

## Proceedings of the 4th International Conference on Innovation in Engineering and Vocational Education (ICIEVE 2021)

# Students' Learning Interest in the Implementation of Distance Learning in Vocational High Schools

Yolavika Marsintyabela\*, Erna Krisnanto, Trias Megayanti Universitas Pendidikan Indonesia Bandung, Indonesia \*yolavikamarsintyabela@upi.edu

Abstract-Productive subjects in vocational high schools require hands-on practice and guidance. The existence of distance learning applied to Software Application and Building Interior Design (SAABI) subjects as one of the productive subjects due to the covid 19 pandemic caused students' understanding and interest to decline. This study aims to find out how much influence distance learning has on interest in learning in SAABI subjects at SMKN 4 Tangerang Indonesia. The quantitative correlational approach is carried out by distributing questionnaires to the Building Modeling and Information Design Study Program students. The results showed that the distance learning process in SAABI subjects at SMKN 4 Tangerang was tolerable. Students' interest in learning in SAABI subjects at SMKN 4 Tangerang was also categorized acceptable. The level of distance learning relationship has a strong effect on students' interest in learning, with a significant influence reaching 49.4%. The magnitude of the impact of distance learning on students' interest in education needs to be considered for improving the quality of distance learning in productive subjects.

Keywords—distance learning, student interests

#### I. INTRODUCTION

Software Applications and Building Interior Design (SAABI) subjects are productive subjects in the Building Modeling and Information Design study program, including three and four competencies, namely knowledge and skills. This subject in the learning process is monitored directly, such as the existence of assistance in learning and carried out in the computer lab to monitor the knowledge and skills of students during the learning process. Most of the SAABI subject matter uses the AutoCAD application as its software. In 2020 Indonesia was infected with the Covid-19 Virus container, the spread of the Covid-19 disease impacted all activities being limited. One of the activities affected was educational activities.

The Indonesian government has imposed large-scale restrictions in accordance with the provisions of Law no. 6 of 2018 concerning public health quarantine as a form of response to public health emergencies, with efforts made including restrictions on activities in public places and facilities, restrictions on religious activities, as well as school activities and working activities. This government policy has an impact

on the implementation of distance learning. Distance Learning is a learning system in which learners and educators are separated or not in one space in its performance—learning using information technology or other media as a source of learning as stipulated in Law Number 20 of 2003.

The adaptation of this distance learning system has an impact on the SAABI learning process. The implementation of distance learning brings a change in the learning environment and the delivery of teaching materials. As a result, students often feel bored and do not understand the learning materials presented in the implementation. Other difficulties are that few students do not have enough devices to run AutoCAD applications, so the learning process couldn't be implemented optimally. These adaptations can affect the student's interest in following the SAABI learning process. Interest is essential in teaching and learning process activities. Interest is a thing or activity that can trigger to continue to follow and pay attention to something. In this case, it is a learning process [1]. This makes interest in learning very necessary in the learning process. With interest in learning, students will follow the learning well and without coercion. Some indicators can be used to measure interest, namely 1) liking, 2) interest, 3) attention, 4) involvement [2]. The importance of interest in learning is the focus of this research, especially in productive subjects. The research aims to find out how the distance learning process and students' interest in learning in SAABI subjects are, and to find out how much influence students' interest in learning has on distance learning.

#### II. METHODS

The research method used is descriptive quantitative with a correlation research design. Quantitative research is based on philosophy with specific statistical calculation techniques to test predetermined hypotheses [3]. Then descriptive is something that tries to describe a symptom or event happening in the present and as it is [4]. This research was conducted at SMK Negeri 4 Tangerang with a population and sample of 11th grade DPIB 1 student with 11 DPIB 2 totaling 59 students.

The data collection technique in this study is a survey using a questionnaire as the primary data with a Likert scale then



followed by interviews, observations, and documentation as reinforcement of the primary data.

TABLE I. ALTERNATIVE ANSWERS LIKERT SCALE

Question	strongly agree	Agree	undecided	Disagree	strongly disagree
Positive	5	4	3	2	1
Negative	1	2	3	4	5

The analytical technique used in this research is descriptive analysis with the Respondent's Achievement Level (RAL) then followed by correlation analysis and simple linear regression to see the effect of distance learning variable (X) on student interest in learning (Y).

#### RAL = <u>average score</u> x 100 number of answers5)

TABLE II. RANGE SCALE OF RAL

Range Scale (%)	interpretation
90 - 100	Very good
80 - 89	good
65 - 79	Average
55 - 64	Deficient
0 - 54	Very Deficient

III. RESULTS AND DISCUSSION

#### A. Distance Learning Variable

TABLE III. AVERAGE RAL VALUE OF DISTANCE LEARNING INDICATOR

No	Indicator	RAL(%)	Interpretation
1	Distance learning applications and facilities	83,3	good
2	Distance LearningInfrastructure	71,6	Average
3	Material Receipt Access	61,0	Deficient
4	Assignment	78,0	Deficient
5	Student Independence	72,5	average
6	Student and Educator Interaction/communication	80,0	Good
7	Accessibility	71,7	Average
Indica	Indicator's average		Average

From these results, the distance learning process is categorized as 'average' with the value of all indicators of 74.3%. The highest score is found in the implementation indicators of distance learning and facilities, followed by interactive indicators of educators and students with good categories. The results show that students understand distance learning and the facilities used, such as internet access and distance learning platform applications such as zoom. Virtual Meeting platform and the learning management system used like Google Classroom are categorized as good. This follows what

Ramayasa conveyed that distance learning is learning using communication technology and learning media as learning resources [5]. In this case, students also admit that they understand the meaning of distance learning and have good internet facilities. Students also acknowledge that it doesn't matter if they use a remote face-to-face platform such as zoom to explain the material. The APLPIG subject is a productive subject that requires a practicum, so it is more practical. It is good if it is presented, but students also admit that they have limited tools to run AutoCAD applications, for those students expect that practice can be carried out at school.

According to one of the theories presented by Keagen Stewart and Holmberg, namely interactive communication, the learning process must be communicative and interactive so that learners are comfortable in learning [6]. However, in this study, it was found that students had problems communicating with the teacher. The cause of these obstacles is the teacher's response that is not fast enough. In some cases, text messages that are sentby students to their teachers get replied to in the next few days. Communication and interaction between the teacher and the student are categorized as good. Thus, the study concluded that there were obstacles in the delivery of material during distance learning. The purpose of online learning is to be able to distribute material promptly and can be accessed by students and studied easily [6].

In contrast, this study shows that students admitted that the SAABI learning material was given only through the Learning Management System in the form of cognitive or knowledge material. The contents of the material were not explained. This makes students unable to understand the material given because the SAABI subject is basically a practicum that hones cognitive aspects and psychomotor aspects.

#### B. Variables of Student Learning Interest

TABLE IV. THE AVERAGE OF STUDENT LEARNING INTEREST

No	Indicator	RAL(%)	Interpretation
1	Discipline Against Time	81,7	Good
2	Happy to Pay Attention to the Learning Process	78,1	Average
3	Happy in Following the Learning Process	74,7	Average
4	Interested In Looking For More Information To Learn	74,6	Average
	Related To Learning Materials		
5	Interested In Asking Questions And Answering Questions	69,3	Average
6	Enthusiasm in Learning Activities	78,8	Average
7	Paying Attention to and Understanding Learning Materials	73,6	Average



Table IV. Cont.

No	Indicator	RAL(%)	Interpretation
8	Concentrate During the Learning Process	78,5	Average
9	Doing the Assigned Tasks	77,3	Average
10	Completing the Assigned Tasks	84,2	Good
11	Active in the Learning Process	69,0	Average
Avera	ge of All Indicators	75,7	Average

The result shows, the student's interest in learning is categorized as average, as seen from the average value of all indicators, which is 75.7%. The highest score is found in the indicator of completing the tasks given, then followed by the discipline indicator against time in the excellent category. It can be concluded that students have good involvement in completing the assigned tasks and a good feeling of pleasure from their discipline towards time. For instance, they were being present on time and submitting assignments on time. Interest can encourage someone to do something good as a psychological or behavioral aspect [7]. In this case, students also admit that they have an interest in SAABI lessons, but due to the distance learning process that cannot be said to be good, students do notunderstand the material presented.

The characteristics of productive subjects that require practice make students bored when dealing with material delivery without a direct approach. However, students also admitted that they were enthusiastic about submitting assignments on time because they knew the late collection resulted in a reduction in grades. Students also acknowledge that they are lacking in re-applying or repeating the material that has been given because students do not understand the material that has been given. Students also cannot do direct practice because of the lack of tools to run AutoCAD applications. From these results, it can be concluded that students are less involved in reapplying the material that has been taught or repeating the material that has been given and only pursuing final grades. According to Bloom, interest is a subject effect that affects something, both attitudes and learning materials [8-10].

### C. The Effect of Distance Learning on Students' Interest in Learning

Based on the results of analytical analysis of research data on concluded that there is a strong correlation between distance learning and student interest in learning with the value of the correlation coefficient is rount 0.703 > rtable 0.256, the correlation coefficient value of 0.703 is in the interval 0.60 - 0.799 which the interpretation is a strong relationship.

From the regression test, it is known that there is a significant effect between distance learning on students' interest in learning in APLPIG subjects at SMKN 4 Tangerang, as seen from the sig F test score of 0.000 <0.05 and the F count 55.678 > F table 4.01 based on the decision-making requirements. it

was decided that there was a significant effect between distance learning and students' interest in learning. Furthermore, there is a positive effect between distance learning and student learning interest obtained from the results of the regression test using the t test with the results of the simple linear regression equation being Y = 25.937 + 0.871X, the equation states that the cost of the variable student interest in learning is 25.931 and the coefficient value the regression is 0.87. This means that for every 1% addition of distance learning, the value of student learning interest increases by 0.87. This result shows that the regression coefficient is positive so it can be concluded that the effect of distance learning on students' interest in learning in APLPIG subjects at SMKN 4 Tangerang is positive.

Furthermore, the magnitude of the effect of distance learning on students' interest in learning can be seen from the acquisition of the coefficient of determination with a result of 0.494. In terms of the results of this study indicate that there is a significant positive effect between distance learning and student learning interest of 49.4%.

#### IV. CONCLUSION

Distance learning has become a necessity for the educational process, including in vocational high schools. However, many obstacles are encountered in implementation of distance learning, especially in the performance of productive courses that require a lot of practicums. From the research that has been done at SMKN 4 Tangerang, it can be concluded that there is a strong influence between the implementation of distance learning on students' interest in learning. In the performance of distance learning, several things need to be considered, especially in the delivery of material. Teachers should consistently deliver learning materials using video conferences and avoid providing material without explanation to students. In terms of interest in learning, the lack of students' desire to repeat the material outside of class hours needs to be a concern for further study. Technical constraints such as the lack of student access to hardware and software equipment need to be a concern for schools to be addressed immediately. Finally, other factors of 50.6% affect interest in learning in the implementation of distance learning need to be studied in further research to comprehensively understand the factors that influence student interest in learning to improve competence according to learning outcomes.

#### REFERENCES

- Slameto, Belajar dan faktor- faktor yang mempengaruhi. PT Rineka Cipta, 2010.
- [2] Sudaryono, Dasar-Dasar Evaluasi Pembelajaran Oleh (Cetakan Pe). Graha Ilmu. 2012.
- [3] Sugiyono, Metode Penelitian Kuantitatif Kualitatif dan R & D. CV. Alfabeta, 2011.
- [4] N. Sudjana, Dasar-Dasar Proses Belajar Mengajar. Bandung: Angkasa, 1989.
- [5] I.P. Ramayasa, "Evaluation Model of Success and Acceptance of E-Learning," Journal of Theoretical and Applied Information Technology, vol. 3182, no. (3), pp. 462–469, 2015.



- [6] Munir, Pembelajaran Jarak Jauh berbasis Teknologi Informasi dan Komunikasi (TIK). CV. Alfabeta, 2009.
- [7] Darmadi, Membaca Yuk "Strategi Menumbuhkan Minat Baca Pada Anak Sejak Usia Dini." Guepedia, 2018..
- [8] A. Mulyana, S. Hidayat and S. Sholih, "Hubungan Antara Persepsi, Minat, dan Sikap Siswa dengan Hasil Belajar Siswa dalam Pembelajaran
- PKn," Jurnal Pendidikan Dan Kebudayaan, vol. 19, no. (3), pp. 315, 2013
- [9] Riduwan, Skala Pengukuran Variabel-variabel Penelitian. Alfabeta, 2010.
- [10] B.S. Bloom, M.D. Engelhart, E.J. Furst, W.H. Hill and D.R. Krathwohl, Taxomony of Educational Objective. Taxonomy of Educational Objectives, pp. 62–197, 1956.