IN BLENDED LEARNING, STUDY THE IMPACT OF TEACHING INNOVATION MEDIATED BY LEARNING ENGAGEMENT ON STUDENT LOYALTY

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ABSTRACT

Objective: Blended learning satisfaction positively affects student loyalty. Teachers need to provide quality learning experiences, fulfill students’ learning needs, and reach students’ learning objectives to increase students’ satisfaction with blended learning and enhance students’ support and loyalty to school education, thus promoting students’ continued support for the school.

Theoretical Framework: This paper presents the theoretical framework model based on culture, education, blended learning, and student loyalty, and three hypotheses are presented in the study.

Hypothesis 1: Teaching Innovation Positively affects Learning Engagement
Hypothesis 2: Teaching Innovation Positively affects Student Loyalty
Hypothesis 3: Learning Engagement Positively affects Student Loyalty

Method: This study explores the impact of teaching innovation mediated by learning engagement on student loyalty in blended education. It discusses the relationship between teaching innovation, learning engagement, and student loyalty in a blended educational environment. The study hypothesizes that teaching innovation has a positive effect on student loyalty through enhanced learning engagement. A mixed research design was employed, with quantitative research methods used. In the quantitative research phase, questionnaires were distributed to students at Aba Normal College. The questionnaire covered levels of teaching innovation, students’ learning engagement, and their loyalty to the institution’s education. Data were analyzed statistically using SmartPLS.

Results and Discussion: The results of this study will contribute to the existing knowledge regarding teaching innovation, learning engagement, and student loyalty in blended teaching. They will also provide practical insights for educators and teaching departments on how to effectively implement teaching innovation and promote student loyalty in a blended educational environment.

Research Implications: Teacher-student relationship and in-depth multiple interaction concepts become important trends in the future development of teaching and learning. (Ma, 2019) Theories related to blended teaching and learning Therefore, the theoretical or practical research related to blended teaching can promote the future development of blended teaching, and also provide an important scientific basis for colleges and universities to effectively solve the problem of balancing online teaching and traditional teaching.

Keywords: Teaching Innovation, Learning Engagement, Student Loyalty, Blended Teaching.

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Resumen

Objetivo: La satisfacción con el aprendizado combinado afecta positivamente a la lealtad de los estudiantes. Los maestros deben brindar experiencias de aprendizaje de calidad, satisfacer las necesidades de aprendizaje de los estudiantes y alcanzar los objetivos de aprendizaje de los estudiantes para aumentar la satisfacción de los estudiantes con el aprendizaje combinado y mejorar el apoyo y la lealtad de los estudiantes a la educación escolar, promoviendo así el apoyo continuo de los estudiantes a la escuela.

Marco teórico: Este artículo presenta el modelo de marco teórico basado en la cultura, la educación, el aprendizaje combinado y la lealtad de los estudiantes, y en el estudio se presentan tres hipótesis.

Hipótesis 1: La innovación docente afecta positivamente el compromiso con el aprendizaje

Hipótesis 2: La innovación docente incide positivamente en la fidelización de los estudiantes

Hipótesis 3: El compromiso con el aprendizaje afecta positivamente la lealtad de los estudiantes

Método: Este estudio explora el impacto de la innovación docente mediada por el compromiso de aprendizaje en la lealtad de los estudiantes en un entorno educativo mixto. El estudio plantea la...
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Hipótesis de que la innovación docente tiene un efecto positivo en la lealtad de los estudiantes a través de una mayor participación en el aprendizaje. Se empleó un diseño de investigación mixto, con métodos de investigación cuantitativos. En la fase de investigación cuantitativa, se distribuyeron cuestionarios a los estudiantes de Aba Normal College. El cuestionario cubrió los niveles de innovación docente, el compromiso de los estudiantes con el aprendizaje y su lealtad a la educación de la institución. Los datos se analizaron estadísticamente utilizando SmartPLS.

Resultados y Discusión: Los resultados de este estudio contribuirán al conocimiento existente sobre la innovación docente, el compromiso con el aprendizaje y la lealtad de los estudiantes en la enseñanza semipresencial. También proporcionarán información práctica para educadores y departamentos de enseñanza sobre cómo implementar eficazmente la innovación docente y promover la lealtad de los estudiantes en un entorno educativo combinado.

Implicaciones de la investigación: La relación profesor-alumno y los conceptos de interacción múltiple en profundidad se convierten en tendencias importantes en el desarrollo futuro de la enseñanza y el aprendizaje. (Ma, 2019) Teorías relacionadas con la enseñanza y el aprendizaje combinados Por lo tanto, la investigación teórica o práctica relacionada con la enseñanza combinada puede promover el desarrollo futuro de la enseñanza combinada y también proporcionar una base científica importante para que los colegios y universidades resuelvan eficazmente el problema del equilibrio. Enseñanza en línea y enseñanza tradicional.

Palabras clave: Innovación Docente, Compromiso con el Aprendizaje, Fidelización de estudiantes, Enseñanza semipresencial.

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1 INTRODUCTION

Since the 21st century, many countries have included education informatization as an important indicator of education reform in relevant policies. For example, the United States has formulated a programmatic document for the development of education informatization, the National Education Technology Plan (NETP), on average once every five years since 1996, with the latest year of promulgation being 2016 (Yin Jia et al., 2016); Japan's Law for the Promotion of Informatization in School Education, published in June 2019, defines the basic concepts, implementation plans, and related necessary matters for the development of informatization in school education (Chen, 2019); The European Commission released the Digital Education Action Plan (2021-2027) in September 2020, calling on European countries to participate in education informatization initiatives (Lili Dong et al., 2021) The development of education informatization in China is currently undergoing an extremely rapid development. Currently, the development of education informatization in China is moving forward at a very fast pace, and in recent years, the Ministry of Education has launched a number of education reform and development planning policies and annual working point documents, such as the Ten-Year Development Plan for Education Informatization (2011-2020) (Ministry of Education of the People’s Republic of China, 2012).
Findings from a study show that most teachers consider blended teaching, which combines online and offline, to be the most desirable teaching method in their minds (Xuemei Zhu & Lei Jie, 2018). In the course of university education and teaching reform, blended teaching, as a new way of thinking, a new way, a new model, runs through the teaching concept of students as the main body, and truly realizes the high-quality integration and utilization of teaching resources, which not only gives full play to the advantages of flexible and autonomous online teaching, but also retains the dominant advantages of teachers in the content, activities and interaction in the traditional offline teaching, so as to make the construction of new types of teacher-student relationships and in-depth multiple interaction concepts in the development of the future teaching and learning. Teacher-student relationship and in-depth multiple interaction concepts become important trends in the future development of teaching and learning. (Ma, 2019) Theories related to blended teaching and learning Therefore, the theoretical or practical research related to blended teaching can promote the future development of blended teaching, and also provide an important scientific basis for colleges and universities to effectively solve the problem of balancing online teaching and traditional teaching.

The policy-theoretical background of blended learning research covers the development of educational technology, the evolution of learning theories and changes in educational policies. Policy makers have begun to pay attention to supporting the promotion and practice of blended learning models in order to promote the modernization of education. Second, the educational community's understanding of the learning process is gradually shifting from the traditional teacher-centered to student-centered. Modern learning theory believes that students should become the main body of learning, not just passive receivers (Sterner et al., 2019). Blended learning provides more personalized and self-directed learning opportunities, which meets the need for students to learn independently. Policymakers have also realized that encouraging blended instruction can help stimulate student initiative and creativity in learning, which in turn improves learning outcomes. Third, the evolution of education policies has also supported the development of blended learning. Educational policies in different countries and regions have emphasized different educational goals and values at different stages (Teixeira & Tavares-Lehmann, 2022). With the continuous evolution of educational philosophy, policy makers gradually recognize some limitations of the traditional education model, such as insufficient resources and uneven teaching quality. As a result, the promotion of blended learning as a strategy for educational reform is gradually being recognized. The Government encourages schools and educational institutions to explore innovative modes of teaching and
learning, so as to improve the quality and efficiency of teaching and learning, while at the same time better meeting the individual needs of students.

2 LITERATURE REVIEW

2.1 BLENDED TEACHING

The author learned through the review of relevant literature that the connotation of blended teaching and hybrid teaching is extremely similar, and domestic scholars tend to use them interchangeably when conducting related research. Blended teaching is developed on the basis of foreign blended teaching, and unlike it, blended teaching starts from the leading position of the teacher, focusing on how to balance online learning and offline face-to-face teaching activities to help learners achieve the best learning results (Luan Wendi, 2022). Garrison, a well-known foreign scholar, believes that blended teaching is a product of the careful combination of online learning and offline face-to-face teaching activities, which is a reorganization of offline face-to-face classroom teaching activities and communication methods, and increases the learning opportunities for learners (Garrison, D.R et al, 2019). According to Prof. He Kexiang, blended teaching is to combine the advantages of traditional learning styles with those of E-Learning (digital or networked learning), to give full play to the dominant role of teachers in guiding, inspiring, and monitoring the teaching process, and to fully embody the initiative, positivity, and creativity of the students as the main body of the learning process (He Kexiang, 2004). The teaching and learning process is a very important part of the teaching and learning process.

Based on the concepts proposed by the above scholars, combined with the actuality of this study: blended teaching refers to the effective integration of online learning platforms and mobile terminals into offline face-to-face teaching, the creation of student-centered learning environments, in order to promote the mutual integration of online learning and offline face-to-face teaching activities, aiming at the effective use of the integration of online learning and face-to-face teaching advantages, and to provide personalized learning experiences for the learner, a kind of Teaching mode.

A word cloud about blended learning is shown in Figure1
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Figure 1
Blended Learning Word Cloud Map

Source: Researcher

In recent years there has been an increasing amount of research literature on blended learning, both domestically and abroad, especially since the gradual incremental increase since 2014, reaching its peak in 2021, as shown in Figure 2, which counts the trend of growth of literature in the last 30 years.

Figure 2
Growth chart of literature on blended learning

Source: Researcher
3 RESEARCH METHODOLOGY

3.1 DEFINITIONS OF TEACHING INNOVATION

Definitions of pedagogical innovation are currently summarized in three main types. The first explanation, from the point of view of the object of training - students, considers that teaching innovation is teaching with the purpose of cultivating students' creativity (Qin Xiaoli, 2003). From the above analysis as well as combining my research, we finally decided to adopt the views of several scholars such as Wang Zhenhong (2010), Chen Shuangcai and Gui Xiaoyin, and Huang Qiulan (2000), and summarized the dimensions of teaching innovation in this paper as follows: innovation in the teaching process, innovation in the content of the teaching and innovation in the teaching method. As shown in Figure 3, the dimensions of teaching innovation.

![Figure 3](Dimensions of teaching innovation)


3.2 DEFINITION OF BLENDED LEARNING ENGAGEMENT

Learning engagement has been defined as the extent to which a student contributes to an activity, and this variable has been recognized as a key factor in learning activities (Y.-M. Huang et al., 2022). If students are motivated and focused on the learning process, they are likely to persist in their studies (Padgett et al., 2019). In learner-centered Teaching activities, it is necessary to know the level of engagement of course participants. Therefore, we used this variable to examine student engagement in the course. Numerous studies have shown that there is a close relationship between learning input and learning outcomes. High input can produce high satisfaction, improve well-being and behavior, increase learning effectiveness and achievement, and achieve self-progress and development (Ariani & others, 2015) Tinto (2012) found that students with high engagement are better integrated into their learning compared to
students with less engagement. Because students build connections to the campus community during the process of learning engagement, engaged students feel they belong and are supported in the campus environment (Tinto, 2012a). And research by both Montelongo (2002) and Kok Choy Cheong & Bessie Ong (2016) demonstrated that learning engagement in extracurricular experiences can similarly provide motivational support for students' academic activities (Cheong & Ong, 2016; Montelongo, 2002).

Borrowing from several scholars such as Fredricks, Bonk & Graham, this study defines learning engagement as the emotional, cognitive, behavioral, and interactional inputs that students invest in effective educational activities inside and outside of the classroom, which are used to guide students to engage in learning activities. Blended learning engagement will be measured in terms of the dimensions of interaction engagement, cognitive engagement, behavioral engagement, and emotional engagement.

**Figure 4**

*Indicators for measuring college students' engagement in learning*

Source: Fredricks, Bonk & Graham (2006)

### 3.3 STUDENT LOYALTY

Muhammad N S (2015) argues that behavioral loyalty reflects true loyalty, and that for the measurement of behavioral loyalty should be based on attitudinal loyalty, but it must be measured by repeat purchase rate and recommendation rate to others indicators. Cannot use willingness indicators (Muhammad et al., 2015) Wang Y S (2011) argued that customer loyalty is a comprehensive concept that should be reflected not only in the behavior of repeated purchases, but also in the degree of preference for the product or service (Wang et al., 2011). Our scholars have also engaged in heated discussions after absorbing the essence of foreign scholars. Dong Chao & Sun Minggui (2016) argued that loyalty can only be manifested in two aspects: higher attitudinal orientation and repetitive purchasing behavior (Dong Chao & Sun Minggui, 2016). Liu, Y. & Jia, Y. (2006) viewed customer loyalty as an enduring relationship
between the customer and the firm, which is manifested in both behavioral and attitudinal aspects. (Liu Yong & Jia Yun, 2006).

**Figure 5**

*Indicators for measuring college students' loyalty in learning*

![Indicator Diagram](image)

Source: Dong Chao & Sun Minggui (2016)

Based on constructivism theory, I explore the factors of blended learning students' loyalty, form a systematic academic theory to support the in-depth development of blended learning, find theoretical models and scales to systematically explain the relationship between blended learning students' participation and students' loyalty, and measure the development of blended learning. Conceptual model as shown in Figure 6.

**Figure 6**

*Conceptual model*

![Conceptual Model Diagram](image)

Source: researcher
3.4 RESEARCH HYPOTHESIS

This paper presents the theoretical framework model based on culture, education, blended learning, and student loyalty, and three hypotheses are presented in the study.

**Hypothesis 1:** Teaching Innovation Positively affects Learning Engagement

**Hypothesis 2:** Teaching Innovation Positively affects Student Loyalty

**Hypothesis 3:** Learning Engagement Positively affects Student Loyalty

The implementation of pedagogical advancements in blended learning has shown notable and substantial benefits in terms of enhancing student commitment. This constructive correlation holds considerable significance for the enduring progress of educational institutions and the academic advancement of their students.

**H1:** Teaching innovation positively blended learning engagement.

**Figure 7**

*Relationship model of Teaching innovation and Blended learning engagement*

Blended teaching innovations have a positive impact on student satisfaction. Teachers should pay attention to the promotion and implementation of blended teaching innovations, and improve students' satisfaction with blended learning through continuous improvement of teaching methods and techniques, thus enhancing students' motivation and learning outcomes.

**H2:** Teaching innovation positively student loyalty
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**Figure 8**

*Relationship model of Teaching innovation and student loyalty*

![Relationship model of Teaching innovation and student loyalty](image)

Resource: Picciano (2009)

Blended learning satisfaction positively affects student loyalty. Teachers need to provide quality learning experiences, fulfill students' learning needs, and reach students' learning objectives to increase students' satisfaction with blended learning and enhance students' support and loyalty to school education, thus promoting students' continued support for the school.

**H3:** Blended learning engagement positively student loyalty.

**Figure 9**

*Relationship model of Blended learning engagement and student loyalty*

![Relationship model of Blended learning engagement and student loyalty](image)


**4 RESULTS**

The R2 value in the structural equation indicates the river of the model and the predictive power of the dependent variable because the R2 value, generally gives the proportion of variance that explains the endogenous variables in the structural equation. Related studies have shown that $R^2 > 0.67$, $R^2 > 0.33$ and $R^2 > 0.19$ are the three levels of the model effect, predictive ability and explains the variance, which is very good, relatively appropriate and barely acceptable.
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Table 1

**Determination coefficient result table**

<table>
<thead>
<tr>
<th></th>
<th>R-square</th>
<th>R-square adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavior_Engagement</td>
<td>0.780</td>
<td>0.779</td>
</tr>
<tr>
<td>Cognitive Engagement</td>
<td>0.751</td>
<td>0.751</td>
</tr>
<tr>
<td>Emotion Engagement</td>
<td>0.734</td>
<td>0.734</td>
</tr>
<tr>
<td>Interactive Engagement</td>
<td>0.746</td>
<td>0.746</td>
</tr>
<tr>
<td>LE</td>
<td>0.234</td>
<td>0.232</td>
</tr>
<tr>
<td>SL</td>
<td>0.511</td>
<td>0.508</td>
</tr>
<tr>
<td>Teaching Contents_Innovation</td>
<td>0.760</td>
<td>0.760</td>
</tr>
<tr>
<td>Teaching Methods_Innovation</td>
<td>0.816</td>
<td>0.815</td>
</tr>
<tr>
<td>Teaching Process_Innovation</td>
<td>0.733</td>
<td>0.733</td>
</tr>
<tr>
<td>Testimonials and_Word of Mouth</td>
<td>0.780</td>
<td>0.779</td>
</tr>
<tr>
<td>Willingness_to commit</td>
<td>0.741</td>
<td>0.740</td>
</tr>
<tr>
<td>Willingness_to_continue to use</td>
<td>0.796</td>
<td>0.795</td>
</tr>
</tbody>
</table>

In Smart-PLS, the Q² value of the Stone-Geisser test can be used as a criterion for predicting correlation, representing the correlation between the exogenous and endogenous models. The blindfolding process calculates the Q² values of latent variables in the Smart-PLS path model. In Smart-PLS, the blindfold method was used in this study to calculate the Q² values of the model, with the ellipsis example set to 7. The value of the ellipsis distance is generally between 5 and 10. The omitted distance cannot be divided by the total number of samples required for the operation. The total number of samples in this study is 457, which cannot be divided by 7. Therefore, the judgment criterion for setting the value of the omitted distance is 7.

In the Q² test, the exogenous model is predictively relevant to the endogenous model when the Q² value is greater than zero.

Table 2

**Predictive correlation result table**

<table>
<thead>
<tr>
<th></th>
<th>SSO</th>
<th>SSE</th>
<th>Q² (=1-SSE/SSO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavior_Engagement</td>
<td>2245.000</td>
<td>1034.318</td>
<td>0.539</td>
</tr>
<tr>
<td>Cognitive Engagement</td>
<td>2245.000</td>
<td>1088.348</td>
<td>0.515</td>
</tr>
<tr>
<td>Emotion Engagement</td>
<td>2245.000</td>
<td>1215.537</td>
<td>0.491</td>
</tr>
<tr>
<td>Interactive Engagement</td>
<td>2245.000</td>
<td>1150.025</td>
<td>0.488</td>
</tr>
<tr>
<td>LE</td>
<td>8980.000</td>
<td>7932.365</td>
<td>0.117</td>
</tr>
<tr>
<td>SL</td>
<td>5388.000</td>
<td>3913.131</td>
<td>0.274</td>
</tr>
<tr>
<td>TI</td>
<td>5837.000</td>
<td>5837.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Teaching Contents_Innovation</td>
<td>1796.000</td>
<td>915.147</td>
<td>0.490</td>
</tr>
<tr>
<td>Teaching Methods_Innovation</td>
<td>2245.000</td>
<td>1044.521</td>
<td>0.535</td>
</tr>
<tr>
<td>Teaching Process_Innovation</td>
<td>1796.000</td>
<td>843.743</td>
<td>0.530</td>
</tr>
<tr>
<td>Testimonials and_Word of Mouth</td>
<td>1796.000</td>
<td>835.824</td>
<td>0.535</td>
</tr>
<tr>
<td>Willingness_to commit</td>
<td>1796.000</td>
<td>904.384</td>
<td>0.496</td>
</tr>
<tr>
<td>Willingness_to_continue to use</td>
<td>1796.000</td>
<td>748.339</td>
<td>0.583</td>
</tr>
</tbody>
</table>
4.1 PATH COEFFICIENT TEST

The bootstrap method calculates the factor load and weight of the measurement model. The bootstrap method is a commonly used inspection method in PLS path modeling.

The bootstrap method calculates the factor loadings and weights of the measurement model. The bootstrap method is a commonly used detection method in PLS path modeling. It estimates the same model for each resampled set of samples by sampling the samples that can be returned. Specifically, it refers to uniform sampling returned from a given training set. Each time a sample is selected, it may be selected again and put into the training set. The resulting set of parameter estimation statistics is then used to test the significant parameters in the PLS path model.

PLS algorithm and Bootstrapping algorithm were used to test the significance of path coefficients; its subsample was set to 500. t-statistic and p-value were used to determine the significance coefficients of paths. When the absolute value of the t-statistic is greater than 1.96 and the p-value is small > 0.05, the path coefficient is significant and the hypothesis is valid. There are 9 paths this model.

Figure 10

*Structural Equation Model Parameter Estimation Results*
### Table 3

<table>
<thead>
<tr>
<th>Path coefficient result table</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Original sample (O)</strong></td>
</tr>
<tr>
<td>LE -&gt; SL</td>
</tr>
<tr>
<td>T1 -&gt; LE</td>
</tr>
<tr>
<td>T1 -&gt; SL</td>
</tr>
</tbody>
</table>

### 4.2 FROM THE RESULTS OF THE PATH CO-EFFICIENT IT FOLLOWS THAT

1) Teaching Innovation -> Student Learning Engagement T-statistic is 13.415 and the p-value is less than 0.01. Combining the correlation analysis of Teaching Innovation and Student Learning Engagement suggests that Teaching Innovation Hypothesis H1 is successful and that Teaching Innovation is positively affecting Student Learning Engagement.

2) Teaching Innovation -> Student Loyalty T-statistic is 13.976 and the p-value is less than 0.01. Combining the correlation analysis of Teaching Innovation and Student Loyalty indicates that the Teaching Innovation hypothesis H2 is successful and that Teaching Innovation is positively affecting student loyalty, and that teaching innovation can significantly and positively influence student loyalty.

3) The t-statistic for the Student Learning Engagement -> Student Loyalty path is 7.579 and the p-value is less than 0.01. Combining the correlation analysis on Student Learning Engagement and Student Loyalty suggests that the Student Learning Engagement Hypothesis H3 is successful and that Student Learning Satisfaction can positively and significantly influence Student Loyalty.

Summarize: As can be seen from the table, Teaching Innovation -> Student Learning Engagement, Teaching Innovation -> Student Loyalty, Learning Engagement -> Student Loyalty, Their T-values are large and the P-values are less than 0.01, indicating that these hypotheses are valid.

### Table 3

<table>
<thead>
<tr>
<th>Table of total indirect effects</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Original sample (O)</strong></td>
</tr>
<tr>
<td>T1 -&gt; SL</td>
</tr>
</tbody>
</table>
Total indirect effects were used to test for the presence of mediating effects in the research model. There is a total indirect effect as shown in the table. The total indirect effect is 0.283, t-statistic is 7.579, p-value is 0 and bias correction is [0.208,0.357]. The indirect effect is significant. This indicates that teaching innovations influence student loyalty through other variables. In terms of the total effect of influence, teaching innovation has a greater effect on student loyalty.

5 DISCUSSION

This study introduces the concept of student loyalty, measuring the effectiveness of blended learning through students' willingness to continue using and recommending it. It focuses on the relationship between teaching innovation, student learning engagement, and student loyalty. I present four questions and three research hypotheses. The key argumentation focuses on validating, elaborating and discussing these research hypotheses and finally drawing relevant conclusions in the context of other literature.

5.1 THE RELATIONSHIP BETWEEN TEACHING INNOVATION AND STUDENT LOYALTY

In examining the relationship between Teaching innovation and student loyalty, the study hypothesized that Teaching creation has a positive impact on student loyalty. It was analyzed using correlation analysis and structural equation modeling and found that there is a significant positive correlation between Teaching innovation and student loyalty. Teaching innovation positively impacts student loyalty. Teaching innovation provides students with rational teaching design, scientific teaching content and forward-looking teaching techniques. Let students actively participate in classroom teaching, teachers guide students to actively think, take the initiative to ask questions, explore each other, discuss with each other, the classroom atmosphere is active, such teaching is conducive to students' deep understanding of each knowledge point and flexible use of the knowledge they have learned. Students are willing to learn and learn something, which lays the foundation for students to continue to participate in blended learning, and students are more loyal to blended learning, so teaching innovation has a positive impact on student loyalty.
5.2 THE RELATIONSHIP BETWEEN STUDENT ENGAGEMENT IN LEARNING AND STUDENT LOYALTY

There is a strong relationship between student learning engagement and student loyalty, as learning engagement can influence how students experience and perceive educational services, affecting their willingness to recommend these services to others or to spread positive messages on social networks. It can also impact their desire to continue using both online and offline educational resources. When students are satisfied and actively engaged in the learning process, they are more likely to become active advocates for educational services, thereby increasing recommendation and word-of-mouth loyalty. Student learning engagement has a positive impact on student loyalty.

5.3 RECOMMENDATION

The teaching department and teachers should continuously innovate teaching methods, promote student learning engagement, and focus on enhancing student loyalty. These measures are instrumental in improving teaching effectiveness, cultivating students' motivation and achievements, thereby driving the development and application of blended learning.

1). Promote teaching innovation, including the adoption of novel teaching methods, development of diverse teaching resources, and integration of advanced teaching technologies. By providing innovative teaching environments and methods, we can stimulate students' interest and engagement in learning.

2). Place emphasis on student learning engagement, encouraging students to actively participate in classroom activities, ask questions, engage in discussions, and participate in collaborative learning. Creating an interactive learning atmosphere can inspire students' motivation and curiosity for learning.

3). Focus on fostering student loyalty to blended learning, encouraging active participation and providing a positive learning experience. Through the provision of personalized learning content and flexible learning approaches, we can cater to the diverse learning needs of students and cultivate their loyalty to blended learning.

REFERENCES


