

# Technology Acceptance and Satisfaction of EFL College Students Using Super Star Learning Platform for Empowering English Language Learning

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## Abstract

Technology acceptance and satisfaction refers to the application effect and user experience of technology. Understanding student acceptance and satisfaction with technology can help optimize educational tools and methods, improve the effectiveness of teaching strategies, and enhance learning outcomes. However, relatively little attention has been paid to students' learning experiences, including technology acceptance and satisfaction. Therefore, the quantitative methodology was used in this research to explore 60 English as a foreign language (EFL) college students' learning experience through questionnaires. The results showed that students' technology acceptance was moderate and some students still faced some barriers when using the software. Furthermore, students had a high level of satisfaction when using the platform. They had a positive attitude towards the effectiveness of teachers' teaching, but they were less satisfied with the function of the software and its role in improving learning interest. Therefore, cultivating students' digital literacy is still an issue that needs attention in future education. All parties involved in education are advised to take full advantage of educational technology to improve students' learning experience in the future.

**Keywords:** Technology Acceptance Model, Students' Satisfaction, Super Star Learning Platform, College EFL Students, English Language Learning

## Introduction

The prevalence of mobile devices and technologies is such that these have become integral parts of life and learning. The penetration of mobile technologies into everyday lives has paved the way for the use of these same technologies in a multitude of aspects of life, including education in general and language learning in particular. English has become the de

facto global language, with the advent of ubiquitous mobile educational technologies that support language learning, enabling anywhere, anytime access. These technologies have become the preferred method for those who would like to learn a second language.

Up to now, researchers increasingly focus on mobile learning and many of them have proven the effectiveness of mobile technology in student learning, especially English learning. For instance, Gilbert et al. found that M-learning has the potential to promote learning and engagement of students and teachers in multiple physical, conceptual, and social spaces. What's more, the research of Chen and Hsu (2020) revealed that self-regulated mobile game-based English learning enabled students to enter the state of flow easily and enhanced their motivation to learn. Furthermore, Super Star Learning Platform, a mobile learning software, improved and promoted college English learning and teaching. Moreover, constructed Hybrid English Courses assisted by Superstar learning, aiming to improve undergraduates' language useability in higher education in China. Substantial research like these has identified the positive effect of mobile learning in English courses.

Currently, the majority of educational research and practice is focused on learning effectiveness and outcomes, with relatively little attention being paid to the student learning experience, which has a profound impact on overall educational outcomes. Consequently, it is essential to explore how this experience can be improved. This study aims to address a significant gap in the existing literature by examining the impact of technology-assisted education on student learning experiences. In particular, we will examine the impact of technology acceptance and satisfaction from the perspective of students. The term "technology acceptance" refers to students' acceptance and utilization of new technologies in educational settings. In contrast, "satisfaction" is a measure of students' sentiments and feedback in a technology-assisted learning environment. By analyzing these two aspects in depth, we expect to uncover the specific role of technology in enhancing the student learning experience. It not only facilitates educators' comprehension of students' requirements but also promotes more efficacious pedagogical approaches and enhances the overall quality of education.

Based on these, two research questions are proposed:

Research question 1:

How about EFL students' technology Acceptance when using Super Star Learning Platform in College English Courses?

Research Question 2:

How about EFL students' satisfaction with Super Star Learning Platform in College English Courses?

### **Methodology**

Questionnaire survey research is a method that systematically and directly collects quantitative data from a sample drawn from a total population using self-administered questionnaires or structured interviews and understands social phenomena (Zhong & Li, 2012). Sampling, questionnaires, and statistical analysis constitute the key links and essential characteristics of the questionnaire survey research method (Saris & Gallhofer, 2014).

In this study, the researcher employed two kinds of questionnaires. The first one is revised from Davis' Technology Acceptance Model (TAM for SSLP), this questionnaire is designed to examine how students perceive and accept the Superstar Learning Platform, with a particular focus on its technical aspects. The second one is the revised version of Students'

Satisfaction for Superstar Learning Platform (RSSSLP) The original version was created by (Li & Heng, 2021). The researcher revised some of items and asked three reviewers to identify the validity and reliability of the questionnaires respectively.

Each questionnaire employed in this study is divided into multiple sections, with the aim of using a series of refined, precise, direct, and targeted questions to delve deeply into the perspectives of the respondents. During the design process, special attention was paid to avoiding the use of terminology that may be unfamiliar to respondents, words with high information density, overly broad concepts, and questions that require strong reliance on every issue to answer. This is to ensure the structural validity of the questionnaire. The answers provided by the respondents will be complete and sufficiently detailed, and the answer options are designed to be incompatible with each other to prevent conflict. The questions will range from general to specific and from brief to detailed. Clear instructions will be prominently displayed at the top of the first page of each questionnaire, helping the respondents understand the purpose of the research, and through this clear understanding of the purpose to further ensure the structural validity of the questionnaire.

### **Technology Acceptance Model for Super Star Learning Platform**

Davis first presented the Technology Acceptance Model (TAM) questionnaire in 1989 as a model based on the Theory of Reasoned Action, designed to investigate the user acceptance of information systems. His initial intent in introducing the TAM was to elucidate the essential elements that lead to the widespread acceptance of computers. Two primary determinants of Technology Acceptance Model are perceived usefulness, which is the degree to which a person believes a system will improve their job performance, and 2) perceived ease of use, which is the degree to which a person believes the system will be simple to use. This study utilizes questionnaire 1, which has been adapted from the TAM questionnaire to be more pertinent to this research, mirroring the students' acceptance of the Super Star platform from a technical point of view. The researcher revised the original TAM questionnaire, which includes 12 questions. Six queries investigate the students' opinion of the Super Star's practicality, while the other 6 queries evaluate the students' opinion of its user-friendliness.

### **Revised version of Students' Satisfaction for Super Star Learning Platform**

The original "Blended Learning Satisfaction Survey for the Superstar Learning Platform" designed by Li & Heng in 2020, contains 24 items that are rated on a 1 to 5 Likert scale. The survey is divided into five sections: assessing the organization and design of the course, a functional survey, engagement, and overall satisfaction with the blended learning system.

Based on the high degree of similarity in content, this questionnaire is based on Li & Heng (2021)'s original survey. To make it more suitable for the current study and to reflect students' satisfaction with the use of Superstar platform in College English courses, the researcher has slightly modified the original questionnaire. The questionnaire, with 28 questions and a Likert scale from 1 to 5 for responses, is divided into five sections: assessing the course's structure and design, conducting a functional survey, gauging engagement, and gauging overall satisfaction with the teaching model. The aim of this survey is to assess student satisfaction with the improvement of their English proficiency due to the new teaching model.

### **Results**

This section shows the results of the two questionnaires.

**EFL students' technology acceptance of Super Star Learning Platform****The validity and reliability of the questionnaire**

Table 1 shows the results of the validity of the technology acceptance questionnaire. KMO and Bartlett's Test was used to measure the validity of the questionnaire. According to Hutcheson and Sofroniou, KMO values between 0.5 and 0.7 are mediocre, values between 0.7 and 0.8 are good, and values between 0.8 and 0.9 are great. The value of KMO in this study is 0.876 ( $P < 0.05$ ), greater than 0.8, which means the validity of this questionnaire is great.

Table 1

*KMO and Bartlett's Test*

KMO		0.876
	Chi-Square	549.453
Bartlett's Test of Sphericity	<i>df</i>	66
	<i>p</i>	0.000

Table 2 presents the reliability of the technology acceptance questionnaire. Cronbach Alpha is used to measure its reliability in this study. A general accepted rule is that  $\alpha$  of 0.6-0.7 indicates an acceptable level of reliability, and 0.8 or greater a very good level (Hulin et al., 2001). The value of Cronbach  $\alpha$  in this study is 0.937 ( $> 0.8$ ), which indicates a good level of reliability.

Table 2

*Cronbach Alpha*

N of Items	<i>n</i>	Cronbach $\alpha$
12	60	0.937

**Descriptive Analysis**

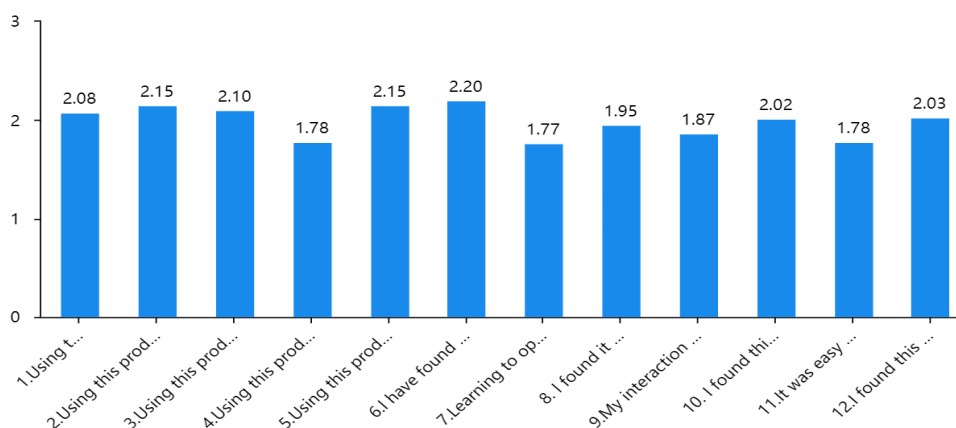
Table 3 and Table 4 show the results of EFL student technology acceptance questionnaire. According to Table 3, the mean of all questions is around 2. The highest score is 2.20 for Question 6, the lowest score is 1.77 for Question 7. It means students most agree that the super star learning platform is useful in their study and less agree with "Learning to operate this product was easy for me". Some students encounter difficulties when using super star learning platform. Furthermore, the standard deviation (SD) reveals the difference of students opinions. The SD of "It was easy for me to become skillful at using this product" is 0.904, and the SD of "I have found this product useful in my job(study)" is 1.132. That means students have a similar view on "becoming skillful at using super star learning platform. They hold different attitudes to "Super Star Learning Platform is useful in my study".

Table 3

*Descriptive analysis of the technology acceptance questionnaire*

Items	N of samples	Min	Max	Mean	Std. Deviation
1.Using this product in my job(study) enables me to accomplish tasks more quickly than other products in its class.	60	1.00	4.00	2.083	0.907
2.Using this product improves my job(study) performance.	60	1.00	5.00	2.150	1.022
3.Using this product in my job(study) increases my productivity.	60	1.00	4.00	2.100	0.951
4.Using this product enhances my effectiveness on the job(study).	60	1.00	4.00	1.783	0.846
5.Using this product makes it easier to do my job(study).	60	1.00	5.00	2.150	1.117
6.I have found this product useful in my job(study)	60	1.00	5.00	2.200	1.132
7.Learning to operate this product was easy for me.	60	1.00	6.00	1.767	0.998
8. I found it easy to get this product to do what I want it to do.	60	1.00	4.00	1.950	0.964
9.My interaction with this product has been clear and understandable.	60	1.00	5.00	1.867	0.947
10. I found this product to be flexible to interact with.	60	1.00	5.00	2.017	1.033
11.It was easy for me to become skillful at using this product.	60	1.00	5.00	1.783	0.904
12.I found this product easy to use.	60	1.00	5.00	2.033	0.974

Table 4 The averages of the technology acceptance questionnaire



**EFL students’ satisfaction with Super Star Learning Platform**  
**The validity and reliability of the questionnaire**

Table 5 shows the results of the validity of the students’ satisfaction questionnaire. KMO and Bartlett’s Test was used to measure the validity of the questionnaire. According to Hutcheson and Sofroniou, KMO values between 0.5 and 0.7 are mediocre, values between

0.7 and 0.8 are good, and values between 0.8 and 0.9 are great. The value of KMO in this study is 0.899 ( $P < 0.05$ ), greater than 0.8, which means the validity of this questionnaire is great.

Table 5  
*KMO and Bartlett's Test*

KMO		0.899
	Chi-Square	1449.051
Bartlett's Test of Sphericity	<i>df</i>	276
	<i>p</i>	0.000

Table 6 presents the reliability of the student satisfaction questionnaire. Cronbach Alpha is used to measure its reliability in this study. A general accepted rule is that  $\alpha$  of 0.6-0.7 indicates an acceptable level of reliability, and 0.8 or greater a very good level (Hulin et al., 2001). The value of Cronbach  $\alpha$  in this study is 0.977 ( $> 0.8$ ), which indicates a good level of reliability.

Table 6  
*Cronbach Alpha*

N of Items	<i>n</i>	Cronbach $\alpha$ ?
24	60	0.977

***Descriptive Analysis***

Table 7 and Table 8 show the results of EFL student satisfaction questionnaire. The scores of all the items are between 3.5-4.5, indicating students' positive attitudes to superstar learning platform used in College English Courses. The highest score is for "The teacher has effectively guided and managed the whole learning activities" with the score of 4.37. It means super star learning platform helps teachers provide effectiveness for learning activities. The lowest score is for "The teaching model based on the Superstar learning platform has stimulated my interest in learning." with the score of 3.65. It means some students disagree with superstar learning platform increases their learning interest. The highest SD is 1.104 for "I think it is very convenient and practical to scan the code to sign in on the Superstar learning platform", indicating students hold different views on the function of scanning the code to sign in. The lowest SD is 0.882 for "The teacher has effectively guided and managed the whole learning activities", indicating students are satisfied with teachers' instruction when using super star learning platform.

Table 7

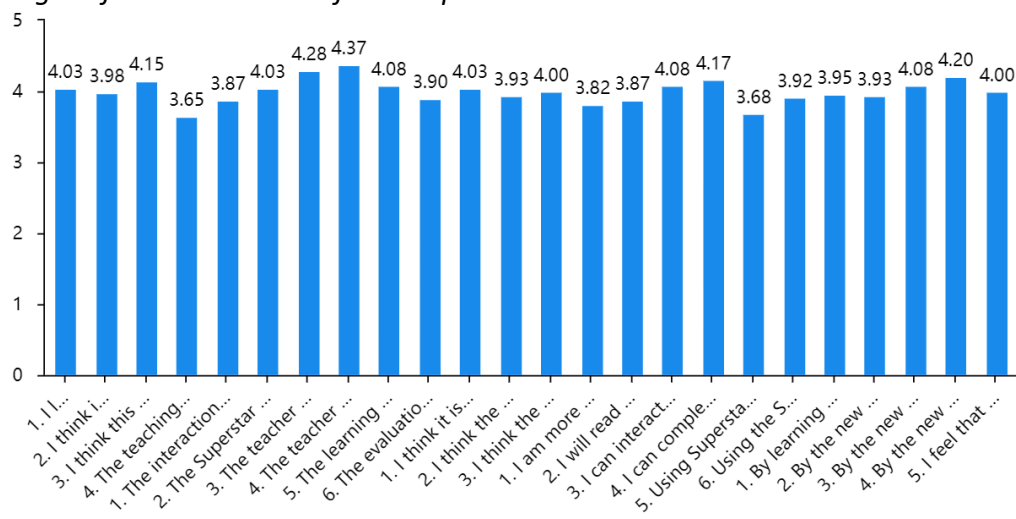
*Descriptive analysis of the student satisfaction questionnaire*

Items	N of samples	Min	Max	Mean	Std. Deviation
1. I like the PBL and Peer Learning teaching model of this course based on the Superstar learning platform.	60	1.000	5.000	4.033	0.882
2. I think it is very necessary to carry out this kind of teaching model based on mobile learning APP.	60	1.000	5.000	3.983	1.033
3. I think this kind of teaching model can make up for some shortcomings in traditional classroom and online teaching.	60	1.000	5.000	4.150	1.022
4. The teaching model based on the Superstar learning platform has stimulated my interest in learning.	60	1.000	5.000	3.650	1.071
1. The interaction is more rational and efficient using the Superstar learning platform.	60	1.000	5.000	3.867	1.033
2. The Superstar learning platform well integrated with the classroom and online learning.	60	1.000	5.000	4.033	1.073
3. The teacher was able to provide timely and effective feedback to my questions.	60	1.000	5.000	4.283	1.027
4. The teacher has effectively guided and managed the whole learning activities.	60	1.000	5.000	4.367	0.882
5. The learning materials provided by the teacher in the Superstar learning platform can stimulate my learning interest.	60	1.000	5.000	4.083	1.062
6. The evaluation method of the course can effectively promote my learning.	60	1.000	5.000	3.900	1.020
1. I think it is very convenient and practical to scan the code to sign in on the Superstar learning platform.	60	1.000	5.000	4.033	1.104
2. I think the interactive function of the learning platform can improve my participation in learning.	60	1.000	5.000	3.933	0.954
3. I think the feedback function of the learning platform allows me to give feedback in time.	60	1.000	5.000	4.000	1.042
1. I am more focused in class when using the Superstar learning platform.	60	1.000	5.000	3.817	1.066
2. I will read the learning materials posted by the Superstar learning platform carefully.	60	1.000	5.000	3.867	1.081
3. I can interact with the teacher in class with a positive and active atmosphere provided by Superstar learning platform.	60	1.000	5.000	4.083	1.062
4. I can complete tests on the Superstar learning platform and get immediate feedback on the answers to understand my mastery.	60	1.000	5.000	4.167	0.994
5. Using Superstar learning platform has reduced my study load.	60	1.000	5.000	3.683	1.081
6. Using the Superstar learning platform has made my learning more planned, informative, and independent.	60	1.000	5.000	3.917	1.046
1. By learning the knowledge points before, during and after class, I understand the knowledge points more thoroughly and master more firmly.	60	1.000	5.000	3.950	1.064
2. By the new teaching model, my ability to apply knowledge is improved.	60	1.000	5.000	3.933	1.023
3. By the new teaching model, I can improve my independent learning ability.	60	1.000	5.000	4.083	0.996
4. By the new teaching model, I have improved my learning efficiency.	60	1.000	5.000	4.200	0.917
5. I feel that the new teaching model using the Superstar learning platform is more effective than just traditional lecture format.	60	1.000	5.000	4.000	0.991



Table 8

*The averages of the student satisfaction questionnaire*



## Discussions

### EFL Student Technology Acceptance of Super Star Learning Platform

Based on the results, further and deeper explanations of EFL student technology acceptance are discussed here. According to the results of Table 3 and Table 4, the findings indicated that while the majority of students perceives the Super Star Learning Platform to be beneficial for their learning, they are less inclined to concur with the assertion that “operating the product is easy”. This indicates that although the functions and resources of the platform have been acknowledged by students, there are still some issues with its user experience and ease of operation. Some students encounter difficulties when using the Superstar learning platform, which may have a negative impact on their learning outcomes. This aligns with El-Sofany and El-Haggar’s finding (2020) that mobile learning technical barriers have a negative effect on M-learning.

The technology acceptance of students has a significant impact on their experience of using it (Al-Adwan et al., 2013; Alfadda & Mahdi, 2021). Some students may be reluctant to embrace new technologies and digital platforms, or may lack the requisite digital literacy to navigate the online learning environment. This may result in a sense of inconvenience when utilizing the platform.

From the perspective of technology acceptance, there are clear differences in students’ perceptions of the Superstar learning platform. While the students exhibited comparable perceptions regarding the operational proficiency of the platform, their attitudes diverged when it came to the usefulness of the Super Star Learning Platform for their studies. This may be attributed to discrepancies in students’ technological literacy and their capacity to adapt to new technologies. Students who are more technologically literate and adaptable may be better able to identify and utilize the advantages of the platform. Conversely, students who are less technologically literate may perceive the platform as difficult to use, leading to doubts about its usefulness.

Therefore, improving students’ technology acceptance on the Super Star Learning Platform and improving their learning experience are conducive to maximizing the effect of technology-enabled education.



**EFL Students' Satisfaction with Super Star Learning Platform**

Students generally have a positive attitude towards the Super Star Learning Platform, which reflects that mobile learning has achieved certain results in the field of language teaching. Most students recognize the role of the platform in supporting teachers' teaching, which is mainly reflected in several aspects. It is supported by the findings of Akour et al. in 2021. Firstly, the platform provides rich teaching resources to help teachers better prepare and organize teaching content. Second, through the platform, teachers can efficiently manage courses, assign homework and evaluate students' performance, which significantly improves teaching efficiency. In addition, the platform's online discussion and instant feedback function enhances the interaction between teachers and students, further improving the teaching effect. These features make the platform widely accepted by teachers, and students benefit from a more organized and interactive learning environment.

However, some students have different views on whether the platform can increase their interest in learning. Platforms may not adequately take into account the interests and needs of different students and lack a personalized learning experience to effectively stimulate their interest in learning (Shemshack et al., 2021). In addition, technical issues such as inconvenience may also affect students' experience of using the platform, thereby reducing their motivation and engagement (Shim & Lee, 2020). Some students also questioned the applicability of the enrolment function, believing that there may be technical barriers, such as network instability, that result in the enrolment process not being smooth. These issues may affect students' acceptance and experience of this feature.

In general, the Super Star Learning Platform is excellent in supporting teachers' teaching, but there is still room for improvement in enhancing students' learning interest and user experience. As a result, technicians can continue to improve the platform's features and increase innovation so as to increase students' interest and engagement. In the actual teaching process, teachers are suggested to give full play to the advantages of educational technology to improve the overall teaching effect and student satisfaction.

**Conclusion**

This study explores the technology acceptance and student satisfaction of using the Super Star Learning Platform in College English courses through a questionnaire survey. The results show that students' technology acceptance is moderate, and some students still face some barriers when using the software, so cultivating students' digital literacy is still an issue that needs attention in the future educational process. In addition, students have a high level of satisfaction when using the platform. They have a positive attitude towards the effectiveness of software teaching, but they are less satisfied with the function of software and its role in improving learning interest. Therefore, it is necessary for technicians, educational institutions, teachers and other parties to make joint efforts to enhance language learning supported by mobile technology, so as to improve the learning effect and enhance the learning experience.

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