Vocational College Students' Learning Efficiency on The Use of Computer English MOOC in Hybrid Learning

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ABSTRACT

With the improvement of educational technology modernization, the promoting effect of network technology on education has been widely concerned by educational circles Massive Open Online Courses (MOOCs) have emerged as a popular platform for learners to access and utilize educational resources. This paper aims to investigate the relationship between various aspects of hybrid learning in the Computer English MOOC platform, including students' learning objectives, methods, concentration, collaborative skills, teacher supervision, and learning efficiency. The research utilizes a quantitative approach to analyze data obtained from 168 vocational college students majoring in computer-related subjects. During the Covid-19 pandemic, it was not always possible for students to go to school in person, but when it came to learning Computer English, they had clear goals. Students were able to get complete and organized information through hybrid learning. And there is a strong relationship between learning cooperation and learning proficiency via hybrid learning. Learning cooperation has the most significant influence on learning proficiency. This study lies in its potential to bridge the knowledge gap regarding the specific factors that impact English language acquisition in the vocational college setting. This research seeks to provide valuable insights and recommendations to inform pedagogical practices, curriculum development, and institutional policies in higher vocational colleges in China.

Keywords: Educational technology, MOOC (Massive Open Online Course), hybrid learning, learning efficiency

INTRODUCTION

Research background

With the improvement of educational technology modernization, the promoting effect of network technology on education has been widely concerned by educational circles(Khoshsima & Shokri, 2016). Digital informatization has appeared in people's vision. "Using technology to support learning" has gradually become the mainstream of the combination of technology and teaching at home and abroad(Chowdhury, 2020). At the same time, education technology is undergoing an open reform.

Several online platforms are used to implement e-learning in higher education. Online learning has been referred to by a variety of names over the years, such as computer-associated learning, web-based training, e-learning systems, and learning management systems(Bahsh & Daoud, 2016). MOOCs（Massive Open Online Courses）are a good option to help learners enhance English language listening, speaking, reading, writing, and translating skills. The courses gathered by the Internet

Educational Institutions are a special way to participate in real classes which are taught by real professors, but learners do not have to go to the university in person.

MOOC is a part of hybrid learning. Hybrid learning has become a very important research area in the field of educational technology in the world because it can integrate classroom teaching and online learning(Joksimović et al., 2018)(Zhu et al., 2020). Students have the opportunity to learn whenever and wherever they want thanks to online-based mobile learning(Akhras, 2012). Especially for language learners, language learning is about learning anytime and anywhere, teachers could provide more learning materials on the MOOC platform for senior vocational college students. This is anticipated to make a number of contributions to understanding the factors that influence students' learning proficiency to use MOOCs even after switching back to the face-to-face learning method.

Problem statement

For students of computer-related majors, English includes College English and Computer English. The learning purpose of Computer English is to teach students to master the frequently used professional vocabulary and expression methods in their professional field, and then master some methods of fast and accurate reading and understanding professional literature, improve their international communication ability, and understand the latest cutting-edge trends in this research field, so as to lay a solid professional foundation for future work or further study. Therefore, Computer English is a compulsory course for computer-related majors, which is worth investigating the learning efficiency to promote students to complete the transition from English learning to practical application.

Nowadays, college students can now learn College English and ESP with computers and mobile devices, especially MOOCs with language learning software, online chatting tools, multimedia glossaries, and games, which provide opportunities for students to learn anytime and anywhere. Teachers can provide more learning materials on this platform. However, are these new educational technologies suitable for hybrid learning? What are the factors affecting ESP English Teaching and learning while they are using MOOCs to study Computer English? There is a lack of deep understanding of this new educational technology for teachers and students, and both of them need a long time to adapt.

Research gap

In recent years, not only the research on the MOOC platform is a research hotspot, but also the research related to technology acceptance of learning proficiency. The research perspectives of most researchers are to build a new teaching model, and there is less research on the factors of acceptance and adoption on new technologies. Although MOOC is developing very fast at present, in actual use, researchers pay more attention to the presentation and transmission of learning content (Bralić & Divjak, 2018). Most researchers focus on how to make and use MOOCs, making teaching more convenient and easier(Zhang et al., 2021). However, it is rarely mentioned in the research whether the learners' learning efficiency of MOOC and whether the learners evaluate MOOC during hybrid learning.

Research Objectives

This paper aims to investigate the relationship between various aspects of hybrid learning in the Computer English MOOC platform, including students' learning objectives, methods, concentration, collaborative skills, teaching supervision, and learning efficiency.

RO: To investigate the relationship among students' English language learning objectives, learning methods, concentration, collaborative skills, teacher supervision, and learning efficiency via Computer English MOOCs in hybrid learning.

Research Questions

RQ1: Is there a significant relationship between students' learning objectives and learning efficiency for learning English using Computer English MOOC in hybrid learning?

RQ2: Is there a significant relationship between students' learning methods and learning

efficiency for learning English using Computer English MOOC in hybrid learning?

RQ3: Is there a significant relationship between students' learning concentration and learning efficiency for learning English using Computer English MOOC in hybrid learning??

RQ4: Is there a significant relationship between students' collaborative skills and learning efficiency for learning English using Computer English MOOC in hybrid learning?

RQ5: Is there a significant relationship between teacher supervision and learning efficiency for learning English using Computer English MOOC in hybrid learning?

Research Hypothesis

H1: There is a significant relationship between students' learning objectives and learning efficiency for learning English using Computer English MOOC in hybrid learning.

H2: There is a significant relationship between students' learning methods and learning efficiency for learning English using Computer English MOOC in hybrid learning.

H3: There is a significant relationship between students' learning concentration and learning efficiency for learning English using Computer English MOOC in hybrid learning.

H4: There is a significant relationship between students' collaborative skills and learning efficiency for learning English using Computer English MOOC in hybrid learning.

H5: There is a significant relationship between teacher supervision and learning efficiency for learning English using Computer English MOOC in hybrid learning.

Significance of this Study

The results of the study will be beneficial to Chinese vocational college students, higher education English instructors, China's higher educational institutions, educational technology designers, and China as a whole. Technology incorporation for English teaching and learning has been one of the trends to encourage the restructuring of College English Education in China. It is important to identify factors that consider the use and efficacy of technology in Chinese college students' learning of English. By delving into the realm of hybrid learning within the Computer English Massive Open Online Course (MOOC) platform, this investigation will comprehensively explore various dimensions, encompassing students' learning objectives, methodologies, levels of focus, collaborative skills, teachers' competencies, and overall learning efficiency.

LITERATURE REVIEW

Hybrid Learning

Hybrid learning mixes in-person and online instruction into a single seamless experience. Students participate in online learning for the other half of the class sessions, which are split roughly in half. Although it may seem like a simple formula, careful planning is required to make sure that the hybrid functions properly and enables its two formats to benefit from one other's advantages. Educational reformers generally believe that hybrid learning has three main components. Combining both in-person and online learning, combining technologies, and combining techniques are the three descriptions or definitions of hybrid learning(Creative Commmons Attribution 4.0 Technologies, n.d.).

Hybrid learning in a single semester may emphasize classroom time in the beginning, and then gradually increase students' workload in e-learning or autonomous learning. For example, many people believe that if participants communicate face-to-face first, the classroom discussion board will be more efficient. In this study, in order to make efficient, resourceful, clear, understandable, and attractive teaching materials, researchers preplanned the course design carefully, make the prerecorded videos, and uploaded them to *Zhi Hui Zhi Jiao* Learning Platform. Students can watch the videos before coming to the classroom, think before coming to the classroom, and see whether they got questions to ask for teachers' help. In that case, teachers are not only to teach but also guide and problem solvers.

MOOC in Hybrid Learning

Online learning is becoming a crucial component of education, giving both students and teachers access to more adaptable, affordable, and convenient methods of instruction. Since it can reach more students with greater convenience and at a lower cost, online learning has become a staple of most levels of education, despite the fact that it has been appeared around human beings since the 1990s.

The first massive open online course (MOOC) of its sort was introduced in September 2008 (University of Manitoba, 2008). For an online course provided by the University of Manitoba, Dave Cormier of the University of Prince Edward Island, Canada, created the acronym MOOC. The public could access video lectures, texts, and online discussion forums for free as part of the Connectivism and Connective Knowledge course created by Manitoba professors George Siemens and Stephen Downes. However, MOOCs did not really catch the attention of academics and educators throughout the world until 2011, when the Massachusetts Institute of Technology, Boston (MIT), released the largest collection of free open courseware in the world. It was essentially a tiny credit-bearing course for 24 students, with about 2200 registered participants on an open-access network, of which about 150 were actively engaged at different periods(Mackness et al., 2010).

MOOCs are a continuous and further development in distance education. Massive Open Online Courses (MOOCs) are free online courses that are available and affordable for anyone to learn. MOOCs provide an accessible and flexible path to get new skills, increasing learners' knowledge and work career, and transforming quality educational experiences in the target fields. Hundreds of people around the world use MOOCs to learn for all kinds of reasons, including job expectations, changing careers, degree preparations, complimentary learning, corporate e-Learning & training, lifelong learning, and more(Bralić & Divjak, 2018).

Asynchronous and Synchronous online English courses

Online courses can be divided into two categories: synchronous and asynchronous. Synchronous learning takes place in the present and can be done online or face-to-face (f2f). On a predetermined class schedule, both instructors and students log in simultaneously. In a synchronous setting, instructors may take attendance (whether virtually or in person), and there is live contact between students and teachers. Learning can take place in the same physical setting, such as a lecture hall, or online. The usage of web conferences, teleconferences, live chat, and lectures that must be watched in real-time while being streamed online by instructors is permitted.

MOOC is a kind of asynchronous course. An asynchronous course is that it is available to learners at any time. Students do not need to get lessons at a fixed time or date. The English learning materials can be provided at one time or on-site. Learners can look for the content when they have free time and complete any optional assignments. Learners may not care about who is providing the material. These courses are often pre-recorded by a group of people, videos are recorded in advance. Professors prepared lecture notes for their lessons. While learners have enrolled in the course to study on their own time, they personally need to remember the deadlines for some assignments. That is why it is important to be organized when taking asynchronous courses.

Conceptual Framework

Figure 1 Conceptual Framework of this study
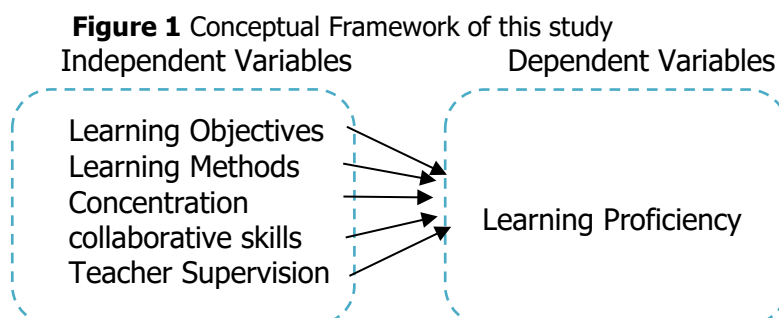
The goal of this article is to examine the connections between several components of hybrid learning in the Computer English MOOC platform, such as students' learning objectives, methods, concentration, collaborative skills, teacher supervision, and learning efficiency.

METHODS AND SAMPLING

Research Design

To answer the research questions, test the study's hypotheses, and give a plan for the gathering and analysis of descriptive data, quantitative procedures are the most effective. Quantitative research findings are also valid, accurate, and trustworthy for extrapolating to a wide population. An online questionnaire was used as the method of choice for quantitative study. Correlational analyze investigate whether there is a link between the independent and dependent variables, including Person's Correlational analyze, linear regression.

Population and Sample

The population for this study is vocational college students at a vocational college, aged between 19 to 23 years old. The MOOC learning community is the study's target population. 168 vocational college students majoring in computer-related subjects answered the questionnaire.

Instrument

An online survey that was given to a sample of Vocational College students served as the primary method of data gathering for this study. The open-access questionnaire used in this study was developed from one that can be found at https://www.wjx.cn/report/2154194.aspx.. Six fundamental constructs which are learning objectives, learning methods, concentration, collaborative learning, teacher supervision, and learning proficiency were covered by the survey instrument. The survey consisted of 42 questions in total to gauge these constructs. Each item was rated on a 5-point Likert scale, with 1 represent "strongly disagree" and 5 denoting "strongly agree." This scale was chosen because it is a reliable method of documenting user responses, is simple to use, and enhances the precision of data analysis.

Factor Analysis

A strategy for condensing a large amount of data into a more manageable and intelligible data set is factor analysis. It is a method for locating elusive patterns, highlighting their overlaps, and highlighting the traits that numerous patterns have in common. Additionally, it is used to create a dimension, or set of variables, for the related objects in the set. Table 1 showed the out loading of factor analysis of this study.

Table 1 Out loading of Factor analysis

	Objective	Collaboration	Concentration	Method	Observation
LO1	0.937				
LO2	0.888				
LO3	0.729				
M1				0.852	
M2				0.728	
M3				0.961	
M4				0.870	
M5				0.916	
M6				0.905	
M7				0.963	
M8				0.917	
M9				0.889	

LC1		0.940	
LC2		0.876	
LC3		0.880	
LC4		0.735	
LC5		0.807	
LC6		0.921	
LC7		0.820	
LC8		0.884	
C1	0.932		
C2	0.922		
C3	0.878		
C4	0.855		
C5	0.898		
TO1			0.919
TO2			0.937
TO3			0.869
TO4			0.769
TO5			0.895
TO6			0.878

The validity and reliability

It is crucial to confirm the reliability and validity of the data from various sources prior to analysis. Finding out how stable the study's questionnaire is was the goal of reliability analysis. A higher coefficient value means the thing is more stable and closer to 1, while a lower coefficient value means the thing is less stable and closer to 0. The reliability analysis looks at how consistent the measurement scale is. In this piece, Cronbach's alpha values, which are written as, are used to measure reliability. Table 3.2 shows that the general reliability of the scale, as measured by SPSS (V25), ranges from satisfactory to good, which is a good sign for scale reliability. The reliability of learning objective is .665, which has 3 items and that is acceptable. The reliabilities of learning methods, concentration, collaborative skills, teaching observation are all above 0.8 , which shows the reliability of this test or scale is very good.

Table 2 Reliability Statistics

Construct	Cronbach's Alpha	Cronbach's Alpha Based on Standardized items	N of items
Learning objectives	.665	.668	3
Learning methods	.927	.927	9
Concentration	.940	.940	8
Collaborative skills	.916	.916	5
Teaching observation	.939	.939	6

Validity analysis is a critical evaluation of how accurate and useful the research tool is. It does this by looking at how well the data collected matches the real event being studied. Table 3 shows the KMO value of this study. If this value is higher than 0.8, it indicates high validity; If this value is between 0.6 and 0.7, it indicates acceptable validity.

Table 3 KMO and Bartlett test

Construct	Kaiser-Meyer-Olkin Measure of Sampling-Adequacy	Bartlett's Test of Sphericity		
		Approx. Chi-Square	df	Sig
Learning objectives	.636	78.956	3	.000
Learning methods	.910	1021.641	36	.000
Concentration	.917	1049.614	28	.000
collaborative skills	.869	589.577	10	.000
Teacher supervision	.897	889.666	15	.000

DATA ANALYSIS

This section presents the analysis and findings derived from the quantitative data collected through the administered questionnaire. The analysis of the quantitative data was conducted using SPSS (Version 25). The data gathered from the online questionnaire were analyzed by calculating the frequency of students' common responses and presenting them in the form of percentages. Furthermore, the participants' responds from question 1 to question 42 were collected using the 5 Likert scale and is reported in the descriptive statistics, providing insights into the learning behavior of students when utilizing the Computer English MOOC.

Demographics
In order to determine the frequency and percentages of the demographic information provided by the participants, descriptive statistics were used. Demographic information was classed as categorical data (e.g., numerical such as grade, gender, and major). Table 4 shows 62.5% computer-related major students were male students. Grade 2 students were the main sample of the study, 83.9%(n=168) students were grade 2 students. 94% students' major were related to science.

Table 4 Frequency distribution of personal information

			Frequency	Percent	Valid Percent	Cumulative Percent
Gender	Valid	Male	105	62.5	62.5	62.5
		Female	63	37.5	37.5	100.0
		Total	168	100.0	100.0	
Grade	Valid	Grade2	141	83.9	83.9	83.9
		Grade3	27	16.1	16.1	100.0
		Total	168	100.0	100.0	
Major	Valid	Humanities	10	6.0	6.0	6.0
		Science	158	94	94	100.0
		Total	168	100.0	100.0	

Data cleaning
Data cleaning is the procedure of editing, fixing, and organizing data inside a data set to make it more uniform and ready for analysis is known as. For the best analysis, this entails eliminating incorrect or unnecessary data and formatting it in a manner that computers can understand. A common adage in data analysis is "Garbage in, garbage out," which suggests that if people start with faulty data (trash), they will only receive "garbage" outcomes. In this study, there are 168 participants in the sample, there are no missing data in the dataset, but there are outliers in the dataset. Therefore, data cleaning process is important for further data analyze.

Simple correlation between the dependent and independent variables
The Pearson correlation coefficient (r), also known as Pearson's r, Bivariate correlation, Pearson product-moment correlation coefficient (PPMCC), and the correlation coefficient, is the most commonly used correlation coefficient. A descriptive statistic, such as the Pearson correlation

coefficient, summarizes the features of a dataset. The degree and direction of the linear relationship between two quantitative variables are specifically described. Table 5 below provides general guidelines, while the meanings of link strength—also known as impact size—vary between disciplines. If the Pearson correlation coefficient value is greater than 0.5, it indicates that there is strong and positive relationship between two quantitative variables. Table 6 and Figure 2 shows the results of correlation indicate that all the independent variables have a positive strong relationship with the student's learning proficiency of learning Computer English MOOC via hybrid learning. Learning objective(r=.513), learning method(r=.685), learning concentration(r=.804), learning cooperation(r=.849), and teacher's supervision(r=.759) showed a positive strong relationship with student's learning proficiency.

Table 5 Pearson correlation coefficient criteria

Pearson correlation coefficient (r) value	Strength	Direction
Greater than .5	Strong	Positive
Between .3 and .5	Moderate	Positive
Between 0 and .3	Weak	Positive
0	None	None
Between 0 and -.3	Weak	Negative
Between -.3 and -.5	Moderate	Negative
Less than -.5	Strong	Negative

Table 6 Pearson correlation coefficient

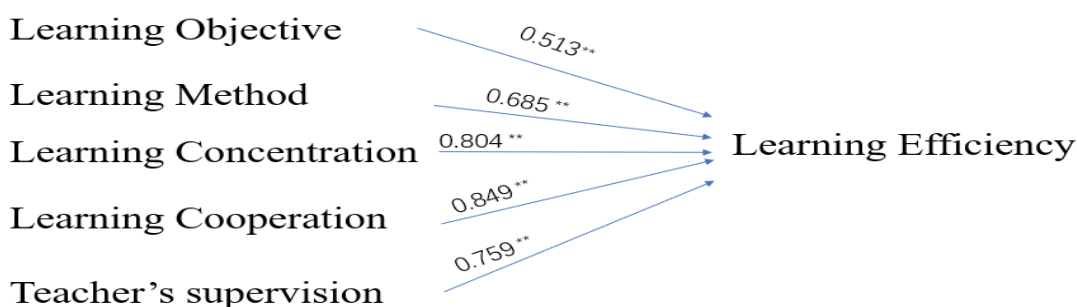|	Learning objectives	Learning methods	Concentration	Collaborate Learning	Teacher supervision	Learning proficiency
Learning objectives	1					
Learning methods	.584**	1				
Concentration	.512**	.802**	1			
collaborative skills	.413**	.617**	.746**	1		
Teacher Supervision	.492**	.715**	.766**	.722**	1	
Learning proficiency	.513**	.685**	.804**	.849**	.759**	1
**. Correlation is significant at the 0.01 level (2-tailed).						

Figure 2 Pearson correlation coefficient

Linear Regression analysis
A statistical technique that demonstrates the link between two or more variables is regression analysis. The approach examines the relationship between a dependent variable and independent variables, typically represented in a graph. Regression analysis seeks to determine which variables account for the greatest change in the independent variable(s) when the dependent variable(s) changes. Table 7 shows the fit of this regression is good, R^2=0.803(>0.6). R^2 indicates the size of the

model's fitting ability, 0.803 indicates that the independent variables has 80.3% explanatory power for the dependent variable. This value is between 0 and 1, the larger the better. Table 8 shows the P value. If P<0.01, the difference is extremely significant. Table 9 shows which constructs are significant influence learning proficiency and each predictors' coefficients of this study.

Table 7 Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
					Change Statistics					
1	.896[a]	0.803	0.797	0.30654	0.803	131.931	5	162	0.000	1.775

a. Predictors: (Constant), Teacher's supervision, Learning Objective, Learning Cooperation, Learning Method, Learning Concentration

b. Dependent Variable: Learning Efficiency

Table 8 ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	61.984	5	12.397	131.931	.000[b]
	Residual	15.222	162	0.094		
	Total	77.206	167			

a. Dependent Variable: Learning Efficiency

b. Predictors: (Constant), Teacher's supervision, Learning Objective, collaborative skills, Learning Method, Learning Concentration

Table 9 Coefficients[a]

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics Tolerance	VIF
1	(Constant)	-0.158	0.167		-0.945	0.346		
	Learning Objective	0.123	0.055	0.097	2.243	0.026	0.647	1.546
	Learning Method	-0.002	0.072	-0.001	-0.023	0.982	0.300	3.334
	Learning Concentration	0.265	0.070	0.271	3.786	0.000	0.238	4.206
	collaborative skills	0.519	0.057	0.510	9.092	0.000	0.388	2.580
	Teacher's supervision	0.139	0.061	0.136	2.258	0.025	0.334	2.995

a. Dependent Variable: Learning Efficiency

RESULTS & DISCUSSION

A thorough study of the reported questionnaire variables was done to figure out how people used the Computer English MOOC to learn. This was done to get a better idea of how people learned when they used the course. From the table 7, table 8, table 9, the following results can be shown. The fit of this regression is good, R^2=0.803(>0.6), this means that the results of this statistics can accurately and reliably reflect the impact of the independent variable on the dependent variable. The five independent variables do not have multicollinearity, VIF<5. Regression equation is significant, P=.000, P<0.001, means that at least one of the five independent variables can significantly affect the dependent variable. Learning concentration(β=0.265>0, P<0.05), learning cooperation(β=0.519>0,P<0.05), Teacher's supervision (β=0.139>0,P<0.05), Learning objective

(β=0.123>0,P<0.05) can positively significantly impact learning proficiency. Learning method (β=-0.002<0, P>0.05) cannot negatively significantly impact learning proficiency. Finally, the following regression equation is derived between the variables. Learning proficiency=-0.158+0.265*learning concentration+0.519* collaborative skills +0.139* teacher's supervision+0.123* learning objective. Table 10 shows the overall results of each research question. There is a significant relationship between students' learning objectives and learning efficiency for learning English using Computer English MOOC in hybrid learning.

Table 10 The results of hypotheses testing

Hypotheses	Results	Conclusion
H1: There is a significant relationship between students' learning objectives and learning efficiency for learning English using Computer English MOOC in hybrid learning.	Learning objective → Learning efficiency is significant (P= .026)	Accepted
H2: There is a significant relationship between students' learning methods and learning efficiency for learning English using Computer English MOOC in hybrid learning.	learning methods → Learning efficiency is not significant (P= .982)	Rejected
H3: There is a significant relationship between students' learning concentration and learning efficiency for learning English using Computer English MOOC in hybrid learning.	learning concentration → Learning efficiency is significant (P= .000)	Accepted
H4: There is a significant relationship between students' collaborative skills and learning efficiency for learning English using Computer English MOOC in hybrid learning.	collaborative skills → Learning efficiency is significant (P= .000)	Accepted
H5: There is a significant relationship between teacher supervision and learning efficiency for learning English using Computer English MOOC in hybrid learning.	teacher supervision → Learning efficiency is significant (P= .025)	Accepted

The fast progress of technology is a positive development for the field's ongoing research. Technology now permeates practically every aspect of our life, making it more and more impossible to avoid it. The present research investigate the students' learning proficiency via Computer English MOOC. Learning is the process that provides students with knowledge and abilities that they may apply in a variety of life situations(Kashmiri et al., 2020).This study shows the technology used English learning proficiency. There is a natural connection between language and technology. Large volumes of language would have been needed to create every technical marvel. According to Mahmud (2018), hybrid learning had a favorable impact on academic achievement. Comparing this style of learning to the traditional learning strategy, this current study is thought to provide a more thorough understanding of the effect it has on learners' learning proficiency. The claim that learning must include fun is supported by professionals.

The present research, drawing insight from prior research, has theorized that four aspects of students' learning via Computer English MOOC can benefit learning proficiency. First, learning objective has positive correlation with learning proficiency; second, students' learning concentration has more positive correlation with learning proficiency and teacher supervision has positive correlation with learning proficiency. Finally, students' collaborative skills have most positive correlation with learning proficiency, which provides an opportunity for teachers to rethink teaching methods and optimize teaching practices via MOOC learning of hybrid learning.

CONCLUSION & IMPLICATION

The Internet has become the most important learning, living, and activity space for contemporary vocational college students. By combining both face-to-face and online education in formal learning environments, hybrid learning offers powerful effects from both. The current pandemic situation forces the globe to use technology to accomplish its objectives. Along with the enhancements in learning proficiency, it is crucial that students participate in collaborative activities during hybrid learning while being highly motivated. It may be concluded that the learning process based on this model is effective because metrics for learning proficiency revealed good values. In this study it is discovered that the outcomes of students' learning proficiency were significantly influenced by their collaboration skills after completing a correlation analysis of all the variables taken into account. These findings show that students' learning proficiency is influenced by learning objectives, concentration on the courses, collaborative skills and teacher observation. During the Covid-19 pandemic, it was not always possible for students to go to school in person, but when it came to learning Computer English, they had clear goals. Students were able to get complete and organized information through hybrid learning. And there is a strong relationship between collaborative skills and learning proficiency via hybrid learning. Collaborative skills have the most significant influence on learning proficiency.

The development of the Internet and information technology has changed the way knowledge is generated, developed, acquired, and disseminated, and human learning and education models will inevitably change accordingly. Hybrid learning cannot be understood as a technological invention or innovation. It is an inevitable product of the development of the Internet and information technology to a certain stage and a new stage in the history of human learning. Hybrid learning closely combines information technology, internet resources, and education, which is an important innovation and progress in educational models. Hybrid learning has broken down the knowledge barriers of different countries and schools, making high-quality resources no longer the patent of elite universities, and will play a greater role in educational equity. Hybrid learning focuses on cultivating students' learning initiative, stimulating their interests, and integrating them into teaching activities. Through big data mining and analysis of the learning process, students' learning status is timely understood, greatly improving the quality of education. In summary, blended learning is not only a brand-new learning method, but also a brand new learning concept, which has a significant and profound impact on current teaching models, teaching methods, and educational concepts.

The current study, which intends to close a significant gap in the literature, has investigated the potential of hybrid learning as a disruptive educational tool. The study also looked at how hybrid learning might help students who are studying for a career strengthen their learning skills. The findings showed that collaborative learning, teacher supervision embedded learning proficiency, and hybrid learning can all significantly improve a student's ability to learn.

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