

The Relationship Between the Implementation of Online Learning Mastering 21st Century Skills for PGSD Program Students, Campus VI, Makassar State University

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Abstract:- This research is a correlational type research which aims 1) to show an overview of the implementation of online learning for PGSD UNM Watampone students and the 21st century skill mastery orientation of students majoring in PGSD UNM Watampone, and 2) to reveal the significant relationship between the implementation of learning online with the orientation of mastering 21st century skills of students majoring in PGSD campus VI UNM Watampone in the 21st century. The research population was 2019 class students with a population sample of 33 people. Data obtained by using a questionnaire instrument. This research used descriptive and inferential statistical analysis method. The results showed that the description of the implementation of online learning was in the adequate category (C), the description of the orientation of mastering 21st century skills was in the Good category (B), and the correlation level of the two variables was categorized as being proven by the results of inferential data analysis, the tcount value was greater than ttable, so the alternative hypothesis (H1) is accepted and (H0) is rejected. This research concluded that there is a significant relationship between the implementation of online learning and the orientation of mastering 21st century skills for students majoring in PGSD Campus VI UNM Watampone.

Keywords:- Implementation, Online Learning, 21st Century Skills.

I. INTRODUCTION

The development of potential knowledge, attitudes and skills of every human being is carried out through education (Jumiati et al., 2020). These competencies are in line with the direction of education, namely to prepare human resources for the development of the nation and state, so that education becomes the need and right of every citizen. The aims of implementing National education is to increase human resources. Therefore, it need to change the mindset of every human being who has proceeded through education (Anggawirya et al., 2021; Andini et al., 2022). Character education that is in accordance with Indonesian culture and in line with the demands of the 21st Century skills with all its challenges. The 21st century is a century based on science and technology. In 2020 the use of online learning

will be implemented as an alternative to breaking the chain of the Covid-19 pandemic (Corona Virus Diseases-19).

This virus started in 2020 in Wuhan and it spreads to Indonesia in only a few months. The Covid-19 has affected various aspects of life such as the economic, social, and educational aspect. The implementation of online learning has many positive and negative impacts. Online learning, lecturers must prepare learning tools properly. Furthermore, the universities have prepared online learning applications such as SPADA, LMS, SYAK-OK and other forms of applications such as WA, google classroom, google met, e-mail and others. Since the odd semester of the 2020/2021 academic year, lecturers including PGSD lecturers have carried out lectures online, but some lecturers have experienced obstacles in terms of information technology competence, unstable internet networks, lecture application systems that are difficult to access, student awareness for independent learning is still lacking and student learning process activities which have decreased due to the lack of optimal implementation of online lectures. Based on the results of pre-research conducted in early April 2022 through interviews with PGSD students majoring in Campus VI UNM Watampone it was revealed that (1) online lectures are carried out through the SPADA, LMS, and the latter through Syam-OK which requires readiness of supporting facilities and mastery of technology that has devices that can be used to carry out online learning activities of Syam-OK, (2) limited interaction of knowledge transfer through limited presentation of material by lecturers, (3) limited knowledge transfer limitations of social interaction between students and lecturers in terms of 21st century skills training, (4) the completion of assignments tends to be individual and if there are group assignments it is done through the distribution of tasks and giving each other information through watshap chat, (5) the role of the lecturer in learning tends to be unidirectional when carrying out vicom/gemeet that have been prepared and multi-directional are limited if included in LMS activities for certain lecturers, (6) are limited to giving critical responses to individual and group assignments during online discussions, (7) creativity is limited to completing assignment reports sent to the Syam-OK application and given limited feedback online. Based on the pre-research results, it shows that there is a tendency for students to take part in online learning through the Syam-OK and LMS applications that have been prepared by

lecturers in a limited way in terms of developing 21st century skills, namely: (1) critical thinking, (2) creativity, (3) collaborative, and (4) communicative . This is in line with the research conducted by Cintiasih (2020) entitled Teacher's Efforts in Implementing Online Learning During the Covid-19 Pandemic which stated that the implementation of online learning during the Covid-19 pandemic has not been running effectively.

This is due to a number of factors ranging from limited infrastructure, the readiness of parents/guardians to provide assistance to children when learning from home, and some teachers/lecturers have not been able to respond and adapt to online learning models due to limited knowledge of technology so that teaching materials and the learning process implemented is not in accordance with the learning objectives that have been set. The results of other studies show that 1) by implementing 21st century skills called 4C, teachers must communicate well with students continuously in various circumstances. Socialization to students is necessary because childhood is a period of play Rahman & Sadik (2018). When students play with their peers, students will naturally have social interactions with their friends. Often inviting students to communicate has a positive impact on developing children's communication skills. This will stimulate the child's brain to imitate the use of good sentences. Collins & Halverson (2018) show that 21st century skills students are trained to explain and exchange formations with their friends during the learning process, learn how to convey information correctly. The teacher's role here is as a facilitator. 21st century skills (Junaidi et al., 2020). Furthermore, it was stated that every individual has 21st century life skills with various opportunities and challenges that will be faced in the era of advances in technology and information. Several experts explain the importance of mastering various 21st century skills as a means of success in a century where the world is developing rapidly and dynamically. Based on the background of the problem, the prospective researcher is interested in conducting research entitled Relationship of Implementation of Online Learning to Orientation of 21st Century Skills for PGSD Students Campus VI UNM Watampone.

II. METHOD

This research used quantitative method. According to Sugiyono (2018) the correlational quantitative method aims to determine the relationship between the two variables. In addition, Olden (2004) stated that correlational research is research that investigates whether there is a relationship or correlation between two or more variables.

A. Research Design

The design of this research aims to make it easier to find out the relationship between the implementation of online learning and the orientation of mastering 21st century skills for students majoring in PGSD Campus VI UNM as follows:

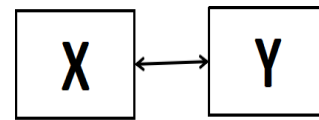


Fig 1 Research Design for Implementing Online Learning Towards the Orientation of Mastering 21st Century Skills

- Information
- X : Learning Implementation Online
- Y : Century skill orientation 21st Students
- \longleftrightarrow Relationship of X and Y

B. Population and Sample

➤ According to Sugiyono (2018) the population is generalizations consisting of objects or subjects that have certain qualities and characteristics set by researchers to study and then draw conclusions. The population in this research were students majoring in PGSD Bone class of 2019 who used the online application SYam- OK a number of 33 people.

Table 1 Number of PGSD Bone Students Class of 2019

No	Subject	Sex		The number of students
		Male	Female	
1	Class of 2019 students	8	25	33
Total				

Data source: Academic Section of PGSD Campus VI UNM Bone

➤ **Samples**

The research sampling technique is the population sampling technique. Population sampling is a sampling technique when the population is less than 100 members of the population. Total sample of 33 students.

C. Variable Operational Definition

- The Operational Definition of the Variable is as Follows:

The implementation of online learning in this research is the Syam-OK online lecture application which consists of Vikom and LMS, b) the practice of mastering critical, creative, collaborative, and communicative skills in online lectures for the odd semester of 2020/2021, and c) the students majoring in PGSD Bone in question are students class of 2019 who have taken part in the online learning application SYAM-OK.

D. Data Collection Technique

This research used questionnaire data collection technique. According to Sugiyono (2018) questionnaire is a data collection technique that is carried out by giving a set of questions or written statements to respondents to answer. The questionnaire is a data collection technique that is carried out by giving a set of questions or written statements to the respondent to answer.

E. Research Instruments

The research instrument used in this research was a questionnaire guide to find out the implementation of online learning towards the 21st century skills orientation of students majoring in PGSD Campus VI UNM Watampone.

F. Data Analysis Technique

This research used statistics divided in to two, descriptive statistics and inferential statistics.

➤ **Descriptive Statistical Analysis**

Descriptive analysis is used to find out the description of the study of courageous learning towards the orientation of the 21st century skills majoring in PGSD Bone Campus VI UNM students. According to Sugiyono (2018) descriptive statistics are statistics that are used to analyze data by describing or describing the data that has been collected as it is without intending to make general conclusions or generalizations. In the descriptive statistical analysis used to calculate the data by using the average and proportion calculations. The two formulas can be described as follows:

- Average analysis used to find out the average results of the Online Learning Implementation questionnaire on 21st century skill orientation for students majoring in PGSD Bone Campus VI UNM. According to Sugiyono (2018, p.84) the formula used to find the average is as follows:

$$\bar{X} = \frac{\sum fX}{N}$$

- Information:
- P = Percentage
- f = medium frequency find the percentage
- N = Expected value

• **Percentage Analysis**

The percentage analysis in this research aims to describe the two variables using a frequency distribution list. The formula used to find the percentage is as follows:

$$P = \frac{f}{N} \times 100\%$$

- Information:
- P = Percentage
- f = medium frequency find the percentage
- N = Expected value

Furthermore, to draw descriptive conclusions, the percentage values that have been obtained and the data are converted to draw descriptive conclusions. Arikunto (2014) suggests that the conversion guidelines used are the ranges within each category are not the same, as well as the distance between one category and another (p.35). This was

made because of certain considerations based on the point of view and considerations of the evaluator to reveal students' abilities as follows:

Table 2 Convert Table

Achievement Level	Low Score
80 % - 100 %	A (Very Good)
66 % - 79 %	B (Good)
56 % - 65 %	C (medium)
41 % - 55 %	D (Less)
0 % - 40 %	E (Very less)

Source: Riduwan. Educational Program Evaluation

➤ **Inferential Statistical Analysis**

According to Sugiyono (2018) inferential statistic is statistical techniques used to analyze sample data and the results are applied to the population. Inferential statistical analysis is used to test the research hypothesis, namely by comparing the correlation coefficient with table (n). To test the truth of the hypothesis, correlation analysis of X and Y variables is used using the Pearson product moment formula. One of the conditions for using the formula is that the data must be normal.

Furthermore, statisticians say data with more than 30 digits (n > 30) can be assumed to be normally distributed. Based on this statement, the number of samples in this study met the requirements.

• **Pearson Product Moment Correlation Formula**

To test the truth of the hypothesis, a person product moment correlation analysis is used as stated by Sugiyono, 2019 as follows:

$$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{(N \sum X^2 - (\sum X)^2)(N \sum Y^2 - (\sum Y)^2)}}$$

- Information:
- rxy = X and Y correlation coefficient
- X = Implementation Variable Online Learning
- Y = 21st Century Orientation Variable
- N = Number of samples
- XY = Result of multiplying the value of Online Learning Implementation against 21st Century Orientation
- $\sum X$ = Total score of item X (Learning Implementation Online)
- $\sum Y$ = Sum of Y item scores (21st Century Orientation)
- $\sum X^2$ = Sum of the squared scores of item X
- $\sum Y^2$ = Sum of the squares of Y's scores

➤ **Determination Formula**

- The determination formula is used to determine the degree of 21st Century Orientation relationship (Riduwan, 2016, p.228)
- $KP = r^2 \times 100\%$ Information
- KP = The magnitude of the coefficient determinant (determinant)

- r = Correlation Coefficient

➤ *The T-Count Formula*

The t-count formula tests whether there is a significant relationship between the implementation of online learning and a 21st century orientation, so the t-test formula is used as suggested by Sugiyono (2019) as follows:

$$\frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

- Information:
- r = Value of rxy
- n = Number of Respondents

➤ *After Testing Tcount, then the Next Step is Testing the Hypothesis with the Test Rules, Namely:*

- If tcount ≥ ttable then the value of t is significant so that H0 is accepted and H1 is rejected. This means that there is a significant relationship between the variable x (Implementation of Learning) and Variable Y (21st Century Orientation).
- If tcount < ttable then the value of t is not significant so that H0 is rejected and H1 is accepted. This means that there is no significant relationship between the X variable (Learning Implementation) and Y Variable (21st Century Orientation).

Table 3 List of Frequency Distribution of Online Learning Scores for Students majoring in PGSD Campus VI UNM Bone

Score	F1	Fkum	X1	F1X1
40 – 43	4	4	41,5	166
44 – 47	4	8	45,5	182
48 – 51	7	15	49,5	346,5
52 – 55	12	27	53,5	642
56 – 59	4	31	57,5	230
60 – 63	1	32	61,5	61,5
Total	32	117	309	1628

Based on Figure 3, the histogram graph can be explained that 1) respondents with a value range of 40-43 are 4 people, 2) respondents with a value range of 44-47 are 4 people, 3) students with a value range of 48-51 are 7 people and, 4) 12 students with a range of 52-55, 5) students with a range of 56-59 4 people, 6) 1 student with a range of 60-63.

➤ *Percentage Analysis*

Percentage analysis was carried out after carrying out an average analysis. From the research results it is known that the value obtained is $\sum X = F = 1621$ in the variable x, and the expected value is the value of the maximum score multiplied by the number of students, namely $80 \times 32 = 2560$ so,

III. FINDINGS

The research results are divided into two, namely descriptive statistical analysis and inferential statistical analysis, both of them can be described as follows:

➤ *Descriptive Statistical Analysis*

Before an analysis is carried out to find out the correlation between online learning and the 21st century skills orientation of PGSD Campus VI UNM Bone students, the results of the descriptive analysis analysis of the variables studied will be presented as follows:

- An overview of the implementation of online learning for the PGSD Department, Campus VI UNM
- ✓ Average Analysis: based on the data obtained from a questionnaire describing online learning for PGSD campus VI UNM Bone students to respondents, each questionnaire consisted of 20 questions, which obtained the highest score of 61 and the lowest score of 40. Data on online learning scores (variable X) achieved by respondents can be seen in questionnaire score tabulation. Before analyzing the data, a frequency distribution is first made to make it easier to calculate, as shown in table 3. as follows:

$$\begin{aligned}
 P &= \frac{f}{n} \times 100\% \quad (4.2) \\
 &= \frac{1621}{2560} \times 100\% \\
 &= 0,633 \times 100\% \\
 &= 63,3\%
 \end{aligned}$$

Based on the results of the calculation above, the results obtained were 63%, it was obtained that online learning in the PGSD program, Campus VI UNM Watampone, was in the medium category (S) because it was in the range of 56% - 65%.

➤ *Orientation of 21st Century Skills Students Majoring in PGSD Campus Vi Watampone*

• *Average Analysis*

Questionnaire analysis data for the 21st century skills orientation of PGSD VI UNM Watampone students who have been distributed to respondents, each questionnaire consisting of 33 questions obtained the highest score of 75 and the lowest score of 46. Data on the score of online learning in the school environment can be (variable X) The results achieved by respondents can be seen in the score tabulation of online learning questionnaires on campus. Based on the data on the distribution of ABD 21 skill orientation, a frequency distribution can be made as shown in table 4.2 as follows.

Table 4 List of Distribution of Online Learning Scores for PGSD Program Students, Campus VI UNM Watampone

Score	F1	Fkum	X1	F1X1
46 – 50	4	4	48	192
51 – 55	8	12	53	424
56 – 60	11	23	58	638
61 – 65	5	28	63	315
Score	F1	Fkum	X1	F1X1
66 – 70	2	30	68	136
71 – 75	2	32	73	146
Total	32	129	363	1851

Based on table 4. above, it can be seen that $\sum F = 32$; $\sum X = 363$; $\sum FX = 1851$, then the average score of the data is as follows:

$$\bar{x} = \frac{\sum f \times x}{N}$$

$$\frac{1851}{32}$$

$$= 57,84375$$

$$= 57,843$$

The results of the calculations show that the average score of variable Y is 57,843. Based on table 4.2, data on the frequency distribution of skills orientation scores of the 21st century students majoring in PGSD Campus VI UNM Watampone, a histogram can be made as follows:

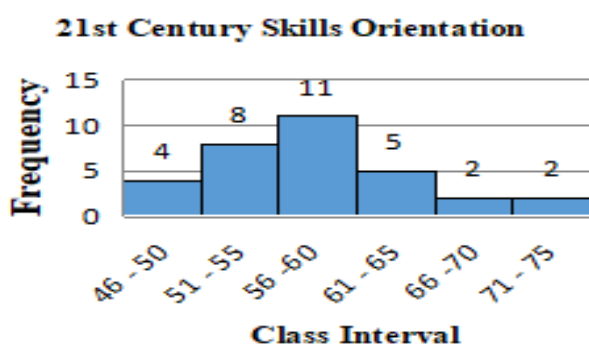


Fig 2 Histogram Graph of 21st Century Skills Orientation Score Frequency Distribution Results

Based on Figure 2 The histogram graph can be explained that 1) respondents with a value range of 46-50 are 4 people, 2) respondents with a value range of 51-55 are 8 people, 3) students with a value range of 56-60 are 11 people, 4) 5 respondents with a range of 61-65, 5) 2 respondents with a range of 66-70, and 6) 2 respondents with a range of 71-75.

➤ *Percentage Analysis*

Percentage analysis was carried out after carrying out an average analysis. From the research it is known that the value obtained $\sum X = f = 1861$ on the variable Y and the expected value is the value of the maximum score multiplied by the number of respondents, namely $80 \times 32 = 2560$ so that

$$P = \frac{f}{n} \times 100\% \tag{4.4}$$

$$= \frac{1861}{2560} \times 100\%$$

$$= 0,7269$$

$$\times 100\%$$

$$= 72,69\%$$

Based on the results of the calculation above, the results obtained were 72.69%, it was obtained that the 21st century skills orientation of students majoring in PGSD Campus VI UNM Bone was declared a good category because it was in the range of 66% - 79%.

➤ *Inferential Statistical Analysis*

• *Normality Test*

The normality test was carried out to find out whether the data from the variables studied were normal or not, to fulfill the assumptions about data normality, this normality test was tested using the Kolmogorov Smimov formula. For more details can be seen in the following table:

Table 5 Normality Test Results Using Spss

Data	Asymp. Sig (2-tailed)	Information
School Environment with Indonesian Politeness	0,200	0,200>0,05

Source : IBM SPSS Statistics Version 25

Based on table XX it can be seen that the Asymp. Sig (2-tailed) (2-tailed) is 0.200, then the significance value of the data is greater or above 0.05, so it can be stated that the data is normally distributed.

➤ *Homogeneity Test*

The homogeneity test aims to prove the processed data is homogeneous or not, by comparing the highest variance with the lowest variance. With test criteria:

- If $F_{count} < F_{table}$ then it is homogeneous
- If $F_{count} > F_{table}$ then it is not homogeneous
- The homogeneity test steps with the F test or Fisher's test are as follows:
- Determine the variance or square of the standard deviation of the X and Y variables using the formula:
- Variance of variable X (School Environment):

$$\begin{aligned}
 S_x^2 &= \sqrt{\frac{n \cdot \sum X^2 - (\sum X)^2}{n(n-1)}} \\
 &= \sqrt{\frac{32(82925) - (1621)^2}{32(32-1)}} \\
 &= \sqrt{\frac{2653600 - 2627641}{992}} \\
 &= \sqrt{\frac{25959}{992}} = \sqrt{26.168} = 5.115
 \end{aligned}$$

Y variable variance (21st century skills orientation)

$$\begin{aligned}
 S_y^2 &= \sqrt{\frac{n \cdot \sum Y^2 - (\sum Y)^2}{n(n-1)}} \\
 &= \sqrt{\frac{32(109705) - (1861)^2}{32(32-1)}} \\
 &= \sqrt{\frac{3510560 - 3463321}{992}} \\
 &= \sqrt{\frac{47239}{992}} \\
 &= \sqrt{47.619} = 6.900
 \end{aligned}$$

Finding F_{count} of X and Y variances with the formula:

$$\begin{aligned}
 F &= \frac{S_{besar}}{S_{kecil}} \\
 F &= \frac{6.900}{5.115} \\
 &= 1.348
 \end{aligned}$$

Determining the price of F_{table} (Appendix C7)

$\alpha = 0.05$ Numerator or $df_1 = 2-1 = 1$ while the denominator or $df_2 = 32-2 = 30$ value of $F_{table} = 1.69726$ while $F_{count} = 1, 348$. $F_{count} < F_{table}$, it can be concluded that the data is taken from populations that have the same or homogeneous variance.

➤ *Hypothesis Test*

The relationship between variables X and Y can be seen through the Pearson Product Moment correlation intended to determine the relationship between online learning and the mastery of 21st century skills by students majoring in PGSD Campus VI UNM Watampone, to test acceptance or rejection of the hypothesis being tested. To simplify the calculation, a table of the distribution of school

environment scores (variabale X) and politeness in the Indonesian language (variable Y) is made in Appendix C.

Based on the calculation results in Appendix C on page 80, the statistical quantities are obtained: $N = 32$; $\sum X = 1621$; $\sum Y = 1861$; $\sum X^2 = 82925$; $\sum Y^2 = 109705$; $\sum XY = 94847$; $(\sum X)^2 = (1621)^2 = 2627641$; $(\sum Y)^2 = (1861)^2 = 3463321$. To determine the value of the correlation coefficient, the Pearson Product Moment correlation formula is used as follows.

$$\begin{aligned}
 &\frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{(n \sum X^2 - (\sum X)^2)(n \sum Y^2 - (\sum Y)^2)}} \\
 &= \frac{32(94847) - (1621)(1861)}{\sqrt{(32(82925) - 2627641)(32(109705) - 3463321)}} \\
 &= \frac{3035104 - 3016681}{\sqrt{(2653600 - 2627641)((3510560) - 3463321)}} \\
 &= \frac{18423}{\sqrt{(25959)((47239))}} \\
 &= \frac{18423}{\sqrt{(1226277201)}} \\
 &= \frac{18423}{35018,2409752} \\
 &= 0,52609724209 \\
 &= 0,526
 \end{aligned}$$

Based on the results of these calculations, an rxy of 0.526 is obtained. To find out the degree of relationship between online learning and the orientation of mastering 21st century skills for students majoring in PGSD Campus VI UNM Watampone, the following determination formula is used:

- $KP = r^2 \times 100 \%$
- $= (0.526)^2 \times 100 \%$
- $= 0.276676 \times 100 \%$
- $= 27.6675 \%$
- $= 27.66 \%$

These results indicate that the degree of relationship between online learning and 21st century skills orientation of students majoring in PGSD Campus VI UNM Watampone is 27.66%, meaning that there are 27.66% of school environmental factors on students' Indonesian politeness and 72.34% are influenced by factors others which are not described in this study. Furthermore, for testing the significance of the correlation coefficient can be calculated using the t-test formula as follows:

$$\begin{aligned}
 t_{hit} &= \\
 &= \frac{r \sqrt{n-2}}{\sqrt{1-r^2}} \\
 &= \frac{0,526 \sqrt{32-2}}{\sqrt{1-(0,526)^2}} \\
 &= \frac{0,526 \sqrt{30}}{\sqrt{1-(0,276676)}} \\
 &= \frac{0,526 (5,47722557505)}{\sqrt{0,72324}} \\
 &= \frac{2,881802065248}{0,8504856776} \\
 &= 3,38842369925 \\
 &= 3,3884
 \end{aligned}$$

The calculated t value is then compared with the t table value after looking at the t distribution table for an error of 5% and $dk = n - 2 = 32 - 2 = 30$, the value of t table = 1.69726 is obtained. It turns out that the result of t count is greater than t table, so the null hypothesis (H_0) is rejected and the alternative hypothesis (H_1) is accepted. Thus it can be concluded that there is a significant relationship between online learning and the orientation of mastering 21st century skills for students majoring in PGSD Campus VI UNM Watampone.

IV. DISCUSSION

A. An Overview of Online Learning for PGSD Students Majoring in Campus Vi Unm Watampone

The results of the data analysis provide an overview of online learning at Campus VI UNM Watampone by giving a questionnaire to 32 students who were used as respondents. The results of data analysis carried out with IBM SPSS Statistics Version 25, it can be seen that online learning on campus VI UNM is categorized as Moderate (S) because it is in the range of 56% - 65%. This shows that online learning using the Syam-OK UNM application is carried out based on an online learning design which has a positive impact on learning during the Covid-19 pandemic and certain situations that allow students to study without dealing directly with lecturers in the classroom. The implementation of the Syam-OK online learning has a positive impact on achieving class goals. This is in line with the opinion of Sofyana & Abdul (2019) stating that the purpose of online learning is to provide quality learning services in an open network to reach more and wider study room enthusiasts (Handarini and Wulandari 2020). In addition to Sofyan's opinion, it is also in line with the opinion of Hadiasi & Muna (2015) that the aim of students is to be able to access learning materials at any time and repeatedly or it can be said that learning flexibility is high so that they can communicate with teachers at any time and students can master learning material. (Kamayanthi, 2020).

B. Description of Mastery of 21st Century Skills for PGSD Major Students, Campus Vi Unm Watampone

The results of the data analysis provide an overview of online learning for PGSD students majoring in Campus VI UNM Watampone which the results are from giving a questionnaire to 32 students as respondents. From the results of data analysis conducted with IBM SPSS Statistics Version 25, it can be seen that mastery of 21st century skills is in the Good category (B) because it is in the range of 66% - 79%. This shows that the orientation of mastering 21st century skills for PGSD students majoring in Campus VI UNM Watampone has been well implemented, which consists of communication, collaboration, critical and creative skills which are very important in this era. Furthermore, the results of Reftikasari's research (2022) which shows that in the 21st century skills students are trained to explain and exchange information with their friends during the learning process, learn how to convey information correctly, so that their friends can understand and understand it. The role of the teacher here is as a facilitator. 21st century skills can foster and improve cooperation within a group to solve certain problems, increase tolerance for differences in friends' opinions, try to think critically and creatively to solve problems to relate something.

Students' critical thinking skills are an important thing to be trained as academic beings who can compete for various things. These critical thinking skills are in line with the opinion of Elaine B. Johnson, (2009: 182) that critical thinking is essentially an active process in which a person thinks about things in depth, asks questions for himself, finds relevant information for himself rather than accepting things from other people (John Dewey in Alec Fisher, 2009: 2). This is also in line with the opinion of Elaine B. Johnson (2009: 185) that the purpose of critical thinking is to achieve a deep understanding.

In addition, in mastering critical thinking skills, there is a mastery of good communication skills for students majoring in PGSD Campus VI UNM Watampone. This is in line with the opinion of Van (2011) communication skills the ability to speak in a language that has emotional and social content, namely how communication activities can take place reciprocally. The ability of students' creative skills in this study already exists and is very important to have, this can be seen from the ideas, creativity of students and conveying in detail the things they learn. This is in line with the opinion of Yeni Rachmawati and Euis Kurniati (2010:16-17) the creative process will only occur if it is generated through problems that spur five kinds of creative behavior as follows:

Fluency is the ability to express similar ideas to solve a problem. 2) Flexibility, namely the ability to generate various kinds of ideas to solve a problem outside the usual categories. 3) Originality, namely the ability to provide a unique or extraordinary response. 4) Elaboration (detail), is the ability to state the direction of ideas in detail to make the idea a reality. 5) Sensitivity is to capture and produce problems in response to a situation. Cooperation skills are

part of the 21st century skills that can be mastered by PGSD students, this shows implementation in carrying out project activities/group assignments to complete based on the tasks given by the lecturer. The ability to work together is in line with the opinion of Warsono and Hariyanto (2012: 50-51) collaboration in the learning process is important because the form of cooperation with each other helps and complements each other to carry out certain tasks in order to obtain a predetermined goal.

C. Relationship Between Online Learning and 21st Century Skill Mastery Orientation for PGSD Program Students, Campus Vi Unm Watampone

The relationship between online learning and the orientation of mastering 21st century skills with this inferential analysis includes normality tests, homogeneity tests and hypothesis testing. The normality test for online learning at campus VI UNM Watampone was carried out using the Kolmogorof-Smirnow test. The results obtained by this normality test is declared normal. After carrying out the normality test, then the next homogeneity test with the result that the data is taken from a population that has the same or homogeneous variance between online learning and the orientation of mastering 21st century skills.

Testing the research hypothesis with inferential statistics begins with finding the Pearson product moment correlation value between online learning and 21st century skill mastery orientation online learning and 21st century skill mastery orientation. significance, so that H_0 is rejected and H_1 is accepted, which means that there is a significant relationship between online learning and the orientation of mastering 21st century skills. This means that the more 21st century skills are trained in learning, the stronger the orientation of mastering 21st century skills of students majoring in PGSD Campus VI UNM Watampone.

V. CONCLUSION

Based on the explanation of the research, the conclusions of the research are as follows: 1) an overview of online learning through the Syam-OK application for PGSD students majoring in Campus VI UNM Watampone is declared in the moderate category (S), meaning that online lectures with the Syam-OK application can be carried out based on lecture objectives. 2) An overview of the orientation of mastering 21st century skills for students majoring in PGSD Campus VI UNM Watampone is stated in the Good category (B) meaning that students have a 21st century skills orientation which consists of communication, critical, collaborative, and creative skills which are integrated through online lectures.

There is a significant relationship between online learning and the 21st century skill mastery orientation of students majoring in PGSD campus VI UNM Watampone, this is indicated by the moderate level of correlation, and the calculated value is greater than t_{table} so that the alternative hypothesis (H_1) is accepted and (H_0) is rejected, so it can be said, online learning can properly integrate the mastery of 21st century skills.

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