teachers' ICT Skills

The systematically designed training provides teachers with direct experience in using digital media such as Microsoft Office, and Canva. With practical experience and mentoring, teachers experience the enhancement

of mastery experience, according to Bandura (1997:80), which is the main source of self-efficacy formation. The training had a strong impact on teachers' technical mastery in using Microsoft Word, Excel, and Canva applications. The average ICT skills pretest score was 58.33, increasing to 88.67 on the posttest.

All participants (100%) reached the high category on the posttest. These results supported Warsita's (2011:45) finding that the training prioritizing a direct practice approach is very effective in improving technical skills, especially in the context of educational ICT. “direct training allows participants to learn contextually and apply their competencies directly.” (Warsita, 2011, Learning Technology: Foundations and Applications, p. 45). Overall, the results showed that digital media training had a significant effect on teachers' self-efficacy and ICT skills. The combination of the hands-on method and participatory approach provided a meaningful and empowering learning experience.

3. The following are the findings obtained during the training activities:

a. 100% of respondents experienced an increase in both dependent variables
b. Self-efficacy increased by an average of 43.1% after the training
c. ICT skills increased by an average of 52.0% after training
d. There were no respondents who experienced a decrease in both aspects

4. Practical Implications

a. The effectiveness of the training: Digital media training proved to be highly effective in improving teacher competencies
b. Continual Application: Needs continuing training program to maintain and improve competency
c. Development of Curriculum: The results can be used as a basis for developing a more comprehensive teacher training curriculum

4. CONCLUSIONS

The results of the research data analysis can be concluded that digital media training has a significant effect on the self-efficacy of elementary school teachers in the Cut Nyak Dien Cluster in Cilacap Selatan. The digital media training has a significant effect on the ICT skills of elementary school teachers in Cut Nyak Dien Cluster, Cilacap Selatan.

Suggestion

A. Training Organizer
1. Continuing the training program with more advanced modules
2. Implementing a regular monitoring system to maintain competency
3. Developing a peer-teaching program among teachers

B. Scholl
1. Providing technology facilities that are suitable for implementation
2. Providing continuous technical support
3. Integrating the use of digital media in the curriculum of schools

C. Follow-up Research
1. Conducting a follow-up study to measure the sustainability
2. Reviewing the factors of support and barriers to the implementation
3. Developing a more efficient and effective training model

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