

Design and Application of Blended Mandarin Teaching Model Based on Online Learning Platform

Ying Cai^(⊠)

School of Foreign Languages, Tianjin University of Technology and Education, Tianjin, China 841327309@qq.com

Abstract. There are abundant research cases revealing that digital technology can contribute a lot in learning. To find out if a blended mandarin teaching model by based on online learning platform motivates learners better than traditional lectures, a test and two questionnaire surveys were conducted within two groups with one taking traditional teacher-centered lectures and the other taking blended learning model. Then 10 respondents chosen randomly from the group taking the teaching model based on online learning platform were interviewed to collect their comments on the model and to find out what difficulties the learners encountered in their learning process. It is found that learners taking blended learning model have a better master of new knowledge and show greater confidence and determination in learning mandarin well as opposed to those taking traditional teacher-centered lectures. The research results also reveal that although some of the respondents are showing their dislikes for blended learning model because of heavy workload, lack of self-discipline together with other factors, the majority of the learners find the model appealing and show their likes for it after experiencing it.

Keywords: digital technology \cdot online platform \cdot blended learning \cdot mandarin teaching

1 Introduction

It is widely acknowledged that digital technology can help professors and learners work more efficiently and the goal of introducing digital technology into teaching and learning process is to improve the efficiency of teaching and learning [1].

According to Pruitt, the process of learning are activities by learners to accumulate knowledge and master skills. It is believed by some scholars that learning is progressive and mastering new materials is based on the knowledge acquired. Instructors are thus expected to help learners do self-directed learning rather than repeat what the book says [2]. Salman Khan, the founder of Khan Academy, highly valued the student-centered teaching model [3] while in traditional teacher-centered instructional model, instructors are the main source of information, they are the "sage on the stage" [4]. On the contrary, blended learning model is student-centered in nature, which allows learners actively acquiring and applying knowledge in their course by wisely using of digital technology.

In blended learning model learners are involved more actively in in-class activities and off-campus learning activities with the help of digital technologies. Thinking in greater depth and getting more opportunities to interact, learns' higher-order thinking skills are built [5].

Researchers have found that blended learning model brings many benefits, say, online resources are available for learners to access whenever and wherever it is convenient as many times as they like, enabling them to come to class better prepared [6]. However, blended learning model is not so widely applied in international Chinese language teaching. To find out if professors can help every mandarin learners achieve more efficiency by taking advantage of online learning platform, a blended teaching model and a research were designed and conducted.

2 Teaching Plan of the Blended Mandarin Learning Model Based on Online Platform

The teaching and learning plan for activities before class, in class and after class of each lecture for group 1 were designed to take full advantage of relevant digital resources.

Before each lecture, the professor provided the learners with links to the websites where learners could find online mini-lecture(s) or with prerecorded video clips and asked them to do self-directed leaning. Learners were encouraged to post questions and comments or ask for help via social medium platforms and other members of the group and the professor would make response to the comments, answer questions or offer help when they could, which meant via Internet, the learners and the professor were bound together all the time and problems could be solved in a more timely and efficient fashion.

In class, the learners were asked to participate in various activities including presentation, discussion, answering questions and taking quiz, etc. and the professor would check and evaluate the learners' performance, give feedback, clarify and highlight difficult points and stress important points involved with deliberate explanation and illustrations when necessary.

After class, the learners were asked to do exercises on an online Chinese learning platform, e-learn Chinese, so as to review, practice and consolidate what they had learned. The exercises were designed in a fun way, including various formats, repeating, blank filling, matching, recording, situation simulation, etc. Meanwhile, the learners would be provided with links to new mini-lectures and video clips to get well prepared for the next lecture.

3 Materials and Methods

3.1 Method

Both quantitative and qualitative research measurements were adopted in this research. This research involved two mandarin learning groups who had passed Chinese language proficiency test HSK level 2 and were taking the course of HSK 3. As to quantitative measurements, a test was designed for experiment group with 23 members (taking blended learning model) and control group with 27 members (taking traditional lectures) to find

out if blended learning model based on online learning platform suited international Chinese language learners and two questionnaire surveys were conducted among the two groups to find out if blended learning model motivated learners better as opposed to traditional teaching model. As to qualitative measurements, 10 respondents picked randomly from the group taking blended learning model were interviewed to collect their comments on the model and difficulties they encountered in their process of learning.

3.2 Sample and Procedure

At the beginning of the first term of the school year 2021/2022, a test was taken by 2 groups. These 2 groups were under the same professor and learning with the same materials for the whole term. For group 1 (with 23 members), the blended learning model was applied while for group 2 (with 27 members), the professor lectured during class and assigned tasks to group 2 after lectures in a traditional way.

At the beginning of the research, one questionnaire survey was conducted to find out how well the 50 learners were determined and confident in learning Mandarin well. At the end of the term, another questionnaire survey with the same questions as those in the first survey was conducted among the two groups to collect data on their determination and confidence in learning mandarin well again to make comparison and find out if blended learning model motivated learners better than traditional teacher-centered lecturing model. Then a test was taken by the two groups to find out if blended learning model could help learners learn the materials required better. At last, 10 members chosen randomly from group 1 were interviewed to collect their comments on blended learning model and the difficulties they encountered in their process of learning.

3.3 Results & Discussion

The questions of the two questionnaire surveys were the same, including 3 questions.

Question 1. Are you determined to learn mandarin Well?

Question 2. Do you think you can learn mandarin Well?

Question 3. Do you like blended learning model based on online learning platform?

Results of the Questionnaire Survey I.

At the beginning of the term, questionnaire survey I was conducted among 2 groups with altogether 50 samples and 50 valid copies were gathered.

	Group 1			Group 2	Group 2		
	Yes	Not sure	No	Yes	Not sure	No	
Question 1	92.1%	1.6%	6.3%	95.2%	1.6%	2.9%	
Question 2	44.4%	23.8%	31.8%	42.9%	28.6%	28.5%	
Question 3 23.12%		42.16%	34.72%	23.68%	43.35%	32.97%	

Table 1. Results of the first questionnaire survey (by Ying Cai)

	Group 1			Group 2	Group 2		
	Yes	Not sure	No	Yes	Not sure	No	
Question 1	100%	0%	0%	96.8%	1.6%	1.6%	
Question 2	81%	3.2%	15.8%	69.2%	18.6%	12.2%	
Question 3	56.54%	20.41%	23.14%	26.62%	40.62%	32.76%	

Table 2. Results of the second questionnaire survey (by Ying Cai)

It is shown in Table 1 that 92.1% learners of group 1 reported that they were determined to learn mandarin well with the percentage of group 2 being 95.2%. 44.4% of group 1 reported that they had confidence in learning mandarin well while among group 2 it was 42.9%. As to the question 3, 23.12% of group 1 reported they enjoyed blended learning model whereas in group 2 the percentage was 23.68%.

Results of the Questionnaire Survey II.

At the end of the term, another questionnaire survey was conducted among 50 samples and 50 valid copies were collected.

Table 2 shows that at the end of the term 100% learners of group 1 reported that they were determined to learn mandarin well with 96.8% of group 2 saying "yes". 81% of group 1 reported that they had confidence in learning mandarin well while in group 2 the percentage was 69.2%. As to the last question, 56.54% of group 1 responded that they enjoyed blended learning model with 26.62% of group 2 said "yes". 20.41% of group 1 and 40.62% of group 2 chose "not sure" while 23.14% of group 1 answered negatively and 32.76% of group 2 chose "no".

It is revealed that after a term's implementation of blended learning model, the number of learners of group 1 who determined to learn mandarin rises from 92.1% to 100% and the percentage of learners who had confidence in learning mandarin well rises dramatically from 44.4% to 81%. As to group 2, the percentage of learners who had determination to learn mandarin well rises insignificantly from 95.2% to 96.8% and as to confidence the percentage rises from 42.9% to 69.2%. Thus, a conclusion can by drawn that the learners taking blended learning model have a stronger determination and confidence in learning mandarin well than those taking traditional lecture-centered institutional model and blended learning does help motivate learners to learn mandarin much better than traditional teacher-centered teaching model.

When it comes to the question "Do you like blended learning?", in group 1 after experiencing blended learning model, 56.54% reported that they liked it whereas in the first survey only 23.13% reported "yes". In contrast, 23.68% of group 2 said "yes" in the first survey and 26.62% in the second survey. It shows that after experiencing blended learning, more learners find it appealing and show their likes for it.

Test Results.

At the end of the term, a test was taken to check if there was a significant difference in mandarin academic achievement among the two groups. After analyzing the grades with SPSS, the following data were attained.

grade					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	710.677	1	710.677	24.666	.000
Within Groups	1382.948	48	28.811		
Total	2093.625	49			

Table 3. ANOVA of the test results (by Ying Cai)

Table 4. Group Statistics of the test results (by Ying Cai)

group		N	Mean	Std. Deviation	Std. Error Mean	
grade	1	23	95.935	5.5459	1.1564	
	2	27	88.370	5.2120	1.0031	

Table 5. Independent Samples test of the test results (by Ying Cai)

		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F Sig.	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
									Lower	Upper	
grade	Equal variances assumed	.148	.702	4.967	48	.000	7.5644	1.5231	4.5021	10.6268	
	Equal variances not assumed			4.941	45.679	.000	7.5644	1.5308	4.4825	10.6464	

In Table 3, it is shown that "P=0.000" and "P<0.05". Table 4 shows Mean of Group 1 is 95.935 and its Std Deviation is 5.5459 and Mean of Group 2 is 88.370 with Std Deviation 5.2120. Table 5 shows "F=0.148, P=0.702>0.05" then "t=4.967, P=0.000" and "P<0.05" which indicates there is a significant difference between the grades of the two groups. Std. Error Difference is 1.5231 and 95% Confidence Interval of the Difference is from 4.5021 to 10.6268.

Based on the data shown above, we can safely draw a conclusion that group 1 taking blended learning model have a better master of new information than group 2 taking traditional teacher-centered instructional model.

Interview

At the end of the term, 10 members picked randomly from the group 1 were interviewed to collect detailed comments on the blended learning based on online learning platform. For each respondent, a transcript of responses was compiled. 7 of them reported that they liked the blended learning model, 2 said this model was acceptable and 1 responded definitely that they didn't like it. The followings are some inspiring comments from the respondents.

"With links to prerecorded mini-lectures and online learning platform, it is convenient to learn at my own pace before and after class. After self-directed learning before class, I had more fun in class activities, especially when I could answer all the questions correctly. I love the online learning platform as well, with which I can review and practice while having fun."

"When taking blended learning model, I got well prepared for the lectures and my concentration span got extended during class."

"To me, actually I don't like blended learning model at all. I found it was hard for me to do self-directed learning before class. The new Chinese characters were difficult to find out how to write in a correct way and the sentences were difficult to understand. I also felt ashamed to ask questions for some of which might seem so silly to others. I miss traditional teacher-centered instructional model."

"I joined a couple of societies on campus and had to finish the assignments from other professors. I was so busy that I could not manage to preview and finish learning the new materials provided by our mandarin professor properly which resulted in my poor performance in class. So, if you ask me, I prefer professor-centered instructional model. I would like our mandarin professor to deliver lecture in class and help me understand the new information. To be fair, there is nothing wrong with blended learning model if I can manage to do self-directed learning before lecture as required."

"I know it was my personal problem that I postponed my mandarin assignments until the last minute and sometimes even did not do my assignment before class at all which resulted in my failure in participation in discussion or tests."

From the responses of the interview the following conclusions can be drawn.

Blended learning model based on online learning platform motivates learners to achieve academic excellence in mandarin better as opposed to traditional lectures. However, not every learner can benefit more from blended learning model than from traditional teacher-centered teaching model. Those who organized and highly self-disciplined and those with better mandarin proficiency benefit more from it than those who are disorganized. To the learners who are less good at doing self-directed learning, traditional lecture-centered instructional model is preferred. Heavy workload, inadequate knowledge supporting self-directed learning, and disorganized behavior patterns, etc. are the factors contributing to the unsuccessful implementation of blended learning.

4 Conclusions

With online learning platform, blended learning model is helpful in getting most mandarin learners better prepared for the lectures and the learners show stronger determination and confidence in learning mandarin well than those taking traditional leaning model. Learners taking advantage of online resources also have a better master of new information as opposed to those in traditional lecture-centered instructional model. However, not everyone can benefit a lot from blended learning owing to certain factors, say, heavy workload, lack of self-discipline or other personal reasons, etc.

Therefore, to make the best of online mandarin learning resources and improve the efficiency of mandarin teaching to international learners, the following suggestions are put forward. Firstly, instructors are supposed to make clear and definite directions to learners before class to help them have a thorough understanding of the preview tasks and get well prepared for in-class activities. Secondly, when preparing learning materials and teaching plan professors are expected to make sure that learners won't get overwhelmed by the workload. Thirdly, instructors are there when the learners need any help in doing self-directed learning. Last but not the least, in-class activities are to be designed properly to make sure that every learner can get involved.

Acknowledgments. Fund from the project entitled Research on the Effectiveness of Work Done by the Chinese Language Teaching Institutes in BiH in Promoting Cultural Exchanges (TJSQ22YB11) approved by the National Language and Characters Promotion Base (Tongji University) in 2022 is gratefully acknowledged.

References

- Mao L.P. (2018) The Concept and Implementation of Computer Aided Instruction. Computer Fans. 12:135-136.
- 2. Pruitt J. (2013) Honors Student Perceptions of Self-Directed Learning: When Teacher be-comes Facilitator. Teaching mandarin in the Two-Year College. 40(3):74-287.
- 3. Khan S. (2013) The One World School House. Little, Brown& Company, New York.
- 4. King A. (1993) From sage on the stage to guide on the side. College Teaching. 41(1):30-35.
- Alon I., Herath R.K. (2014) Teaching International Business via social media projects. Jour-nal
 of Teaching in International Business. 12:44-59.
- Musallam R. (2010) The effects of screencasting as a multimedia pre-training tool to manage the intrinsic load of chemical equilibrium instruction for advanced high school chemistry learners. Doctoral Dissertation, University of San Francisco.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (http://creativecommons.org/licenses/by-nc/4.0/), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

