

# AN ACTION RESEARCH OF O2O BLENDED LEARNING IN THE INTEGRATED ENGLISH CLASS UNDER THE CONTEXT OF A CHINESE PRIVATE LANGUAGE UNIVERSITY

Dr. Ling Li
Lecturer, Department of College English
Zhejiang Yuexiu University of Foreign Languages
China
20132065@zyufl.edu.cn

## **ABSTRACT**

Based on the framework of action learning, this study attempted to construct an online-to-offline (O2O) blended class of integrated English based on the flipped classroom, focusing on cultivating students' listening and speaking capability and critical thinking ability, improving students' competence to analyze and solve problems using English, and giving full play to students' personality characteristics. This action research spanned from February 2019 to June 2019. Taking the 130 students of integrated English class of College of International Business (CIB) of Zhejiang Yuexiu Foreign Languages University (ZYUFL) as samples, this paper adopted qualitative research methods, through the analysis of log observation and reflection reports, combining with comparisons of the quantitative online data. This paper drew the conclusion that the O2O blended learning based on flipped classroom in the integrated English class was the practice of innovative teaching mode and it created interactive classes of integrated English. It is suggested that if implemented from the beginning of freshman year, the continuation effect of this teaching mode should be better. In addition, if more teacher training opportunities were available, and if the teaching facilities and environment could be improved, the effect of this teaching mode should be more significant.

Keywords: action learning, O2O blended learning, flipped classroom, interactive classes

#### INTRODUCTION

College foreign language strategy is an important part of Chinese national strategy in 2018. It is the duty of foreign language teachers in colleges and universities to actively cultivate students' ability to directly absorb international frontier information and exchange scientific research developments in their respective fields in foreign languages, and their ability to carry out work and research in foreign languages after graduation. Under the context of globalization 2.0 (Vielmetter, G., & Sell, Y., 2014), university English teachers in China should aim to cultivate the international compound talents urgently in alignment with the globalization trend; and it must cultivate the comprehensive ability and critical thinking ability of students to raise and solve problems; at the same time, it should adapt to the development of new technologies, reform teaching methods and make full use of various online resources.

Zhejiang Yuexiu University of Foreign Languages (ZYUFL) is a private language university in Zhejiang Province, North east of China (near Hangzhou and Shanghai). With more than 16,000 students and over 1,000 teachers and administrators in total. As the university with the largest number of foreign languages, ZYUFL stays in the forefront of various kinds of educational reforms and researches. The greatness of a university lies in the greatness of its teachers, and the excellence of a university lies in the excellence of its students. Classroom is the main way for students to acquire knowledge. Therefore, in order to maximize the growth and development of students, teachers must reform teaching methods and renew teaching concepts. Since 2018, ZYUFL calls on teachers carrying on online-to-offline blended learning reform to classroom teaching. The researcher applied for an online-to-offline blended learning project based on flipped classroom in 2019. The study was part of the research results (ZYUFL Online Database, 2019).

#### LITERATURE REVIEW

Action Learning: This study is based on the theory of action learning. Action learning is a comprehensive learning model, which integrates theoretical learning and behavioral cognition, and then carries out group learning and interactive sharing (Revans, 1982). It is mostly used in the field of medical and business training, and its practice in the field of education has gradually expanded in the past 20 years. In schools, especially in MBA teaching in business schools, action learning is an important method of teaching reform. Action learning method was first used by Reg Revans in 1940s to train and develop employees in the coal industry in Britain. Since the 1980s, action learning has been gradually applied in medicine, commerce and education. Nowadays, many universities in the United Kingdom and the United States offer courses based on action learning. There is a simple equation to explain the action learning method: AL (Action Learning) = P (Programmed Knowledge) + Q



(Questions) + R (Reflection) + I (Implementation), that is, action learning = structured knowledge + query + reflection + execution (Marquardt, 2004). In the MBA course of higher education, action learning method has achieved good practical results. Dutch Business School is one of the first business schools in the world to introduce "action learning" into management education. It enjoys a high reputation in both business and academic circles in Europe. Compared with the traditional teaching methods, the action learning method attaches more importance to the combination of learning and practice, and leads students to improve their problem-solving literacy and ability, with the growth and development of learners as the core, so as to stimulate students' internal learning motivation. The training goal of Applied Talents in ZYUFL coincides with the practice of action learning (ZYUFL Online Database, 2019). In English learning, action learning enables students to develop their practical application abilities such as cross-cultural communication.

Blended Learning: Blending learning is also called hybrid learning or flipped classroom in the literature. According to Graham (2006): "Blended learning systems combine face-to-face instruction with computer-mediated instruction" (p.5). The traditional education where face-to-face teaching mode was in dominant position now is being changed by the wide application of digital technology. The educational field is also adapting to the trend of integrating technology into education, so that students can survive in the world where technology is widely used (Lu, et al, 2018; Meyer et. Al., 2014). Combining online learning with face-to-face teaching can enhance students' interaction and learning enthusiasm, form a more open and communicative learning environment, and produce meaningful learning outcomes (Garrison & Kanuka, 2004). Several benefits can be listed out of O2O blended learning. On one hand, pre-class preparation can promote students' learner autonomy and help them develop self-directed learning habits; on the other hand, learning experiences in collaboration with peers can be motivating. Students form a learning community online and they can be much courageous to express their views, especially in high-context culture like China. There are researches showing students' positive attitudes towards O2O blended learning (López-Pérez et al., 2004; Paechter et al., 2010; Wang et al., 2009) and students' expansion in learning to the out-class environment (Kasraie & Alahmed, 2014; Shih, 2011; Zhu, 2012). Face-to-face teaching activities and network seminars offer students asynchronous content so that they can learn according to their own time and rhythm. It takes students' individual differences into full consideration. Subsequent classroom discussions help students better understand the topic and develop their cognitive and social skills. Sharp et al. (2006) conducted a research reviewing more than 300 blended learning studies, they summarized three main ways of blended learning. First, the most common way of blended learning is that mainly provides additional learning resources for institutions-supported courses on a virtual learning platform. Second, there is a few radical and transformative blended learning mode. It aims to promote interaction and communication through technological innovation, thus replacing other teaching modes. The third mode of change is no longer led by educators or educational institutions, but by students. Students nowadays use a wide range of technologies, such as mobile phones, laptops, e-mail, networking apps and online database. This current study, to a large extent, combines the first mode and the third mode, supplementing online learning materials and making full use of students' self-learning ability. Thanks to the flexibility and diversity of O2O blending learning, it's of great use to teachers and researchers to design appropriate programs in their own specific contexts. The study adopts the framework of action learning and designs the semester into three action learning cycles based on three main themes, which is going to be elaborated in details in the following sections.

#### PURPOSE OF THE STUDY

The primary objectives of the study are:

- To assess and analyze students' perception of O2O blended learning model in the integrated English class.
- To make comparative study of students' perception of O2O blended learning model in the integrated English class between the two classes (A5 & A6).
- To make comparative study of students' perception of O2O blended learning model in the integrated English class between the two classes (A5 & C7).
- To make comparative study of students' perception of O2O blended learning model in the integrated English class between the two classes (A6 & C7).

## METHODS AND PROCEDURES

The focus of the research is to assess and analyze students' perception of O2O blended learning model in the integrated English class in the College of International Business (CIB), Zhejiang Yuexiu University of Foreign Languages (ZYUFL). This current research adopted a mixed-method approach combining qualitative with quantitative methods (Creswell, 1994). The observation logs of the researcher and reflection papers of students were used to assess and analyze students' perception of O2O blended learning model in the integrated English class. The quantitative data were collected from the online education integrated platform of ZYUFL (<a href="http://www.icoursel.org/">http://www.icoursel.org/</a>) and the excellent resources of teachers in ZYUFL.



The survey population of this research consists of students from CIB of ZYUFL. Convenience sampling method was used to draw 130 samples from three classes (A5=45, A6=51, C7=34) of CIB. The researcher made clear explanation about the purpose of the research to the participants before collecting data.

Since September 2018, stratified English teaching was applied in the sophomores of non-English major in ZYUFL. Table 1 shows the criteria of stratified English classes. CET 4 & 6, the abbreviation of College English Test Band 4 & 6, are conducted by the Department of Higher Education of the Ministry of Education. The junior college students, undergraduates and postgraduates have to complete CET-4 according to the syllabus (Zheng & Cheng, 2008).

**Table 1:** Standards of Stratified English Teaching in ZYUFL

Stratified English Classes	Criteria	
A	Those who pass CET 6	
В	Those who pass CET 4	
С	Those who did not pass CET 4	

The textbooks they used were the fourth volume of the New Target College English Textbook Series. There were compulsory seven units in this semester, namely, Unit 1, 3, 4, 5, 6, 7 and 8, which could be re-integrated into three categories, namely, "Self-awareness", "Green Technology" and "Emerging Science and Technology". At the beginning of the semester, three classes were grouped into several (A5=six groups, A6=seven groups, C7=six groups). Each group has its own unique group name and slogan, representing the core ideas and learning objectives of the group. It facilitates team building process and enables students to learn together.

Based on the researcher's previous study of action learning in the integrated English class and the concept of flipped classroom, the O2O blended learning model in the integrated English class mainly consists of three parts: "Preview Classroom" in pre-class phase -- students have to preview online before class. "Dialogue Classroom" in in-class phase -- teachers and students interact face-to-face, and answer questions, share, evaluate and expand what have been learned in class. "Reflective Classroom" in after-class phase -- both teachers and students have to reflect about the learning process after class. In the whole action learning circle, teachers constantly optimize teaching design and innovate teaching methods. Students try to improve their ability to understand, raise and solve problems. The two-way interactive evaluation method of peer evaluation and teacher evaluation, and the cross-teaching method of peer guidance and teachers' supervision can not only enable students to input and consolidate basic knowledge, but also give students space to innovate and play, so that they can learn to use. Such wisdom "classroom" combines the characteristics of knowledge indoctrination in low-level classroom and the integration of knowledge and practice in high-level classroom.

**Preview Classroom**: Before class, the teacher assigned the list of self-study tasks to the students before class, then tracked the students' learning situation and gave timely feedback. At the same time, the teacher sorted out the participation of students in platform learning and the common questions raised by students. Referring to the students' self-test feedback sheet, the teacher determined the main points of the objectives in class, and summarized the teaching objectives, knowledge points and problems, mainly focusing on the objectives, key points and problems for teaching design. Students studied online independently in the online education platform of ZYUFL, through watching videos and learning ppt slides and word files. Then students tested themselves on the online platform and summarized the knowledge points. After sorting out the relevant difficulties and unsolvable problems, students could discuss them with teachers and students online. Those difficulties that could not be solved would be left for discussion offline face-to-face.

Dialogue Classroom: During the course, the main activities of teachers and students include the following aspects: (1) Vocabulary contest (individual), which follows the design concept from easy to difficult, focusing on the detection of students' basic knowledge and re-examination of pre-class learning. (2) Intensive knowledge points (individual), intensive principles: complex knowledge would be summarized by the teacher and the general knowledge would be summarized by students. In each class, students may be picked out to summarize, thus promoting students' understanding of knowledge systematization and motivating them to make good preparations. (3) Group discussion, the topic of group discussion should be closely related to the unit theme and students' real life, encourage students to put forward learning topics, and teachers should give some guidance to deepen students' understanding and application of knowledge to solve practical problems. (4) Outward bound exercises (group/individual) are an important part of improving students' cross-cultural communication awareness and ability. It develops culture, art, customs and other aspects on the basis of the theme film of the unit, and actually completes the homework. Teachers give one-to-one guidance or group classified guidance. (5) Presentation (group/individual). Presentation emphasizes that students act to show themselves, improve their



English application ability, enhance their ability to think independently and try to explore, and develop their cross-cultural communication awareness and literacy.

Reflective Classroom: After class, the teacher made an evaluation and gave the feedback to the students in time. At the same time, the excellent works displayed in practice should be sorted out and shared with the classmates. In addition, the research team would collectively carry out critical teaching reflection, summarize the shortcomings of each classroom implementation, optimize the teaching program and micro-class design and production. Students would conduct timely self-examination after class, take a comprehensive view of their own learning situation in combination with peer review and teacher evaluation, make a good record of learning, conduct deep reflection on learning, strengthen the consolidation of existing knowledge, and realize the individualized application and expansion of learning.

#### DATA ANALYSIS AND DISCUSSION

The data for this current research was collected electronically through a Chinese popular website (www.wjx.cn). Students were very familiar with this website and could use it via their self-phones and laptops. Internet were everywhere and had a very easy access to students in the two campuses of ZYUFL. In addition, the researcher utilized the Microsoft Excel and Statistical package for Social Sciences (SPSS) to show statistical distributions if this research. Descriptive analyses, such as frequencies and percentages, were adopted in this study for comparative studies.

Data analysis of reflective reports of students are conducted through open source coding, and for its validity, the researcher and two assistant researchers did the coding independently at first and then adjourned an inter-coding session. After the several debates among the three coders, the finalized results of coding were listed as follows.

Table 2: Results of Coding -- Students' Perception of O2O Blended Learning

Category	Code	Example
Perception of O2O blended learning. There were several ways in which the students expressed their	Positive	In short, through this semester's study, I clearly found that my self-learning ability has improved significantly, and I have made some progress in speaking on stage.
perception of the autonomous learning. The codes created within this category specify the students' reactions.	Negative	However, as far as I can see, I think the new style was less helpful.
	Favorite part	I can get access to the reference materials easily online.
	Less favorite part	what I dislike most is that there are always some members who are unwilling to take participate in activities but just enjoy the final results.

Most students of the two A classes thought positively of the O2O blended learning in the integrated English Class. However, seven students of C7 stayed negative towards the O2O blended learning. Six students remained neutral and made no further comments about it. As the periodical assessment was put online, it allowed automatic scoring and made it easier to save the file of scores. Students could also get in touch with their scores easily. Reference materials were also available to them in the online data, which engaged students out of class. Moreover, flexible access from home and campus made it easier for students to adjust study plans. The teacher's online office hour was also warmly welcomed by the students who used to at a loss when confronting with problems in the middle of learning a certain theme. The goal-setting and coaching approaches adopted by the teacher extended the online guidance to out-class environment. Moreover, the email and messaging in WeChat group were maximized to extend the classroom experiences. Problems identified in the feedback of students included sudden technological breakdown in the online platform, delayed response and the gap between the teacher and the technological staff. Moreover, team learning was not easy for some students. Group dynamics varied greatly due to different personalities.

Table 3 Percentage of Students' Perception

	Positive	Negative
A5	94%	6%
A6	97%	3%
C7	62%	21%

The results were supplemented by the teacher's observation. The observation logs showed that A5 and A6 were



very active in classroom activities. A5 was good at doing presentation and designing their own projects. A6 was adept in reading discussion and writing assignment. According to the mid-term exam results, the score of A6 stayed ahead. C7 was not so interactive as the other two classes. But three groups of C7 kept learning very hard. Based on their group's name, it's obvious that they were targeting CET-4 in June, 2019. The rest three groups stayed aloof towards various kinds of activities. One of the three groups felt excited at the very beginning of the semester, and then cooled down after one month. Their attitude was mostly passive and could not keep up with the study neither online nor offline. This partly was because of their past learning habits and partly was owing to the inconsistency in teaching between the freshman year and the sophomore year. Students needed time to adapt themselves to new teaching mode. It is suggested that if the O2O blending learning could be put into practice since the very beginning of the freshman year, the effect could be much better.

**Table 4** Students' Reflection of Most Improved Areas

Category	Code	Example
Most improved areas	Speaking	Because of my teacher, I made progress on my oral English. One of my friends who come from America told me that my spoken English was getting better and better. He can understand me easier than one year ago.
	Listening	Online preview of classes and the micro-lecture help me a lot, and because we need to bring up questions towards other groups' presentation, we have to listen carefully. My listening ability has improved a lot out of my surprise.
	Adaptation	This semester, the new study mode, the new learning environment, let me felt a little uncomfortable. But in the end, more was new experiences, new gains, new friends. The flexible learning pattern, let me have a cleverer understanding of my own learning progress.
	Motivation	It opens up a new path for English learning and enables team members to get to know each other better in the process of communication. It also motivates us to learn from the excellent people around us and make progress together.
	Expansion	Passing CET6 was not the ultimate goal. I want to try other E nglish translation certificates and challenge myself.

According to students' reflective reports, there were several distinctive areas: speaking ability, listening ability, learning adaptation, learning motivation and out-class expansion. Most students from A5 and A6 enjoyed the three-steps O2O blended learning in the integrated English class. They felt a great improvement in terms of self-confidence and motivation both in class and outside class. Presentation was a golden opportunity for them to practice their listening and speaking abilities. Three students mentioned life-long learning in their reflective reports, which demonstrated the usefulness of O2O blended learning in developing students' autonomy in learning. Nevertheless, things in C7 went in a different direction. Three teams tried to catch up with peer's progress, but they were comparatively in short of language proficiency. Due to a lack of English proficiency, they met obstacles from time to time. As for the rest three teams, they went their own ways without discipline, for example, more than ten students would be late for every class. Three students never brought the textbook or the notebook to class, not to mention take part in the activities.

Table 5 Students' Suggestions of O2O Blended Learning

Possible suggestions.	Technological Support	I hope that the Network Information Service Center could be more responsible and replied our puzzles in time.
	App Upgrade	Compared with other apps in the market, our university's app was out of date.
	Regulations	We should make regulations in this regard, which can prevent some people from being lazy.
	Richer ways of teaching	Different teaching methods can be adopted to lead the students into the classroom, such as playing some video related to the text in class.



Given the full freedom of writing anonymously online, students were very active in giving their opinions and suggestions. As both a researcher and a teacher, it's really inspiring to hear students' voices. When designing the class activities and preparing for class materials, considering students' real needs and different requirements were of great help. As for the technological support and app upgrade, it was reflected the technological deficiencies in ZYUFL. On one hand, the educational online platform broke down from time to time, which made a great impact on students' motivation of study online; and sometimes students' online test scores were also influenced by that. On the other hand, whenever problems appeared, as the teacher was not familiar with the technological knowledge, the process went through the teacher to the technological service center and then went back to students, which cost a lot of time. More opportunities for teachers' training and the upgrade of facilities and networks should be taken into seriously consideration for the top administrative level. Another aspect that worthy of attention was that students of C7 suggested to play games, watch videos and listen to music more frequently in the class. The research team discussed about it and concluded that students of C7 was unable to overcome their study inertia and was in favor of entertaining learning methods more. To help them overcome their laziness in study, peer tutoring and team learning were more effective than didactic lectures. More importantly, they needed help for the development of their learning goals.

Table 6 Online Data

Class/Online	Number of	Number of	Online	Number of	Number of
data	participations in the	participations in	time/hr.	micro-lecturers	submissions for
(average)	course online	the online		learned	online testing
	seminar	questionnaire			
A5	168.5	9.5	2052	114	20
A6	265	10.5	5996.5	114	16
C7	100	8	1309	60	10

The online education integrated platform of ZYUFL included data of students' performance from various aspects. The research team decided five most important ones in alignment with the research purpose. From table 6, it was safe to conclude that A5 and A6 excelled C7 in terms of all these five areas. Students in A class paid more attention to their own performance both online and offline. Students in C class focused more on entertainment and leisure. It was in great alignment with the researcher's observation that C7 showed higher motivation in "self-awareness" cycle instead of the other two.

**Table 7** The Mid-term Exam and Final Exam Scores

Class/ Scores (average)	Mid-term Exam Scores	Final Exam Scores
A5	77	88.5
A6	81	93.5
C7	40.5	50.5

Exam scores were in alignment with the online performance of students. The data were also consistent with the observation logs. A6 was good at writing assignment and reading analysis, and reading and writing had the biggest proportion in the mid-term exam and final exam, that's explained why A6 gained higher marks in the two exams. On the other hand, A5 was creative. A good case in point was the design of an organic house by themselves. Several groups were very innovative and one group was outstanding with a hand-drawn model. C7 was interested in role playing related with the textbook. Though they were not good at English, they made interviews with some foreign friends in Unit 7 about self-image and cosmetic surgery. Their interpersonal skills and abilities were not hindered by their not-so-fluent English.

Based on the feedback from the students of the three classes in their reflective reports and online data, it was easily seen that the O2O blended learning based on flipped classroom in the integrated English class was more suitable for students of A5 and A6. A5 was good at creating something new while A6 was good at academic assignments. Moreover, the teachers of this research team analyzed the reasons for the short online time, the low number of submissions for online tests and the low participation rate of C7. The suggestions provided by the students show that the students in Class C like entertaining learning methods such as movies, games, and songs. They had a strong fear of systematic online and offline courses and could not control their learning inertia. This kind of students should be guided correctly, and their laziness and learning inertia should be controlled through goal setting and detailed tasks, teamwork and encouragement.

# **LIMITATIONS**

The research attempts to assess and analyze the student's perception towards O2O blended learning in ZYUFL, China. The limitation of this study is that it adopts the convenient sampling method. However, this sampling method is suitable for this study to fulfill the research objectives. Another limitation of this study is that the sample size is not enough to represent all students of CIB, ZYUFL.



## **CONCLUSIONS**

Based on the framework of action learning, this study takes 130 students from three classes as samples and conducts an action research of O2O blended learning in the integrated English class. Most students can complete the tasks of pre-class preparation, in-class interaction and post-class reflection according to O2O blended learning requirements based on the flipped classroom. However, based on the quantitative data analysis of online learning and the qualitative analysis of observation logs and reflection reports, the researcher found that students in class A and class C were different in their perception towards O2O blended learning, such as the focus on topics, learning autonomy and learning styles. Therefore, students' differences should be put into consideration when in the preparation of materials. Yet, it can be concluded that the O2O blended learning based on flipped classroom in the integrated English class was the practice of innovative teaching mode and it created interactive classes of integrated English. Suggestions were more training opportunities should be provided to teachers, and technological and network environment upgrade should be kept up with the educational reform in ZYUFL. If the O2O blended learning could be put into practice at the very beginning of freshman year, the effect might be much more significant.

## **ACKNOWLEDGEMENT**

The author is grateful to Zhejiang Yuexiu University of Foreign Languages ("O2O Blended Learning Project in 2018"—JGH1801; "Improving Non-English Major Students' Learner Autonomy"—N2018028) for providing financial assistance to carried out this research work.

### REFERENCES

- Bonk, C. J., & Graham, C. R. (2012). The handbook of blended learning: Global perspectives, local designs. John Wiley & Sons.
- Bowyer, J., & Chambers, L. (2017). Evaluating blended learning: Bringing the elements together. Research Matters: A Cambridge Assessment Publication, 23, 17-26.
- Creswell, J. W. (1994). Research Design Qualitative and Quantitative Approaches. Thousand Oaks. CA Sage.
- Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *The internet and higher education*, 7(2), 95-105.
- Garrison, D. R., & Vaughan, N. D. (2008). Blended learning in higher education: Framework, principles, and guidelines. John Wiley & Sons.
- Graham, C. R. (2006). Blended learning systems. The handbook of blended learning, 3-21.
- Kasraie, N., & Alahmad, A. (2014). Investigating the reasons institutions of higher education in the USA and Canada utilize blended learning. *Mevlana International Journal of Education*, 4(1), 67-81.
- López-Pérez, M. V., Pérez-López, M. C., & Rodríguez-Ariza, L. (2011). Blended learning in higher education: Students' perceptions and their relation to outcomes. *Computers & education*, *56*(3), 818-826.
- Lu, O. H., Huang, A. Y., Huang, J. C., Lin, A. J., Ogata, H., & Yang, S. J. (2018). Applying learning analytics for the early prediction of Students' academic performance in blended learning. *Journal of Educational Technology & Society*, 21(2), 220-232.
- Marquardt, M. (2004). *Optimizing the Power of Action Learning: Solving Problems and Building Leaders in Real Time*. Palo Alto, California: Davies-Black Publishing.
- Meyer, S., Wohlers, S., & Marshall, B. (2014). Blended learning: student experiences. In B.Hegarty, J. McDonald, & S.-K. Loke (Eds.), *Rhetoric and Reality: Critical perspectives on educational technology* (pp. 89-98). Proceedings ascilite Dunedin.
- Paechter, M., Maier, B., & Macher, D. (2010). Students' expectations of, and experiences in e-learning: Their relation to learning achievements and course satisfaction. *Computers & education*, 54(1), 222-229.
- Revans, R. W. (1982). The origins and growth of action learning. Brickley, UK: Chartwell-Bratt.
- Sharpe, R., Benfield, G., Roberts, G., & Francis, R. (2006). The undergraduate experience of blended e-learning: a review of UK literature and practice. *The higher education academy*, 1-103.
- Shih, R. C. (2011). Can Web 2.0 technology assist college students in learning English writing? Integrating Facebook and peer assessment with blended learning. *Australasian Journal of Educational Technology*, 27(5).
- Spring, K., & Graham, C. (2017). Thematic patterns in international blended learning literature, research, practices, and terminology. *Online Learning Journal*, 21(4).
- Wang, M., Shen, R., Novak, D., & Pan, X. (2009). The impact of mobile learning on students' learning behaviors and performance: Report from a large blended classroom. *British Journal of Educational Technology*, 40(4), 673-695.
- Zheng, Y., & Cheng, L. (2008). Test review: college English test (CET) in China. *Language Testing*, 25(3), 408-417
- Zhu, C. (2012). Student satisfaction, performance, and knowledge construction in online collaborative learning. *Journal of Educational Technology & Society*, 15(1), 127-136.