

The Effect Of Implementing Richpeace Software On The Competency Of Clothing Pattern Making In Semester III PKK Students, Centrations In Clothing Design, USK

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ABSTRACT

This study aims to determine : (1) the differences competency between students taught with Richpeace Software and students taught without applying Richpeace Software in making fashion patterns for Semester III PKK students with Fashion Design concentration; (2) The application of Richpeace Software has an effect on the competency of making fashion patterns for Semester III PKK students with Fashion Design concentration. Type of research used Quasi Experimental Research with NonRandomized Control-Group Pretest-Posttest Design model. Research conducted on Semester III PKK students , Fashion Design Concentration, Syiah Kuala University. The results of the study show that : (1) there is difference results Study between students who study with implementing Richpeace Software with students who study without implementing Richpeace Software in making fashion pattern with mark probability or significant $0.000 < 0.05$, so H_0 is rejected and H_1 is accepted ; 2) the existence of influence in Richpeace Software Implementation to competence making fashion patterns , this is proven with mark probability or significance is $0.000 < 0.05$, then H_0 is rejected and H_1 is accepted. The response results student to Software implementation Rich Piece show 58.33 % agreed and 33.33% strongly agreed , meaning student give positive response to learning in the Basic Fashion Course. Furthermore, the application of Richpeace Software can made into alternative in learning in the Basic Fashion Course, because making pattern with digital way can increase competence student in meet the world of work in accordance with the 21st century era.

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1. Introduction

Quality education is education that is capable print generation a nation that has competence to compete globally in create field work. Revolution industry society 5.0 which will We face it is the most difficult challenge for adaptation all over element life, especially field education that must be synergize with system increasingly modern (Nento et al., 2023)technology Therefore, technology is element important in learning as a solution increase quality education. (Ajizah, 2021)Technology also plays a role role big in change method Work Lots industry so that skills required no longer just centered on manual skills, components education at this time it really needs to be sharpened skills is PKK students concentrate on Fashion Design, because education vocational focused on development competence skills with need industry and the world of work. Therefore, must equipped with the right training and skills to his students (Nurhijrah & Suryana, 2023). With supplies the ability that has been adequate, then the PKK Fashion Design concentration has been capable prepare graduates who have appropriate skills and knowledge with demands industry Currently, education vocational can help create field work better and improve quality life society. Learning productive among others: knowledge of materials textiles, basics design, manufacture pattern basic, technology sewing, and others. The Basic Fashion Course is one of the eye studying productive, where ability basically among other things making pattern manually and digitally as well determine *Break Even Point Sales*, calculating price sell and evaluate report results fashion making (Ministry of Education and Culture, 2018). Talking about fashion today and in the future Of course just the more develop with use technology for designing various pattern the more advanced and sophisticated in fashion industry along development technology. This is in agreement (Nadia et al., n.d.) the more the development of fashion among public make the teenagers create the latest fashion models in accordance with development of the times. The use of ICT is also applied to the fashion industry, which utilizes *Richpeace software* to create fashion pattern . (Fadholi & Rachmawati, 2024)one of The core and basic competencies of the Basic Fashion Course are ability to create fashion patterns manually and digitally using technology computer. In learning, one of the software that can utilize Richpeace Software.

Based on matter said, then the main task a lecturer must capable create learning in the technological age to facilitate student in develop his competence to design various pattern with utilise technology. Use computer in make pattern is a network device technology capable high and versatile can, so a person who has control technology computer in the process of making general fashion patterns will capable generate and realize ideas faster compared to when done with another way (Herdiningrum et al., 2022). Related explanation said , then searched step development innovation with take advantage of technology in the Basic Fashion Course with offers Richpeace Software as one of the system technology in making fashion pattern. Richpeace Software can help student designing pattern fashion because have complete tools in making pattern become more productive compared to make pattern with manual, this system makes things easier usage, can produce various size with good, save time in creation and reduction cost production addition (Angendari et al., 2023). Another advantage of Computer Aided Design with Richpeace Software make pattern digitally, can edited and simulated before used in the field. However problems that arise Previously, the Basic Fashion Course had not been using digital media as well as application for development pattern basic, even though there is laboratory adequate computer, will but during this time lecturer Not yet hone skills student in making digital fashion patterns.

Based on description said, then found problem that application technology Not yet Once implemented in the Basic Fashion Course, students still doing assignments done manually with use pencil and paper, eating long time with results that are not regular and less appropriate target , this results in No There is development quality students to produce the right fashion pattern and creativity in accordance with the current era of the fashion industry. So that competence in making fashion patterns are not yet reach objective expected learning in accordance with demands OBE curriculum. The solution to problem the is Richpeace Software Implementation to competence making fashion patterns for PKK students concentrating in Fashion Design, Richpeace Software can help students to make fashion patterns become more productive, can produce various size with good, save time in the process . Formulation problem which will investigated is:

Whether Is there a difference in competence between students who are taught using Richpeace Software and students who are taught without using Richpeace Software in making fashion patterns for Semester III PKK students with Fashion Design concentration? Does the implementation of Richpeace Software affect the competence of making fashion patterns for Semester III PKK students concentrating on Fashion Design?

2. Research Design

Research conducted including Study Quasi Experimental Research. In this study, two groups were taken. research that has relatively The same his ability based on KHS value obtained from part academic. Next second group the given treatment test early to be able to know ability base student before to be continued research . Test results beginning show If score group experiments and controls No Far different so that can done research. Influence treatment is (T2-T1), (T4-T3). Research done refers to the NonRandomized Control-Group Pretest-Posttest Design model (Isaac & Michael, 1982) as follows:

Table 1. Pretest-Posttest Design Model

Group	Pretest	Treatment	Posttest
Group Experiment	T1	X	T2
Group Control	T3	-	T4

T1 = Pretest group on variable dependent (group experiment)

T3 = Pretest group on variable dependent (group control)

X = Treatment experimental (variable free)

T2 = Posttest group on variable dependent (group experiment)

T4 = Posttest group on variable dependent (group control)

Variables Study

Variables Free (X) to use *Richpeace Software*.

Variable (Y) Competence student in Making Clothing Patterns.

Population is overall elements used as a basis generalization. According to (Sugiyono, 2019) "population is a generalized area consisting of above: object/subject that has quantity and characteristics certain ones that have already determined by researchers to be studied and further withdrawn a conclusion". Population in This research is student force 2024 or semester III of the PKK Department, Fashion Design Concentration, USK in the year academic, 2024/2025 with There are 3 classes with a total of 73 students. The sample used namely two classes, semester III-a and III-b. Sample selection was carried out using

simple random sampling is his class, while students in class experiments and controls No this is random indeed intex group. Based on 2 selected classes assumed own same ability or almost same, based on the GPA obtained from part academic. Number 24 students in semester III-a through implementation of Richpeace Software and semester III-b as many as 25 people using module learning.

Data collection was carried out through test show Work make fashion pattern to measure psychomotor (results) test given scoring) and affective, then use questionnaire to find out response student to Richpeace Software implementation. Test before treatment experiment aims to obtain data on competencies student before learning with using Richpeace Software. Test after treatment experiments, used to obtain data on competencies student after learning Use of Richpeace Software in making fashion patterns. Test questions to test student own same character in aspect design fashion pattern between before or after treatment.

Before doing *t-test* must similarity test was conducted Variants with use F test number which assumes second Variants The same based on pretest data (results) test beginning) with using the SPSS version 21 program. Next, the resulting data measurement variable bound and variable free done to test existence differences, analyzed with using the t-test (*independent-test*) so can determined validity hypothesis being tested. Statistical data analysis to see existence difference the done with utilizing the SPSS version 21 program. Meanwhile, to test existence influence to implementation, analyzed with using the ANOVA test with utilizing the SPSS version 21 program. Response data analysis students in each questions/aspects use the formula is as follows:

$$P = f / nx 100\%$$

Q: percentage

f : frequency

n : number of samples

Then to find the average answer student used formula :

$$X = \frac{\sum X_i}{n}$$

Where, X^- = average value , $\sum Xi$ amount response students , n = number respondents .

Percentage result response student interpreted according to Table 2.

Table 2. Response Criteria Student

No	Average value	Criteria
1	$3.0 < X^- \leq 4.0$	Strongly agree
2	$2.0 < X^- \leq 3.0$	Agree
3	$1.0 < X^- \leq 2.0$	Don't agree
4	$0.0 \leq X^- \leq 1.0$	Absolutely not agree

3. Results and Discussion

Data used in This research is the result data competence making fashion patterns, which are obtained from difference between score test end and score test beginning or *gain score*. Result data competence making grouped fashion patterns become; score results competence making class fashion pattern experiment with use *Richpeace software* and

scores results competence making pattern class dress control without use *Richpeache Software*.

Next, the result data study analyzed with using t-test through help means computer program *SPSS version 21*. The results of the data analysis are used basis for testing hypothesis that has been determined previously. However before do data analysis results competence making pattern fashion needs prerequisite test conducted includes normality and homogeneity tests to student class experiments and controls.

Testing normality done use testing *Shapiro Wilk Test* use *SPSS version 21*. The condition for data to be normally distributed is if *P value (sig.)* > 0.05 then it is said normally distributed, and if *P value (sig.)* < 0.05 so it is said No normally distributed. It turns out that $0.823 > 0.05$ so that the class data experiment normally distributed. For class control, $0.401 > 0.05$ so the data is also normally distributed . This means Variants comparison groups same, then condition fulfilled and can ANOVA test was conducted.

Testing homogeneity use *Levene's Test* . With condition when *P value (sig.)* > 0.05 then the data nature homogeneous . If *P value (sig.)* < 0.05 then the data No nature homogeneous. Based on results calculation with *SPSS version 21* obtained F test number 0.004 with *P value (sig.)* of 0.948. It turns out that number *P value (sig.)* > 0.05 , so the data homogeneous. Requirements fulfilled and can done test ANOVA.

Hypothesis Testing Research 1.

Testing equality of means (t-test) was conducted to determine whether there is the mean difference between the two groups. This study was conducted referring to the *NonRandomized Control-Group model*, to find out difference competence *between* students who study with apply *Richpea Software* with students who study without apply *Richpea Software* in making fashion pattern. Calculation average similarity (t-test) is presented in table 3.

Table 3. Calculation of Average Similarity (T-Test) Using Results from N Gain.

Group Statistics									
Kelas		N	Mean	Std. Deviation		Std. Error Mean			
NGain_Score_ Eksperimen		24	.6665	.13367		.02729			
Kontrol		25	.2470	.14614		.02923			

independent samples test									
		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower Upper
NGain_Score_	Equal variances assumed	.486	.489	10.471	47	.000	.41946	.04006	.33887 .50005
	Equal variances not assumed			10.491	46.895	.000	.41946	.03998	.33902 .49990

Based on The t-test numbers show probability or significant 0.000, it turns out that $P < 0.05$ so that in the class this experiment H_0 rejected It means there is difference competence *between* students who are taught with *Richpea Software* with students who taught without apply *Richpea Software* in making fashion patterns for third semester PKK students , Fashion Design Concentration, USK.

Research result give description that using Richpeace Software own significant impact to competence student in to make pattern. Supported study (Pembinaan et al., 2018)“ The use of CAD with Richpeace Software is very effective in make fashion patterns, the software can used on all student laptops and can installed in a way easy to motivate student Study in a way independent”.

Testing hypothesis research 2.

The results of the SPSS version 21 calculations for the ANOVA test are presented in Table 4 below.

Table 4. ANOVA Test Results Class Experiments And Classes Control

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7593.230	1	7593.230	120.885	.000
Within Groups	2952.247	47	62.814		
Total	10545.477	48			

From testing using ANOVA obtained probability or significance is $0.000 < 0.005$, then H_0 is rejected It means there is influence use *Richpeace Software* to competence in making Student fashion patterns for semester III PKK students, Tata Bisana concentration , USK. The results of this study also present information that Use Richpeace Software more productively in make fashion patterns, because This system offers profit big to respond with fast order with size different and in the end graduate of Ready thrown into the world of business and industry (DUDI). With control Richpeace Software Technology so Graduates of S1 PKK with concentration in Fashion Design will become Superior Human Resources (HR), ready play a role and compete in the fashion business globally.

Furthermore results response student can concluded that in general Richpeace Software implementation is very much agreed to improvement results Study student in making women's fashion patterns. This is proven with height percentage response student to effectiveness in Application of Computer Aided Design learning media with Richpeace Software 33.33 % strongly agree and 58.33% agree meaning, result the student has give positive response to learning in the Women's Fashion Course.

Furthermore results response student can concluded that, the implementation of Richpeace Software is very much agreed to competence student in making fashion patterns. This is evidenced with height percentage response student to effectiveness in Richpeace Software Implementation 33.33 % strongly agree and 58.33% agree meaning, result response student has give positive response to learning in the Basic Fashion Course.

4. Conclusion

Based on data analysis and discussion, it can be concluded as follows: There are differences competence between students who are taught with implementing Richpeace Software with students who are taught without implementing Richpeace Software in making fashion patterns for PKK students in Fashion Design Concentration, USK. This is proven t-test number < 0.05 , namely probability or significance $0.000 < 0.05$. This means objective giving treatment through Use of Richpeace Software can felt its benefits by students . Implementation of Richpeace Software influential to competence making fashion patterns for PKK students in Fashion Design Concentration , USK. This is proven based on

results ANOVA test shows probability or significance $0.000 < 0.05$. This means objective from giving treatment can be beneficial for students. Implementation of Richpeace Software give impact positive for students, because they accept new experience so can increase competence in making women's fashion patterns.

5. Acknowledgements

It is expected This research can give input for researchers , adding insight and knowledge knowledge in making women's fashion patterns with digital techniques . In addition, for students , findings study can used for input knowledge to be able to use making fashion pattern with digital techniques and also as materials consideration for lecturer in carry out learning process in the Women's Fashion Course with apply media learning *Computer Aided Design* with *Richpea software*.

References

- Ajizah, I. (2021). Urgensi Teknologi Pendidikan : Analisis Kelebihan Dan Kekurangan Teknologi Pendidikan Di Era Revolusi Industri 4.0.
- Angendari, M. D., Dewa, I., Made Budhyani, A., Mayuni, P. A., & Sudirtha, G. (2023). Pelatihan Pembuatan Pola Busana Digital Cad Dengan Software Richpeace Di Smk Negeri 1 Seririt (Vol. 8).
- Fadholi, A., & Rachmawati, R. (2024). Fashion And Fashion Education Journal Pengaruh Mata Kuliah Pengelolaan Usaha Busana dan Pelayanan Prima terhadap Minat Berwirausaha pada Mahasiswa S1 Pendidikan Tata Busana Fakultas Teknik UNNES. FFEJ, 13(2). <https://journal.unnes.ac.id/sju/index.php/ffe/index>
- Herdiningrum, R. R., Addin, S., Shiddieq, A., Prop, P., & Timur, J. (2022). Pengembangan E-Modul Berbasis Richpeace Software Pada Kompetensi Pembuatan Pola Busana Digital Rinda Resi Herdiningrum. In Jurnal Penelitian Pendidikan Indonesia (JPPI) (Vol. 7, Issue 1). <https://lowongan.trovit.co.id/marker-garment-jobs>
- Isaac, S., & Michael, W. B. (1982). Handbook In Research And Evaluation : Second Edition. United State of America.
- Nadia, S., Budiastuti, E., Sri Wening, dan, kunci, K., & Pesta, B. (n.d.). Tingkat Ketertarikan Desain Blazer Berbahan Dasar Songket Untuk Busana Pesta Remaja Aceh The Level of Interest in Songket-Based Blazer Design for Aceh Youth Party Clothes. 40(2), 213–224. <https://doi.org/10.22322/dkb.v40i2.7086.g6092>
- Nento, F., Manto, R., Sultan, I., & Gorontalo, A. (2023). E-Tech Peran Teknologi dalam Dunia Pendidikan. <https://doi.org/10.1007/XXXXXX-XX-0000-00>
- Nurhijrah, & Suryana, S. (2023). Efektifitas Penggunaan Cad Melalui Program Richpeace Digital Grading System Dalam Pembelajaran Busana Industri. Pesona Jurnal Pendidikan Tata Busana, 3. <https://jurnal.unimed.ac.id/2012/index.php/pesona/index>
- Pembinaan, D., Menengah, S., Direktorat, K., Dasar, J. P., Menengah, D., Pendidikan, K., & Kebudayaan, D. (2018). Pattern, Grading dan Marker dengan CAD Pattern, Grading Dan Marker Dengan CAD (Richpeace).
- Sugiyono. (2019). Metode Penelitian Kuantitatif, Kualitatif, dan R&D. ALFABETA.