Influencing Factors of Blended Learning Adaptability of Journalism Majors

Wanlu Liu, Bee Eng Wong

Faculty of Social Sciences and Liberal Arts, UCSI University, 56000, Kuala Lumpur, Malaysia
E-Mail: 529542793@qq.com

Abstract

Based on the theoretical foundation and practical application of blended learning, this paper aims to understand the blended learning adaptability of journalism students from six dimensions: learning motivation, learning self-efficacy, teachers' teaching, learning support, superstar learning platform and quality of course content. This study adopts the quantitative research methods. 193 journalism students from Guizhou Urban Vocational College participated in the questionnaire survey, and the collected data were subjected to exploratory factor analysis, descriptive analysis, correlation analysis and multiple linear regression analysis with the SPSS software. The results show that learning motivation, learning self-efficacy, teachers' teaching, learning support, superstar learning platform and quality of course content have a significant positive influence on journalism students' learning adaptability.

Keywords: Journalism Major, Blended Learning Adaptability, Influencing Factors.

Since the beginning of the 21st century, the rapid development of information technology has had a profound impact on the education industry. The popularity of the Internet, mobile devices, artificial intelligence and other technologies has made learning no longer limited to traditional classrooms and fixed times. The rapid changes and disruptions caused by the unprecedented spread of the COVID-19 pandemic continue to transform learning and teaching experiences and the broader higher education landscape (Faize & Nawaz, 2020). Students can access learning resources through the network platform, and interact with teachers and classmates anytime and anywhere. Under this kind of technical background and the pandemic, blended learning has arisen at the historic moment, and it is becoming an increasingly popular learning mode and learning philosophy.

With the continuous updating of teaching methods, the concept of student-centeredness, ability training and all-round development of education has gradually become popular. blended learning is designed on the basis of this educational concept, which emphasizes the principal role of students and encourages students to acquire knowledge and improve their abilities through self-learning, cooperative learning and inquiry learning. At the same time, blended learning also pays attention to teacher's guidance and this support function guarantees the student receives the essential help and the required instruction in the study process. Blended learning, strategically combining the conventional face-to-face teaching mode with online learning, is becoming increasingly

popular in education at various levels (Graham & Halverson, 2023).

The concept of adaptation has become a crucial issue of research for learning in the last few years (Xu et al., 2018). Although blended learning has many advantages in theory, in practice, it is not always as effective due to a variety of factors. For example, issues such as the online resource environment, course design, differences in teachers' IT competence, students' self-discipline and study habits may all factor into the effectiveness of blended learning (Li et al., 2022). Some students can adapt to the blended learning model well and achieve remarkable learning results, while others feel puzzled and frustrated, and subsequently, the learning effect is not good. In blended learning environments, the challenge of adaptation is magnified, and its importance is amplified in the face of a large number of learners, different course contents and teaching resources, as well as changing environments (Souza et al., 2023). Some studies (e.g. Chang et al., 2013) have shown that the problems students face when learning online include not being able to control themselves, not being able to use technology well, and not being able to manage their time well. Therefore, it has become an important subject in the field of education to explore the influencing factors of blended learning adaptability.

With the rapid development of Internet technology, the news communication industry has undergone earth-shaking changes. Network media has gradually become the main way for people to obtain news and information, and has put forward higher requirements for the learning methods and learning effects of journalism students. Blended learning means that teachers use online learning resources to carry out independent learning in the process of classroom teaching, and use offline teaching content to carry out practical teaching. Compared with traditional classroom teaching, in the blended learning environment, students need to have stronger self-control, which is a new challenge for students. The author has found in actual teaching that journalism students often have problems adapting to the blended teaching model, such as: it is difficult to adapt to the alternate teaching mode of online and offline when facing the network and teaching materials; it is difficult to adapt to the development of offline practical activities when facing the blended environment of virtual and reality; it is difficult to adapt to the process of communication and cooperation when facing teachers and partners. At the same time, students majoring in journalism have some problems such as low interest in their majors and low self-efficacy. However, in the present context, blended learning has become the trend and direction of journalism education reform.

Literature Review

Kian-Sam et al. (2008) conducted a study with 22 postgraduate students who participated in a 14-week awareness and learning programme. The study showed that the students showed positive attitudes towards constructing knowledge, but were limited to seeking and expressing opinions . Based on this, it was suggested that students should be given more guidance on learning and avoid transfer of knowledge unilaterally. Gyamfi (2015) et al. through a survey of 71 first year students found that in a blended learning environment, students have positive perceptions of this type of learning but the functionality of the course platform affects students' learning. And it is believed that in order to improve students' learning effect, the quality and function of the teaching platform should be improved, as well as guiding students to learn how to use the teaching platform. Li (2016) et al. found through a questionnaire survey, combined with regression method, that the instructor's instructional design method and the quality of the course content have a significant impact on the learning effect of college students. Vaughan et al. (2017) compared four international teachers' blended learning development programmes and found

that the challenge of blended learning development is that most teachers currently do not know how to design blended course resources and content, which can affect students' learning outcomes. Therefore, teachers' teaching has a great impact on students' learning adaptation. Bbbas (2018) concluded through a questionnaire survey that the overall learning effect of university students in a blended learning environment is average, and 30% of students think that blended learning is not as effective as traditional teaching methods. And he suggested that teachers can only improve students' performance if they master appropriate teaching methods for blended learning. Ramirez-Arellano (2018) et al. concluded through a questionnaire survey and structural equation modelling approach that learning motivation significantly affects learning strategies and learning emotions, which in turn determines college students' learning effectiveness. And Wei (2023), through a questionnaire survey of 258 college students, found that motivation, learning self-efficacy, teachers' teaching, learning platform, and course content quality have an impact on blended learning adaptation.

After reviewing the relevant literature, this study proposes that there are six key factors that influence the adaptability of blended learning, that is one more than Wei's study (2023) and these are: learning motivation, learning self-efficacy, teachers' teaching, learning support, superstar learning platform and quality of course content. And this study will investigate blended learning adaptation of journalism majors at Chinese universities in … . In view of this, this study attempts to answer the following questions:

What are the effects of these 6 factors on journalism students' learning adaptability?

At the same time, the following hypotheses were formulated:

H1: There is a significant positive effect of motivation on learning adaptability.

H2: There is a significant positive effect of learning self-efficacy on academic adjustment.

H3: Teacher's teaching ability has a significant positive effect on academic adjustment.

H4: Learning support has a significant positive effect on learning adaptation.

H5: There is a significant positive effect of Superstar Learning Platform on learning adaptation.

H6: There is a significant positive effect of course content quality on learning adaptability.

Methodology

3.1 Study Design

This study adopts the quantitative research method. After the proposal for the study was reviewed and approved by the President's Office and the Research Centre of Guizhou Urban Vocational College, the author distributed questionnaire to all the freshmen, sophomores and juniors of journalism majors. All methods were carried out in accordance with relevant guidelines and regulations. The questionnaire used in this study was adapted from Wei's (2023) "Questionnaire on Factors Influencing Adaptation to Blended Learning in Business English Audiovisual Speaking Courses", which has a reliability of 0.905. The items in the questionnaire were validated and tested for reliability for this study. This is described in sections 4.1 and 4.2 below. The study was conducted using an online platform. The questionnaire consisted of 32 questions on a Likert scale and included six dimensions: motivation, self-efficacy, teacher's teaching ability, learning support, Super Star Learning Platform and course content quality. These six factors are the independent variables of this study. Learning adaptability is the dependent variable of this study. The questionnaire results were analysed using SPSS 24.0 for reliability analysis, exploratory factor analysis, descriptive analysis, correlation analysis and multiple linear regression analysis.

3.2. Research Sample

Since the author is currently employed at Guizhou City Vocational College as a teacher

majoring in journalism, the journalism students of this college were selected to participate in the study. In this study, a questionnaire survey was conducted on all the freshmen, sophomores and juniors of journalism majors in Guizhou City Vocational College, totalling 193 students. These students, who have been receiving blended learning since their freshman year, are representatives of the population, and at the same time they indicated their willingness to participate in the study and their cooperation was forthcoming, which is conducive to the smooth conduct of the study.

3.3. Research Environment

This study focuses on a blended learning environment in which traditional teaching environment and online teaching environment are combined. Traditional teaching environment is face-to-face classroom teaching, and online teaching environment is a platform called SUPERSTAR LEARNING online teaching platform.

Results

4.1 Reliability Analysis

The main purpose of reliability analysis is to measure the reliability of the questionnaire, which is generally expressed in terms of the level of internal consistency, i.e. whether the questions of the same dimension test the same concept. In this paper, the internal consistency of the questionnaire is tested using the Cronbach coefficient method. If the internal consistency coefficient is above 0.7, it indicates that the questionnaire is highly reliable, if the internal consistency coefficient is between 0.6 and 0.7, it indicates that the questionnaire is of average reliability, and if the internal consistency coefficient is 0.6, the internal consistency is low, and the questionnaire needs to be rewritten.

Table 1: Reliability analysis of questionnaire

Title	Number of questions	Cronbach α Coefficient
Learning motivation	4	0.872
Learn self-efficacy	6	0.907
Teacher teaching	3	0.856
Learning support	4	0.888
Superstar learning platform	6	0.894
Quality of course content	6	0.898
Learning adaptability	3	0.830
Summary table	32	0.946

As can be seen from the above table, the total Cronbach α coefficient of the whole questionnaire is greater than 0.9; in addition, the Cronbach α coefficients of the seven dimensions are above 0.8. The results indicate that the internal consistency coefficient of this questionnaire is high and the credibility of the questionnaire is high, so the results of the questionnaire test have high reliability and stability.

4.2 Validity Analysis

Validity analysis is used to show whether the questionnaire was designed in a reasonable manner and whether the internal structural divisions of the questionnaire are more in line with expectations. This paper uses exploratory factor analysis to test the validity of the questionnaire.

Table 2: Exploratory factor analysis results of questionnaire

Question number	Factor load coefficient						
	Factor1	Factor2	Factor3	Factor4	Factor5	Factor6	Factor7
Q1	0.163	0.140	0.073	**0.793**	0.182	0.145	0.057
Q2	0.225	0.132	0.138	**0.783**	0.004	0.181	0.156
Q3	0.257	0.199	0.158	**0.736**	0.115	0.200	-0.069
Q4	0.125	0.138	0.136	**0.786**	0.118	0.142	0.168
Q5	**0.814**	0.066	0.161	0.161	0.170	0.067	0.008
Q6	**0.769**	0.016	0.133	0.155	0.150	0.016	0.223
Q7	**0.764**	0.131	0.071	0.164	0.019	0.129	0.177
Q8	**0.796**	0.153	0.145	0.115	0.114	0.095	-0.037
Q9	**0.760**	0.191	0.212	0.217	0.020	0.084	0.081
Q10	**0.745**	0.208	0.188	0.039	0.098	0.130	0.074

Question number	Factor load coefficient						
	Factor1	Factor2	Factor3	Factor4	Factor5	Factor6	Factor7
Q11	0.134	0.166	0.220	0.198	0.111	**0.778**	0.141
Q12	0.174	0.125	0.265	0.304	0.182	**0.699**	0.069
Q13	0.158	0.176	0.204	0.254	0.219	**0.784**	0.121
Q14	0.174	0.246	0.097	0.147	**0.746**	0.153	0.202
Q15	0.206	0.095	0.279	0.059	**0.793**	0.034	-0.021
Q16	0.023	0.106	0.094	0.132	**0.791**	0.104	0.185
Q17	0.108	0.230	0.169	0.082	**0.778**	0.184	0.088
Q18	0.172	**0.761**	0.140	0.077	0.099	0.183	-0.051
Q19	0.114	**0.769**	0.081	0.230	0.102	0.013	0.013
Q20	0.175	**0.747**	0.142	0.016	0.098	0.143	0.065
Q21	0.167	**0.728**	0.185	0.102	0.208	0.082	0.171
Q22	0.156	**0.807**	0.217	0.147	0.083	0.049	0.128
Q23	-0.037	**0.722**	0.135	0.135	0.176	0.067	0.275
Q24	0.145	0.186	**0.738**	0.110	0.160	0.169	-0.067
Q25	0.162	0.148	**0.769**	0.097	0.083	0.074	0.215
Q26	0.188	0.132	**0.722**	0.172	0.152	0.099	0.151
Q27	0.121	0.097	**0.834**	-0.013	0.153	0.093	0.065
Q28	0.282	0.248	**0.639**	0.246	0.035	0.135	0.169
Q29	0.104	0.155	**0.761**	0.090	0.130	0.176	0.034
Q30	0.280	0.219	0.242	0.300	0.259	0.223	**0.520**
Q31	0.211	0.263	0.207	0.105	0.309	0.120	**0.708**
Q32	0.318	0.297	0.282	0.198	0.216	0.261	**0.584**
Characteristic root value (after rotation)	4.460	4.233	4.171	3.155	3.064	2.247	1.626
Variance explained % (after rotation)	13.939%	13.228%	13.034%	9.860%	9.575%	7.023%	5.080%
Cumulative variance interpretation rate% (after rotation)	13.939%	27.167%	40.201%	50.061%	59.636%	66.659%	71.739%
KMOprice	0.908						
Bart spherical value	4124.867						
df	496						
P price	0.000						

As can be seen from the above table 2, the KMO test and Bartlett's Spherical Test were conducted on the questionnaire. The test results are as shown in the table: the KMO value of the questionnaire is 0.908, and the P-value of Bartlett's Spherical Test is 0.000, which is less than 0.05, and thus it was very suitable for factor analysis. The factor analysis of the questionnaire extracted a total of seven factors with eigenroot values greater than 1. The variance explained values of these seven factors are 13.939%, 13.228%, 13.034%, 9.860%, 9.575%, 7.023%, 5.080%, and the cumulative variance explained after rotation is 71.739% > 50%, indicating that the information of this questionnaire can be effectively extracted. Meanwhile, the questions of the same dimension all have the largest factor loading coefficients on the same factor and exceed 0.5. Therefore, the scale has a good level of structural validity.

4.3 Descriptive analysis

Table 3: Descriptive statistics for the 7 factors

variable	sample capacity	least value	crest value	average value	standard deviation	median
Learning motivation	193	1.500	5.000	3.337	0.873	3.500
Learn self-efficacy	193	1.167	5.000	3.388	0.898	3.500
Teacher teaching	193	1.000	5.000	3.625	0.874	3.667
Learning support	193	1.500	5.000	3.560	0.825	3.500
Superstar learning platform	193	1.333	5.000	3.345	0.793	3.500
Quality of course content	193	1.667	5.000	3.621	0.742	3.667
Learning adaptability	193	1.333	5.000	3.622	0.839	3.667

Based on the descriptive statistics provided in table 3 above, we can see that the sample size in each of the seven dimensions was 193. This indicates that there was a significant number of participants in this study. The median for each dimension ranged from 3 to 3.6, indicating that overall, participants rated learning motivation, learning self-efficacy, teacher teaching, learning support, Superstar Learning Access Platform, course content quality, and learning adaptability as moderately high. The standard deviation ranges from 0.742 to 0.898, which means that the data in each dimension are relatively concentrated with little variation. The median is relatively close to the average value, indicating a relatively symmetrical distribution of the data. Taken together, the participants' evaluations of the various learning dimensions are overall at a moderately high level, and their evaluations of these dimensions are relatively consistent, indicating that the overall learning environment and conditions are relatively stable and satisfactory.

4.4 Correlation analysis

Table 4: Pearson Correlation analysis

	Learning adaptability	Learning motivation	Learn self-efficacy	Teacher teaching	Learning support	Superstar learning platform	Quality of course content
Learning adaptability	1						
Learning motivation	0.529**	1					
Learn self-efficacy	0.555**	0.468**	1				
Teacher teaching	0.578**	0.565**	0.416**	1			
Learning support	0.583**	0.358**	0.360**	0.458**	1		
Superstar learning platform	0.563**	0.410**	0.393**	0.420**	0.436**	1	
Quality of course content	0.565**	0.402**	0.457**	0.520**	0.434**	0.457**	1

As shown in table 4 above, correlation analysis was used to investigate the correlation between learning adaptability and motivation, learning self-efficacy, teacher teaching, learning support, Superstar Learning Platform, and course content quality, and Pearson's correlation coefficients were used to measure the strength and direction of the relationship between the variables.

Table 5: Pearson correlation coefficient (r) value

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

Specific analyses showed that the correlation coefficients of adaptability with motivation, self-efficacy, teacher teaching, learning support, superstar learning platform, and course content quality, are 0.529, 0.555, 0.578, 0.583, 0.563, 0.565, respectively. According to the general rule of thumb (table 5), the strength of the correlation coefficient value is strong and the direction is positive.

4.5 Regression Analysis

Correlation analysis measures the strength of the linear relationship between two variables (one-to-one), while multiple regression is used to study the relationship between a single dependent variable and several independent variables. In this study the influence of multiple factors on learning adaptability, is analyzed. Thus, this study takes learning motivation, learning self-efficacy, teacher teaching, learning support, Superstar Learning platform, and

quality of course content as independent variables, and learning adaptability as the dependent variable to conduct linear regression analysis, and the following results are obtained:

Table 6: Analysis of variance (ANOVA) of the model

	quadratic sum	*df*	mean square	*F*	*P price*
Regression	81.367	6	13.561	46.885	0.000
Residual	53.799	186	0.289		
Total	135.166	192			

As can be seen from the table above, when the model was subjected to F-test, it was found that the model passed the F-test (F=46.885, P=0.000<0.05), which indicates that at least one of independent variables, learning motivation, learning self-efficacy, teacher teaching, learning support, Superstar Learning Platform, or quality of course content, has an influential relationship on learning adaptability, that is, it indicates that the model construction is meaningful and regression analysis can be carried out.

Table 7: Results of the multiple linear regression analysis

	Non-standardized coefficients		Standardization coefficient	*t*	*P*	collinearity diagnostics	
	B	standard error	*Beta*			VIF	tolerance
Constant	-0.129	0.231	-	-0.557	0.578	-	-
Learning motivation	0.115	0.058	0.120	2.002	0.047*	1.673	0.598
Learn self-efficacy	0.188	0.053	0.202	3.566	0.000**	1.492	0.670
Teacher teaching	0.148	0.060	0.155	2.464	0.015*	1.843	0.543
Learning support	0.251	0.057	0.247	4.429	0.000**	1.456	0.687
Superstar learning platform	0.206	0.060	0.194	3.439	0.001**	1.492	0.670
Quality of course content	0.168	0.067	0.148	2.492	0.014*	1.654	0.604
R^2	0.602						
adjust R^2	0.589						
Dependent variable: learning adaptability							
*** p <0.05 ** p <0.01**							

From the above table 7, it can be seen that the R2 value of the model is 0.602, which means that learning motivation, learning self-efficacy, teacher teaching, learning support, Superstar Learning Platform, quality of course content can explain 60.2% of the reasons for the changes in learning adaptability. In addition, the test for the multiple covariance of the model found that all the VIF (Variance Inflation Factor?) values in the model are less than 5, indicating that there is no covariance problem between the independent variables; the final specific analysis shows that: The regression coefficient value of learning motivation is 0.115 (t=2.002, p=0.047<0.05), which means that learning motivation will have a significant positive influence on learning adaptability (H1 holds).

The value of regression coefficient of learning self-efficacy is 0.188 (t=3.566, p=0.000<0.01), which means that learning self-efficacy will have a significant positive influence relationship on learning adaptability (H2 holds).

The value of regression coefficient of teacher teaching is 0.148 (t=2.464, p=0.015<0.05), implying that teacher teaching will have a significant positive influence relationship on learning adaptability (H3 holds).

The regression coefficient value of learning support is 0.251 (t=4.429, p=0.000<0.01), implying that learning support will have a significant positive influence relationship on learning adaptation (H4 holds).

The regression coefficient value of Superstar Learning Platform is 0.206 (t=3.439,

p=0.001<0.01), implying that Superstar Learning Platform will have a significant positive influence relationship on learning adaptability (H5 holds).

The regression coefficient value of course content quality is 0.168 (t=2.492, p=0.014<0.05), implying that course content quality will have a significant positive impact relationship on learning adaptation (H6 holds).

Discussion and Conclusions

According to the findings of this study, among the factors affecting journalism students' adaptability to blended learning, are motivation, learning self-efficacy, teachers' teaching, learning support, Superstar Learning Platform and course content quality. The scores for all the six factors were moderately high, with average values from 3.337 – 3.625 (see Table 3). Further the dependent variable of adaptability is positively corelated with the six independent variable factors with values ranging from 0.529 to 0.583.

In future blended learning, teachers should intervene throughout to provide targeted guidance. To help students adapt to the blended learning environment, students would have to enhance their sense of self-efficacy, take the initiative, and cultivate their professional interests, so as to enhance the effectiveness of blended learning. Online learning platforms should enrich and optimise the resource platform to promote the use of IT learning tools. Schools should strengthen the construction of online teaching resources and provide students with appropriate learning resources.

The findings of the study have shown that improving and enhancing the level of blended learning adaptability of these students should become an endeavour to overcome the difficulties in the process of learning in journalism courses. By sorting out the factors that influence blended learning adaptability of journalism majors at the higher vocational college, we can thus formulate more enhanced scientific and systematic strategies for them to learn more efficiently. At the same time, the findings inform us as to how we can enhance the independent learning ability of journalism majors. These findings also provide journalism teachers who carry out blended learning with effective ideas to further improve the corresponding teaching programmes and enhance the overall teaching quality.

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