

The Effect of Hybrid Learning Model Vs Online Learning Model and Learning Motivation on Learning Outcomes of Taper Turning Technique of Student of Class XI SMK PGRI 1 Gresik



Hery Mulyono¹, Achmad Noor Fatirul², Djoko Adi Walujo³

^{1,2,3} PGRI Adi Buana University of Surabaya, Street Dukuh Menanggal XII-4 Surabaya, East Java

ABSTRACT: The purpose of the study is to: 1) find the effect between Hybrid Learning and Online Learning on Learning Outcomes, 2) find the effect between High learning motivation and Low learning motivation on Learning Outcomes, 3) find the interaction between the Use of Learning and learning motivation on Learning Outcomes.

This study uses a 2X2 factorial experimental design. The research data were collected using questionnaire methods and test methods. Then the data were analyzed using two-way ANOVA statistical analysis techniques. The research population was all students of class XI SMK PGRI 1 Gresik. With sampling carried out using random sampling techniques.

The results of the study concluded that (1) Learning using Hybrid Learning students have better learning outcomes compared to online learning, (2) Students who have high motivation get better learning outcomes compared to students who have low motivation. Moderate (3) there is an interaction between learning and learning motivation on learning outcomes. Based on the results of the study, it can be said that the use of Hybrid Learning and high learning motivation can be used as a benchmark to be considered in the learning process at SMK PGRI 1 Gresik.

KEYWORDS: Hybrid Learning, online learning, learning motivation, learning outcome, Taper Tuning Technique

I. INTRODUCTION

Education plays a very important role in human life. The civilization of previous nations whose handiwork was later printed as a wonder of the world was also due to the quality of education of that civilization, even the good and bad of a civilization is also determined by the quality of its education. If we read, then we will understand that advanced nations in this digital era (Digital Age) depend on the quality of the nation's education. (Andayani et al., 2020; Irawan & Fadly, 2020; Ramdhani et al., 2020), So that the progress of a nation is determined by how good the quality of its education is, which will lead to the formation and empowerment of quality humans in terms of Faith and Piety (IMTAQ) and mastering Science and Technology (IPTEK), and Art. Education is a process to improve the attitudes and behavior of students both on an individual and population scale through efforts to provide training and teaching on something. (Andayani et al., 2020; Irawan & Fadly, 2020; Ramdhani et al., 2020)

So, education is a treatment or action to obtain knowledge, understanding, and practice according to needs, rationally, and of course based on science. Education is a process of maturing young people carried out by adults. The education process will never be separated from the learning process. Learning itself comes from the word learning, where learning itself is a process of change that occurs in individuals, in other words, someone is only said to be learning when there has been a change for the better. (Faulinda & Aghni Rizqi Ni'mal, 2020; Puspitorini et al., 2020; Wirani, 2020). Such learning conditions also occur at SMK PGRI 1 Gresik. Based on the results of observations and cross-checks carried out in the teaching and learning process of Lathe Machining Engineering in the previous semester on the date, it was revealed that various learning activities were still dominated by teachers, so that the active involvement of students in the teaching and learning process of Taper Turning Engineering was still lacking. According to Vygotsky (1978) learning is an active process that involves interaction between individuals and their social environment. (Muhammad Hanif Fahmi, 2020; Nastiti &

Ni'mal 'abdu, 2020; Waskito et al., 2020) Low knowledge has an impact on low student abilities. Low student abilities occur due to underdeveloped understanding (Mauliya, 2021; Nasrullah & Bachtiar, 2021; Oktavianto, 2021). Based on the results of a survey conducted on teachers, it is known that less than 10% of teachers are trying to empower the use of the Hybrid Learning learning model through the application of learning models. Empowerment of the use of the Hybrid Learning learning model is very necessary so that students can improve their learning outcomes and learning motivation. Learning Models according to Joyce and Well, a

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learning model is a pattern that can be used to form a curriculum (long-term learning plan), design learning materials in class or others (Sukmawati, 2021). Experts compile learning models based on learning principles, psychological theories, sociological or other theories used as a pattern of choice by educators in carrying out the learning process (Setyowati & Sukmawan, 2021). While the learning models themselves are usually compiled based on various principles or theories of knowledge. Experts develop learning models based on learning principles, other supporting theories (Suratanee & Plaimas, 2021).

Hybrid Learning emerged as an impact of the use of internet-based technology in education. The internet promises convenience and massive capabilities in presenting material (Ramdhani et al., 2020). The internet is able to offer fast information acquisition. However, this technology cannot foster attitudes, provide examples of good behavior or develop creative potential (Irawan & Fadly, 2020). These three examples are related to the learning process in the realm of attitudes or effectiveness. To overcome this deficiency, a direct or instructor-led learning process is needed. Teachers or educators are able to provide examples or foster creativity that is not offered by internet technology (Andayani et al., 2020). This learning model that combines the potential of virtual, internet-based learning with direct learning is now called (Y. Wang et al., 2021) Hybrid Learning or blended learning

However, the journey of this learning model is not that simple. Previously, Brunner, Molenda quoted (N. M. W. S. Cahyani et al., 2021) stated that learning takes place gradually and progressively, from direct experience to the use of symbolic language that has abstract meaning (Delavar, 2022). Hybrid Learning or hybrid learning is a combination of classroom learning models and online learning without eliminating direct face-to-face learning (Ikawati et al., 2021). The stages of Hybrid Learning are: (1) Presentation of material by the teacher, (2) Providing practice questions, (3) Using internet services to help with practice questions, and (4) Discussion of practice questions (Ghate & C, 2021). Furthermore, the term Hybrid Learning is also known, which can be simply defined as a combination of face-to-face learning methods (in class) with material provided online (Agustan et al., 2020). One of the meanings of hybrid in Webster's Ninth New Collegiate Dictionary (1985) is something heterogeneous in composition, while the interpretation of the word hybrid, in general, is excellence, different from others (B. Wang et al., 2021), argues that Hybrid Learning is a combination of elearning with direct face-to-face learning.

Basically, Hybrid Learning chooses the most superior technique or method for the learning process. This term emerged when people became aware of the advantages and limitations of online learning based on digital technology (Setiawan et al., 2020). One of the prominent limitations is that digital technology will never be able to replace the presence of a teacher or instructor in the classroom. To overcome this, face-to-face learning with instructors is needed (Puspitorini et al., 2020). Teachers or instructors are prioritized to foster attitudes and behavior of students. Face-to-face interaction is applied to overcome the limitations of online learning (Andrade Nunes et al., 2021) Blended learning is a mixed learning model between online technology and face-to-face learning at a low cost, but an effective way to transmit knowledge in the global world (Wirani, 2020). (R. Wang et al., 2021) states that "Blended learning is defined as a mix of traditional face-to-face instruction and e-learning". New South Wales Department of Education and Training (2002) provides a simple definition: Blended learning is learning which combines online and face-to-face approaches. To date, there is no consensus on a single definition for blended learning. In addition, the terms "blended," "hybrid," and "mixed-mode" are used interchangeably in recent research literature (Faulinda & Aghni Rizqi Ni'mal, 2020). The preferred term at Penn State in the above learning is "blended". Basically, the use of the blended learning model is a new way of both teaching and learning in a higher education environment (Soenarto et al., 2021)

The three reasons for choosing the blended learning or Hybrid Learning model above are because (Oktavianto, 2021): (1) Contributing to the development and support of interactive strategies not only in face-to-face teaching, but also in distance education. Developing activities related to learning outcomes, namely focusing on student interaction, not just content distribution. In addition, it can offer more information available to students, better and faster feedback in richer communication between lecturers/tutors and students, (2) Learning is one of the key factors influencing the growth of the learning environment. Students can access materials anytime and anywhere. Furthermore, they can continue according to their abilities. As a consequence, learners must have high motivation, (3) Increased cost effectiveness especially applies to teachers who are Civil Servants (PNS) or Permanent Foundation Teachers (GTY) where people are permanently busy and almost never able to attend full-time face-to-face classes. However, the Blended Learning model allows them after completing their work, family and other social commitments to start learning (Krishnan et al., 2021) One of the most specific advantages of the blended learning model is the opportunity to immediately build a sense of community among students (Xu et al., 2021). In the Blended Learning model class, students generally meet in face-to-face learning, and then have the opportunity to communicate in an open dialogue, to experience critical debate, and basically participate in various forms of communication in a "safe" environment (Aulia et al., 2021). These opportunities can facilitate greater reflection on the content of the lecture material and broaden the student learning experience (Chua & Islam, 2021).

Online Learning. The online learning system is a learning system without direct face-to-face meetings between teachers and students but is carried out online using an internet network. Teachers must ensure that teaching and learning activities continue, even though students are at home. (Hoi et al., 2021). The Online Learning Learning Model is learning that is carried out online via an internet network or connection (Elshami et al., 2021), the Online learning model can be used to deliver learning without being limited by space and time, can use various sources that are already available on the internet, teaching materials are relatively easy

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to update and in addition to further increasing student independence in carrying out the learning process (Yunus et al., 2021). To provide an Online Learning learning model, teachers are required to be able to use internet technology that can make it easier for teachers to provide learning. Teachers must have the ability and skills to use media from laptops and the applications they use (Abou-Khalil et al., 2021). Teachers; Provide materials before and after learning in class; Provide student development independently, collaborate and monitor their projects to achieve general goals. Based on this opinion, the learning model with Online Learning and the technology used can help teachers and students use time and energy with effective learning. In this Online Learning Learning Model, students are required to be independent and creative in learning so that students' ability to utilize learning media from the internet and materials provided by teachers (Ziadat, 2021). E-Learning in a broad sense can include learning carried out on electronic media (Internet) both formally and informally. Formal E-Learning, for example, is learning with a curriculum, syllabus, subjects and tests that have been arranged and arranged according to a learning schedule (Poláková & Klímová, 2021). The outline of the discussion in this section explains the concept of Online learning including changes in learning patterns, the concept of the Online Learning learning model, the characteristics of the Online Learning learning model and finally also discusses the role of teachers in the Online Learning learning model (T. Wang et al., 2021). The Online Learning Learning Model was first known because of the influence of the development of electronic-based learning (E-learning) introduced by the University of Illinois through a computerbased learning system (Hardiyanto). Online Learning is a system that can facilitate students to learn more widely, more, and more variedly. Through the facilities provided by the system, students can learn anytime and anywhere without being limited by distance, space and time (Zuo et al., 2021).

The learning materials studied are more varied, not only in verbal form, but also more varied such as visual, audio, and motion. In general, the Online Learning learning model is very different from conventional learning. The Online Learning Learning Model emphasizes more on the accuracy and thoroughness of students in receiving and processing information presented online (Wasfy et al., 2021).

Have you ever participated in an online learning process? What is online learning? According to Bonk Curtis J. implicitly stated in the Online Training in an Online World Survey that the concept of Online learning is the same as ELearning. According to The Report of the Commission on Technology and Adult Learning (2001) in (El-Sayad et al., 2021). Defines E-Learning as "instructional content or learning experiences delivered or enabled by electronic technology". Therefore, Online Learning requires students and teachers to communicate interactively by utilizing information and communication technology, such as computer media with its internet, telephone or fax, The use of this media depends on the structure of the learning material and the types of communication required (Yu-Fong Chang et al., 2021). Conversation transcripts, examples of information, and written documents that link to Online Learning or learning via the Web that show full examples of text are typical ways that the importance of learning materials is documented online. More visual communications include whiteboard images, sometimes combined with conversation sessions, and video conferencing, which allows students who prefer to use different media to work with non-printed messages (Jogezai et al., 2021).

Online Learning can be formulated as "a large collection of computers in networks that are tied together so that many users can share their vast resources" (Tick & Beke, 2021).

The definition of Online Learning includes hardware aspects (infrastructure) in the form of a set of computers that are interconnected with each other and have the ability to send data, either in the form of text, messages, graphics, or sound (Yudiawan et al., 2021). With this capability, Online Learning can be interpreted as a computer network that is interconnected with other computer networks all over the world (Bolatov et al., 2021)

However, the definition of Online Learning is not only related to hardware, but also includes software in the form of data that is sent and stored, which can be accessed at any time. Several computers that are connected to each other can create a sharing function that can be simply referred to as a network (networking). The sharing function created through a network (networking) does not only include facilities that are very and often needed, such as printers or modems, or those related to certain data or application programs (Hendarwati et al., 2021).

Another advancement related to Online Learning as stated by (Perguna et al., 2021) is the large number of computer terminals around the world connected to Online Learning, so that many people use Online Learning every day (Karatat & Arpacı, 2021). Considering Online Learning as a method or means of communication that can provide great benefits for the interests of researchers, teachers, and students, teachers need to understand the characteristics or potential of Online Learning in order to be able to utilize it optimally for the benefit of their students' learning (Hira & Anderson, 2021). The advantage of Online Learning is that it is a fun medium, thus arousing students' interest in Online programs. Students who learn well will quickly understand computers or can quickly develop the necessary computer skills, by accessing the Web (Jumareng et al., 2021). Therefore, students can learn anywhere at any time Online Learning in Indonesia begins to be felt from the independent learning process through the tasks given (Pavan Kumar, 2021). Independent learning emphasizes learning through all sources that can support with minimal assistance from others. The development of Online Learning began to be evident when there was distance learning (Kizilcec et al., 2021). Through distance learning, the government can overcome the problem of equal education for all individuals. Through distance learning, the learning

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process is combined with E-Learning since then Online Learning has continued to develop in Indonesia. Online Learning in Indonesia is growing rapidly. Initially, Online Learning was still combined with Conventional learning to train students to be more independent (Rafique et al., 2021). Training independent learning for students in Indonesia is not an easy thing, because the previous learning system (traditional pattern) assumed that teachers were the main source of learning. After students are more independent, Online Learning can be carried out comprehensively (Al-Kumaim et al., 2021). In learning activities, motivation is needed to arouse students' enthusiasm for learning so that learning activities can run well. The definition of learning motivation is "The entire driving force within students that gives rise to learning activities, which ensures the continuity of learning activities and provides direction to learning activities, so that the goals desired by the learning subject can be achieved". Learning motivation is an internal and external drive in students who are learning to make behavioral changes, generally with several supporting indicators or elements (Taufiq et al., 2021).

Learning outcomes are the abilities that students have after receiving their learning experiences. Howard Kingsley divides three types of learning outcomes, namely skills and habits, knowledge and understanding, and attitudes and ideals (Kartika, 2021). Each type of learning outcome can be filled with materials that have been applied in the curriculum. Meanwhile, Gagne divides five categories of learning outcomes, namely verbal information, intellectual skills, cognitive strategies, attitudes, and motor skills.

In order for students to succeed in their learning, students need to pay attention to the principles of learning. Some of the principles of learning include the following: (1) Learning needs to have basic experience, (2) Learning must have a directed goal, (3) Learning requires a problematic situation, which will arouse learning motivation, (4) Learning must have determination and strong will and not give up easily, (5) Learning requires guidance, direction, and encouragement, (6) Learning requires practice, (7) Learning requires the right method, (8) Learning requires the right time and place (Susanto, 2021).

By understanding the concept of learning carefully and understanding the principles of learning, a teacher can plan and design a learning model that is in accordance with learning objectives and is adjusted to the character of the students being taught (Dwiantoro & Basuki, 2021). From this understanding, it can be concluded that learning achievement is an activity that has been carried out and gaining knowledge by fulfilling cognitive, psychomotor, and affective elements both individually and in groups in certain subjects.

II. METHOD

The research analysis design uses a 2 x 2 Factorial Design. With independent variables: Hybrid Learning learning model and moderator variables: Learning Motivation and dependent variables: student learning outcomes. Samples were taken using cluster sampling techniques where the Hybrid Learning model and Online learning treatments were applied to groups of students who had high learning motivation and groups of students who had low learning motivation experienced the same treatment.

Furthermore, the treatment instrument appears in the learning scenario which is divided into learning with the Hybrid Learning model and Online learning model. At the first meeting, students worked on the pre-test questions for learning motivation, the next meeting was the learning treatment and after that they were given a post-test for learning outcomes for the Competence of Taper Turning Techniques.

The research subjects were SMK PGRI 1 Gresik. In this study, the population taken was class XI students with a total of 120 respondents. The researcher determined each of the number of classes by making 2 groups representing each research variable. The number of samples is 2 classes/study groups in order to represent each research variable. With details of 1 class being an experimental group with the Hybrid Learning learning model and 1 other class being a control group with the Online Learning learning model.

The research variables The independent variable is the Hybrid Learning Model and the Online Learning Model, the moderator variable is learning motivation with the categories of High learning motivation and Low Learning Motivation and the dependent variable is the learning outcomes of Taper Turning Techniques.

Instruments and Data Collection Methods: To collect data on learning motivation, a learning motivation questionnaire instrument with a total of 20 questions was used to determine the group of students who have high learning motivation and the group of students who have low learning motivation. . The process of collecting data on learning motivation is carried out before the learning process is carried out, this is to sort class groups in the treatment of the experimental group and the control group. The results obtained from the results of the student learning motivation test will be used as a specific group that is included in the treatment of the experimental group and the treatment of the control group. Groups from each learning motivation have the same opportunity in the treatment of the experimental group and the control group. The learning motivation questionnaire instrument before being carried out and given to a group of students, the instrument will be tested with an instrument validity test and an instrument reliability test, to see whether this test tool has validity and consistency over a certain period of time. The learning outcome test instrument with the competency of Imitation Turning Technique was conducted twice in the learning process, namely pretest and posttest to measure student learning outcomes. The test was conducted before and after receiving treatment using both learning models. This research instrument, before being used in the study, was tested for validity and reliability. The instrument or data collection measuring tool is a tool chosen and used by researchers in their data collection activities so that the activity becomes systematic and facilitated by it.

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The data analysis technique used Two-Way ANOVA, which was used to answer hypotheses 1, 2, and 3. Before being analyzed using Two-Way ANOVA, the data was first tested for normality and homogeneity. Because in this study the number of samples was quite large, namely 120, the data analysis technique was not calculated manually but used the help of SPSS (Statistical Package For Social Science) for Windows version 25.0 or better known as SPSS 25.0. With the instrument that has been tested for validity and reliability, the instrument was then used by the researcher in this study. The research data were then processed statistically inferentially using the two-way Analysis of Variance (ANOVA) method. The significance level for this study was planned at 5% or a confidence level of 95%. Data processing was carried out using SPSS 25.0 for Windows software. Furthermore, the results of data processing with ANOVA were used as a basis for interpreting research results or drawing research conclusions.

II. RESULTS

Data Description

Data presentation will present data related to the research results, which are data from the calculation results. Furthermore, in this research report, the findings in the field will be explained when the researcher conducted the research activities. This research was conducted on grade XI students at SMK PGRI 1 Gresik, by taking a sample of 6 grade XI students with a total of 204 students. The questionnaire used to determine students' learning motivation. Before being tested for validity, the questionnaire that was distributed was tested using a validity test and a questionnaire reliability test on each respondent in the two classes where the research took place. Validity is a test tool to determine the accuracy of a measuring instrument (questionnaire), has the measuring instrument measured what is meant?, with high validity, the measuring instrument is said to have measured students' learning motivation. The results of the validity test using product moment correlation will be compared with r_{table} at a significance of $\alpha = 0.05$. The results of the instrument test show that at a significant level of 5%, a number of instruments used in this study obtained a correlation coefficient value greater than the r_{table} Product Moment value of 0.334 for $N = 60$. Thus, it can be said that the instrument in this study is valid or can measure the variables studied. The results of the instrument test show that at a significant level of 5%, a number of instruments used in this study obtained a correlation coefficient value greater than the r_{table} Product Moment value of 0.334 for $N = 60$. Thus, it can be said that the instrument in this study is valid or can measure the variables studied. Reliability is a tool used to determine the level of reliability of the measuring instrument used. The higher the reliability value or the data is reliable, the better (reliable) the measuring instrument used is for use in further research or different places (locations). The model used is the alpha formula. The results of the reliability test of the research data are as in the following table. The results of the reliability test in the table above show that the reliability coefficient value of the variables used, in the variables above is greater than the r_{table} value of 0.6, so the results of the respondents' answers can be relied on, in other words, if the same research is conducted at different times, the respondents will give the same answers.

DATA ANALYSIS

Prerequisite Test

Before conducting the 2-factor ANOVA test, to determine the interaction of the hybrid learning and online learning methods and learning motivation on the learning outcomes of Taper Turning Techniques of class XI students of SMK PGRI 1 Gresik, a prerequisite test was previously conducted, namely Normality and homogeneity. **a. Normality Test**

Basically, Normality can be calculated and detected in various ways. As for detecting Normality, it is done in various ways, namely: (1) By looking at the Skewness/Kurtosis ratio, (2) By using Graphs, and (3) By using the Kolmogorov-Smirnov test. In this study, to detect data Normality, the Kolmogorov-Smirnov test was used, with the following hypotheses: H_0 : data is normally distributed H_1 : data is not normally distributed The decision-making criteria are:

- Probability sig., $\alpha > 0.05$ then the data is normally distributed
- Probability sig., $\alpha < 0.05$ then the data is not normally distributed

The results of the Normality test calculations carried out are as follows.

Table 1. Experimental Class Normality Test One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual	
N		60	
Normal Parameters	a,b	Mean	.0000000
		Std. Deviation	4.07392239
Most Extreme Differences		Absolute	.198
		Positive	.130
		Negative	.198
Test Statistic			.198
Asymp. Sig. (2-tailed)			.000 ^o

a. test distribution is Normal
b. calculated from data

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c. Lilliefors Significance Correction

The Kolmogorov-Smirnov value for the data of Class XI students of SMK PGRI 1 Gresik was obtained a value of 0.198 with a significance probability of 0.000 and the value is above $\alpha = 0.05$, this means that the null hypothesis is accepted or the data of Class XI students of SMK PGRI 1 Gresik is normally distributed.

Table 2. Control Class Normality Test One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		60
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	3.79363604
Most Extreme Differences	Absolute	.228
	Positive	.109
	Negative	-.228
Test Statistic		.228
Asymp. Sig. (2-tailed)		.000 ⁰

a. test distribution is Normal
b. calculated from data

c. Lilliefors Significance Correction

After the learning process is carried out in each class, which is treated with a hybrid learning model and an online learning model. In addition, at the beginning before learning is carried out, students will be given a questionnaire whose function is to identify

The Kolmogorov-Smirnov value for the data of Class XI students of SMK PGRI 1 Gresik is 0.228 with a significance probability of 0.000 and the value is above $\alpha = 0.05$, this means that the null hypothesis is accepted or the data of Class XI students of SMK PGRI 1 Gresik is normally distributed. Based on the description, it can be explained that the Normality test carried out for Class XI students of SMK PGRI 1 Gresik is data that is normally distributed.

Hypothesis Testing

Student learning motivation. It can be explained that students with high motivation are students who have a need to improve learning outcomes, which are implemented by students as an action that prefers situations with full risk, can provide real results. In addition, high learning motivation is characterized by a high need for affiliation, implemented students will try hard to foster and create good friendships with each other and students prefer situations by maintaining conditions to control others, prefer to give advice and opinions to others, such conditions are shown in their learning activities and feelings of pleasure when the teacher teaches in class. On the other hand, low motivation in classes that implement hybrid learning models and online learning models is shown by students who do not like and are not interested in learning that is implemented either with the hybrid learning model or the online learning model, students tend to divert attention, students are less enthusiastic in the learning process. This explains that the learning motivation possessed by students is related to motivation from within themselves because of the desire to achieve learning goals, and motivation that arises due to the application of certain learning models.

The descriptive results of this experimental class are as follows.

Table 3. Results of Descriptive Research Tests

Descriptive Statistic

Dependent Variable: Learning outcomes

Learning model	Motivation to learn	Mean	Std. Deviation	N
HYBRID LEARNING	High	76.4151	4.31649	53
	Low	80.0000	.00000	7
	Total	76.8333	4.21525	60
ONLINE LEARNING	High	61.1887	2.12183	50
	Low	51.5714	2.69921	7
	Total	60.0667	3.79503	60
Total	High	68.8019	8.36480	106
	Low	65.7857	18.86441	14
	Total	68.4500	9.31778	120

Based on the table, it can be explained that the students involved in this study were 6 grade XI with a population of 204 to 120 in grade XI at SMK PGRI 1 Gresik, where in the implementation of this learning the sample was selected randomly. 60 students were

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given treatment using the Hybrid Learning learning model and 60 other students were given treatment using the online learning learning model. The table above explains that the hybrid learning model and the online learning model applied can improve the learning outcomes of the Taper Turning Technique, which is indicated by the final Taper Turning Technique learning outcomes obtained by students. For the experimental class in general there was a significant increase where at the beginning of learning it had an average of 70 while at the end of learning the learning outcomes of the Taper Turning Technique obtained were 82.57, Likewise, the control class that applied the online learning learning model also experienced a significant increase where at the beginning of learning it had an average of 74 while at the end of learning the learning outcomes of the Taper Turning Technique obtained were 78.71. And based on observations and calculation results, it is known that the hybrid learning model has more students who have high motivation and with better average grades, as well as the online learning model where students who have high learning motivation are also more when compared to students who have low motivation. And overall, students tend to have high motivation in the hybrid learning model and the online learning model. Based on the table above, it can be explained that in general differences occur between the application of the hybrid learning model or the application of the online learning model, both in students who have high motivation or students who have low motivation. Based on the results of this descriptive calculation, it can be explained that there is a difference in learning outcomes for Taper Turning Techniques between students who are taught using the hybrid learning model and those taught using the online learning model for students who are highly motivated and students who are low motivated, although to see whether the difference is significant or not significant, evidence is needed with statistical calculations. Based on the table above, it can be seen that the hybrid learning model with high learning motivation has greater learning outcomes when compared to the hybrid learning model for students with low learning motivation. Likewise, the online learning model with high learning motivation has greater learning outcomes compared to the online learning model with low learning motivation. In this case, the hybrid learning model has better learning outcomes compared to the online learning model. However, to ensure its significance, it was tested with a mean difference test or t-test, with the following results. Further details can be seen in the following table.

Table 4. Partial Regression Coefficient Test Results (TTest) Coefficients^a

Model		Unstandardised Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	1	Sig.
<u>1</u>	(Constant)	96.968	1.676		57.840	<u>.000</u>
	<u>Model Pembelajaran</u>	-16.767	.713	-9.903	-23.508	.000
	<u>Motivasi Belajar</u>	-3.016	1.111	-.104	-2.715	.008

a. Dependent Variable: Learning outcomes

Based on table 4 above, the Tcount value of each variable can be seen. (1) The effect of the hybrid learning model on Learning Outcomes Based on the table, the Tcount value can be obtained as -0.23.508 with a Sig value of 0.000. This shows that the Tcount value is smaller than the Ttable value of 1.986 and the Sig value is smaller than 0.05. Thus, H₀ is accepted and H_a is rejected. This means that the hybrid learning model variable has a significant effect on student Learning Outcomes in the Taper Turning Technique competency, (2) The Effect of Learning Motivation on Learning Outcomes Based on the table, the Tcount value can be obtained as -02.715 with a Sig value of 0.008. This shows that the Tcount value is greater than the Ttable value of 1.986 and the Sig value is smaller than 0.05. Thus, H₀ is rejected and H_a is accepted. This means that the Learning Motivation variable has a significant effect on student Learning Outcomes in the Taper Turning Technique competency. Regarding the 2-factor variance analysis conducted, it can be seen in the following table.

Table 5. Results of the 2-Factor Variance Analysis Test

Test of Between-Subjects Effect					
Dependent Variable: Learning outcomes					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	9085.005 ^a	3	3028.335	281.774	.000
Intercept	224007.003	1	224007.003	20843.008	.000

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MODEL	5891.968	1	5891.968	548.224	.000
MOTIVATION	112.503	1	112.503	10.468	.002
MODEL*MOTIVATION	538.868	1	538.868	50.140	.000
Error	1246.695	116	10.747		
Total	572580.000	120			
Corrected Total	10331.700	119			

a. R Squared =.879 (Adjusied R Squared=.876)

Based on the table above, it can be explained regarding the hybrid learning model and the online learning model, and achievement motivation and the interaction between the application of the hybrid learning model and the online learning model and motivation with the following results.

1. The application of the hybrid learning model and the online learning model with a significance value smaller than $\alpha < 0.05$, namely 0.000, so it can be explained that there is a difference in the learning outcomes of the Taper Turning Technique of class XI students between those who were treated using the online learning model and the hybrid learning model at SMK PGRI 1 Gresik.
2. Student Learning Motivation with a significance value smaller than $\alpha < 0.05$, namely 0.002, meaning that there is a difference in the learning outcomes of the Taper Turning Technique of class XI students between those who have high learning motivation and those who have low learning motivation at SMK PGRI 1 Gresik.
3. The interaction of learning models with a significance value smaller than $\alpha < 0.05$, which is 0.000, so there is an interaction of learning models and learning motivation on the learning outcomes of Taper Turning Techniques of class XI students of SMK PGRI 1 Gresik.

Based on the results of the study and calculations carried out using the 2-factor variance analysis, it can be explained that in general, this is related to the hypotheses that have been given previously. Based on this calculation, it can be explained that all hypotheses can be accepted based on calculations using two-way variance analysis. In detail, regarding the hypotheses that have been proposed, it can be explained that in this study there is a difference in the learning outcomes of Taper Turning Techniques caused by the use of the hybrid learning model and the online learning model in students with high learning motivation and low learning motivation, so that there is an interaction between the use of the learning model applied to the learning outcomes of Taper Turning Techniques. Where in this study, the use of the hybrid learning model is more able to improve students' learning outcomes of Taper Turning Techniques compared to the use of the online learning model. In addition, students with high learning motivation also have better learning outcomes of Taper Turning Techniques compared to students with low learning motivation.

III. DISCUSSION

Differences between Hybrid Learning and Online Learning models

At the beginning of the learning outcomes of the Taper Turning Technique learning of class XI students, namely the Experimental Class and the Control Class, the Taper Turning Technique learning outcomes can be said to be the same, indicated by the Taper Turning Technique learning outcome scores or test scores that are not much different, namely around 74. This means that these two samples meet the criteria as research samples which have homogeneity so that the results of the application of the hybrid learning model and the online learning model can be used as a comparison for students' Taper Turning Technique learning outcomes. After the application of the hybrid learning model and the online learning model in each class according to the research stages, the results of the increase in students' Taper Turning Technique learning outcomes were obtained through the application of the learning model. This is indicated by the results of descriptive calculations from each application of the learning model applied both before and after the application of this learning model, where the results showed that the class taught using the hybrid learning model had better Taper Turning Technique learning outcomes compared to the class taught using the online learning model. In general, the application of the hybrid learning model and the online learning model can provide an overview of students' learning motivation to learn and improve their learning outcomes for Taper Turning Techniques. The increase in students' learning outcomes for Taper Turning Techniques can be said to be significant because it is proven by the t-test with a significance value below 0.05, so that the difference in learning outcomes for Taper Turning Techniques obtained by students in the two classes is significant (the difference cannot be ignored). Based on the calculation, the F count for the learning model application factor obtained the F count result is greater than F table, meaning that the use of the learning model applied in the class in this study has a difference, between the class that was given treatment using the hybrid learning model and the online learning model. The results of this calculation indicate that the proposed hypothesis can be accepted, namely that there is a difference in the learning outcomes for Taper Turning Techniques of class XI students between those using the online learning model and the hybrid learning model at SMK PGRI 1 Gresik. In general,

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the hybrid learning model obtains better learning outcomes for Taper Turning Techniques where its application has been able to run well. In addition, there is activeness and involvement and students' way of thinking about the subject matter so that they can improve their learning outcomes. In other words, the main targets of the hybrid learning model activities are achieved, namely (1) maximum student involvement in the learning process, (2) logical and systematic direction of activities on learning objectives, (3) developing an attitude of self-confidence in students about what is found in the learning process with the hybrid learning model (Chu et al., 2022; Engel & Coll, 2022; Rachmawati et al., 2022). In addition, based on the stages of the hybrid learning model activities that have been implemented, it can be explained that in the implementation of the hybrid learning model, students tend to think and be actively involved, learning activities begin by confronting students with stimulating problems (Ng et al., 2022; Sheik Abdullah et al., 2021; Yaşar Kazu & Yalçın, 2022). The syntax or flow of activities of the hybrid learning model can be arranged as follows:

The first stage: Facing stimulus (planned or unplanned), in this stage of course provides problems related to the material of writing poetry, until students understand poetry, how to write poetry, interpret poetry and so on.

The second stage: Exploring reactions to stimulating situations. After the stimulus or stimulation planned by the teacher, students generally respond to what is given. Students with high achievement motivation will generally respond quickly and actively in this activity.

The third stage: Formulating the tasks studied and organizing the class (formulating problems, class assignments, roles, and so on)

The fourth stage: Learning to solve problems independently or in groups. In this activity, students will carry out the tasks given by the teacher, so that indirectly it spurs and encourages students to excel.

The fifth stage: Analyzing the process and progress of learning activities. This is done by the teacher to find out the progress that has occurred, so that later a conclusion will emerge regarding the teaching and learning process that is being carried out.

Sixth stage: Evaluation and follow-up, the final stage to find out and evaluate the teaching and learning process until the conclusion of the teaching and learning process that has been carried out is determined whether it is right or not, whether it is continued or replaced, and so on.

Different from the online learning model that is implemented, although in general students are also enthusiastic in this learning. However, the thing that is less controllable by teachers is the habit of students outside the classroom is playing so that students who tend to use this learning model to just walk around so that the learning objectives that should be good become less focused on the material being discussed.

Differences in Student Learning Outcomes with Learning Motivation

In a study conducted regarding student learning motivation, it was found that the differences in learning outcomes of Taper Turning Techniques of class XI students at SMK PGRI 1 Gresik were divided into two groups, between those with high learning motivation and those with low learning motivation. In the application of the hybrid learning model, it is dominated by students with high learning motivation, this high student achievement motivation can be seen from their learning activities where students have a desire to improve their learning outcomes of Taper Turning Techniques and are actively involved in learning, such as asking questions, discussing, preparing materials before lessons, completing assignments given by teachers and learning not only when there will be a test. Likewise, in the online learning model, it is also dominated by students who have high learning motivation (Dian Anggreni et al., 2019; Misnah, 2019; Nurwahid, 2021). However, from the level of learning motivation possessed by students, it can be explained that students with high learning motivation have higher or better learning outcomes compared to students with low learning motivation. In addition, teachers try to increase students' learning motivation through several actions, including: (1) Competition, by creating positive competition between students so that students compete to improve their learning achievements, (2) making clear goals. Motives encourage individuals to achieve goals. The clearer the goal, the greater the value of the goal for the individual concerned and the greater the motivation to do an act, (3) building great interest, this can be done with simple things so that students are interested in learning the material being studied, and (4) conducting assessments or tests, this will encourage students to learn and prepare themselves so that they can increase their achievement motivation (Hastiyaningsih, 2018; Kurniadi et al., 2020; Riyadi, 2020). Based on the calculation of the 2-factor variance analysis, a higher learning motivation value was obtained F_{table} , meaning that there is a difference in the learning outcomes of Taper Turning Techniques for class XI students between those with high learning motivation and those with low learning motivation at SMK PGRI 1 Gresik. Basically, the motivation possessed by students has many benefits for student learning outcomes, which will be useful for:

- Encouraging students to do or act. Functioning as a driver or with a motor that gives students the strength to carry out learning activities, in this case the use of the hybrid learning model and the online learning model.
- Determining the direction of action. The realization of the direction of action, goals, prevents deviations from the path that must be taken to achieve that goal. This provides focus for students to carry out learning actions as directed by the teacher.
- Selecting actions. This means that students take the necessary actions related to learning implemented by the teacher. such as conducting discussions, experiments and so on (Gunawan1 et al., 2022).

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And according to Fitriati et al., (2021); Utami et al., (2019); Yanti et al., (2021) stated that this motivation is basically influenced by various factors, namely:

- a. The level of students' self-awareness of the needs that drive their behavior/actions and awareness of the learning goals they want to achieve
- b. Teachers' attitudes towards the class; teachers who are wise and always stimulate students to act towards a clear and meaningful goal for the class will foster intrinsic traits, but if the teacher focuses more on one-sided stimuli, extrinsic traits become dominant.
- c. The influence of student groups. If the influence of the group is too strong, the motivation tends to be more extrinsic.
- d. The classroom atmosphere also influences the emergence of certain traits in students' learning motivation. An atmosphere of responsible freedom certainly stimulates the emergence of intrinsic motivation more than an atmosphere full of pressure and coercion.

Based on the description above, it can be explained that the second hypothesis can be accepted, meaning that there is a difference in the learning outcomes of Taper Turning Techniques of class XI students between those who have high learning motivation and those who have low learning motivation at SMK PGRI 1 Gresik.

Interaction of Learning Models and Motivation on Learning Outcomes

Based on the analysis of variance of 2 factors, the calculated value is $> F_{table}$, with a significance level of less than 0.05 (5%) so that it can be explained that there is an interaction between the learning model and learning motivation on the learning outcomes of the Taper Turning Technique of class XI students of SMK PGRI1 Gresik. Based on the results of the study, it can be explained that there is an increase in learning outcomes in each use of the learning model, both by using the hybrid learning model and by using the online learning model. Students who are taught using the hybrid learning model have better learning outcomes than students who are taught using the online learning model. In addition, high achievement motivation is also shown to be mostly owned by students who are taught using the hybrid learning model. While in the online learning model, students who have high learning motivation and low learning motivation are dominated by students with high learning motivation. Basically, the increase in learning outcomes that occurs in each learning model cannot be separated from the advantages of the learning model itself as expressed by (Delavar, 2022; Hidayati et al., 2022) the hybrid learning model is a learning model that is widely recommended, because this model has several advantages, including.

- a. It is a learning model that emphasizes the development of cognitive, affective, and psychomotor aspects in a balanced manner, so that learning through this model is considered more meaningful.
- b. Provides space for students to learn according to their learning style.
- c. It is a model that is considered in accordance with the development of modern learning psychology which considers learning to be a process of changing behavior thanks to experience.
- d. Another advantage is that this learning model can serve the needs of students who have abilities that have above average abilities. This means that students who have good learning abilities will not be hampered by students who are weak in learning.
- e. Does not make teachers the only source of learning, because students learn by utilizing various types of learning resources.

Based on these advantages, in implementing the learning model using the hybrid learning method, students are free to have the opportunity to learn correctly according to existing provisions even though they are expressed freely. Thus, it is expected to be able to bring out higher student creativity and students' abilities in learning outcomes will increase (Andayani et al., 2020; Irawan & Fadly, 2020; Setiawan et al., 2020). Based on the description above, it can be explained that the third hypothesis can be accepted, namely There is an interaction between the learning model and achievement motivation on the learning outcomes of Taper Turning Techniques for class XI students of SMK PGRI 1 Gresik.

IV. CONCLUSIONS

From the results of the experimental tests that have been carried out, it can be concluded that learning using hybrid learning results in better student learning outcomes compared to learning outcomes of students who use online learning. Furthermore, the learning outcomes of students who have high motivation are also higher than students who have low motivation, and there is an interaction between the use of learning models and learning motivation towards improving learning outcomes at SMK PGRI 1 Gresik, especially in class XI in the Taper Turning Technique subject.

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