THE PRACTICE OF BLENDED LEARNING IN VIETNAM: A CASE OF PRIVATE ENGLISH LANGUAGE INSTITUTE

Nguyen Thi Hong Van ULIS Middle School; hongvan@vnu.edu.vn

ABSTRACT:

In recent years, the term "Blended Learning" is no longer a novelty in education in Vietnam. In universities and institutions nationwide, the combination of face-to-face and online-based learning and teaching has been implemented in various subjects, which sparks the interest of researchers, educators, and teachers. While some studies have examined the benefits as well as challenges of blended learning in higher education, little research has been done to investigate the perceptions of students and teachers towards blended learning and flipped classrooms at high school level in private English language institutes. Given the difference in learners' autonomy and cognitive ability between high school students and university students, the current paper explored the former group of students and their teachers' overall perceptions of blended learning at a private English language institute in which the groups of students are given more guidance and teachers' support than university students. To be specific, each lab session which is followed by a face-to-face lesson with interactive activities is supported by a lab coach. Through questionnaires and interviews, insights into students' and teachers' perceived benefits and challenges of blended learning at the high school level have been revealed. While some acknowledged the benefits of blended learning, some students and teachers required more innovative activities to compensate for the limitations of blended learning.

Keywords: blended learning; private English language institute; learners' autonomy; flipped classrooms.

1. INTRODUCTION

With the advancement of technology and breakneck speed of the Internet development, the term "blended learning" has been coined and welcomed in

current education settings. This convergence of traditional face-to-face mode of learning and computer-mediated one is widely believed to bring the best of both worlds together.

"Blended learning", as generally understood, is an approach to learning which combines both face-to-face and online-learning experiences. Ideally, each of the learning mode will complement the other by its own strength. To illustrate, students participating in blended learning courses can experience an element of control over where, when and how they learn, while rejoicing at the excitement of face-to-face interaction with the peers and the teachers. In the context of this research, "blended learning" is defined as an approach which "combine(s) face-to-face instruction with computer-mediated instruction" (Graham, 2006, p.5).

In Vietnam, blended learning is adopted nationwide in higher education today, and the dramatic increase in such hybrid courses has captivated scholars' and educators' interest. Researchers far and wide have started to look at the benefits and challenges of blended learning in English training in Vietnam; however, the number of such studies still remains relatively small. In addition, given the technological innovation and the urgent demands from the Covid-19 pandemic, various schools and English language institutes have adopted this mode of learning for their high school students. Due to differences in learner's autonomy and cognitive ability between tertiary and high school students, the practice of blended learning is expected to experience variations. Yet, most studies in the field often investigate blended learning in higher education settings, while the perceptions of students and teachers towards blended learning and flipped classrooms at high school level are often ignored. This highlights a need for closer examination at perceived benefits and shortcomings of blended courses among high school students. The research questions that the current study seeks to answer are as follows:

- (a) What are students' and teachers' perceived benefits and challenges of blended learning in the private English language institute?
- (b) How do the teachers practice the blended learning in their classrooms?

This study is meaningful in, at least, three ways. First, it extends the research line on the practice of blended learning and flipped classroom for high-school students in Vietnam. Second, apart from questionnaire and interview survey for students' and teachers' perceptions as in other studies, it adopts another source of information for the purpose of data triangulation.

Put differently, it uses a combo of three sources: questionnaire, interview survey and classroom observation to validate the collected data and provide a clearer picture about the application of blended learning in private English language institutes in Vietnam. Finally, it informs English language instructors and course designers in Vietnam about the perceived benefits and challenges of blended learning at high school level. Based on this information, instructors and course designers are expected to have practical measures to mitigate such difficulties (if any).

2. LITERATURE REVIEW

2.1. Definitions of blended learning

The term 'blended learning' has recently become a buzzword, yet despite its increasing popularity, this term is still ambiguous in the way it is defined. The idea of what is being blended has provoked different interpretations of the word 'blended learning'; most of them could be later categorized into a few common themes (Graham, 2006). Some suggest blending instructional modalities, or delivery media in other words (Singh & Reed, 2001; Bersin, 2004); others consider blended learning as mixing instructional methods. Slomanson (2014, p.94) propounded that "A blended classroom, by comparison, offers both face-to-face and virtual elements". However, in the recent technological context, these ways of interpreting 'blended learning' has led to an all-embracing term that nearly all courses and learning systems could be referred to 'blended learning'. In The Handbook of Blended Learning, Graham (2006, p.5) defined: "Blended learning systems combine face-to-face instruction with computer-mediated instruction". This way of definition more accurately reflects the idea that blended learning is a mix of instructions between traditional face-to-face learning environments and distributed learning environments. With such definition, it is asserted that this mode of learning and teaching offers the best of both worlds: the excitement of person-to-person interaction, together with an emphasis on self-paced learning. This paper, accordingly, adopted the term "blended learning" as defined by Graham (2006): "Blended learning system combine face-to-face learning instruction with computer-mediated instruction".

2.2. Models of blended learning

Since the way that face-to-face instruction and computer-mediated one are mixed varies, more than one model of blended learning is allowed. One

widely adopted approach is exemplified by Staker and Horn (2013) with six original models, which are presented as below:

Table 1. Six original models of blended learning

(1) The face-to-face driven model	Classroom learning is supplemented with online learning.
(2) The rotation model	Students rotate between working online and other classroom-based model.
(3) The flex model	Students study mainly online according to an individually customized schedule, and face-to-face support is provided by the teacher as needed.
(4) The online lab model	Student supplement their traditional studies by taking an additional online course on-campus.
(5) The self-blend model	Students supplement their traditional studies by taking an additional online course off-campus.
(6) The enriched virtual model	Learning is mainly online with occasional visits to a brick-and-mortar setting for face-to-face tuition.

Note. Adapted from Blended Learning in the K12 Education Sector. *Blended learning: Research perspectives, 2,* 287-300, by Staker, H., & Horn, M. B., 2013.

However, as the insufficient difference in nature between model (1) and two other models (2 and 3), the former one was eliminated. Also, for the same reason, (4) and (5) were merged, which left them with four models of blended learning: the rotation, flex, self-blend and enriched virtual. Regarding the rotation model, depending on how students rotate within the classroom, to another room or off-campus, its different variants were introduced. One interesting variant is the 'flipped classroom' where students study online at a location of their own choice with a view to gaining basic content knowledge. Then, the classroom is utilized for higher-order tasks, which allows more effective and creative time. This schedule is fixed, and it

"accords with the idea that blended learning includes some elements of student control over time, place, path, and/or pace" (Staker & Horn, 2013, p.289). With the intention of transitioning passive students into active and engaged learners, this flipped classroom variant (of the rotation model) was also adopted in the investigated English language courses.

2.3. Benefits and challenges of the flipped classroom

Through a large-scale systematic review of the literature on the flipped classroom, Akçayır and Akçayır (2018) pointed out both advantages and disadvantages of the flipped model.

Overall, with flipped classroom model, positive results were reported regarding learner outcomes, pedagogical contributions, time efficiency, interactions and other advantages such as less anxiety and cost effectiveness (Hardin & Koppenhaver, 2016). To be specific, from learners' perspectives, flipped classroom model gave them a higher level of engagement during lessons and foster continuous learning throughout the semester (Khanova et al., 2015). Higher motivation for students (Huang & Hong, 2016), as well as improved learning achievement (Bhagat et al., 2016) were also positive aspects of the model. Students also reported to have more collaboration opportunities (Foldnes, 2016), increased customized learning (González-Gómez et al., 2016), and flexibilities (Nguyen et al., 2016) as main reasons for their satisfaction with the flipped classroom. Regarding teachers, two important benefits of the flipped model were flexibility and active participation of students. Teachers suggested that the flipped classroom setting made it easy to engage students and empower them to become active participants in their own learning (Moraros et al., 2015).

Nevertheless, certain challenges were also found. For learners, the "clashes they experience in their own timetable and insufficient time to prepare adequately for tutorials" became challenges when they prepared lessons (Wanner & Palmer, 2015). They also counted difficulties in use and management of technology (Moraros et al., 2015), higher workload (Khanova et al., 2015), students' resistance to change, and teachers' inability to help when they are out of class (Chen et al., 2015) as difficulties. From teachers' perspectives, the flipped classroom model specifically required greater amount of work (Wanner & Palmer, 2015; Sage & Sele, 2015). Some teachers aslo reported "low level of commitment to the flipped classrooms but felt under higher pressure to include them in their courses" (Wanner & Palmer, 2015)

Of the reviewed studies in the research conducted by Akçayır and Akçayır (2018), the vast majority (80%) were carried out at the higher education level, while a minority were devoted to K-12 students. Thus, it could be assumed that the results yielded from such studies could be dissimilar for high-school students due to "very limited time to use technology for learning at home" (Wang, 2016, p.393) and other intrinsic/extrinsic reasons.

3. METHODOLOGY

3.1. Context and participants of the study

The current study was conducted at a private English language institute in Hanoi, Vietnam. A group of 39 high school students and 6 teachers participated in the research. These students had taken a placement test to decide which class they should attend. Students' English proficiency levels ranged from A2 to B2 level according to the Common European Framework of Reference for Languages (CEFR). All the students involved in the study enrolled on blended learning English language courses in the institute.

The blended learning English language courses investigated in the research were specifically designed in alignment with interest and language competencies of high school students by experienced teachers and educators. Accordingly, these language courses adopted the flipped classroom variant of the rotation model (Model 2 of the six original models of blended learning, Staker & Horn, 2013) with a view to promoting active and engaging learning experiences. The English courses offered skills lessons in which videos and reading texts were used to introduce useful language for communication, as well as micro and macro skills of reading, writing, listening and speaking. For example, in one of the speaking skills pre-lesson, the videos and reading texts were to equip students with introductory phrases for a presentation, the mind-mapping technique to take notes, together with topic-specific vocabulary so that learners have adequate input for their presentation and group work in the class. The videos are in the form of either lectures or conversation with guided questions for knowledge and vocabulary input.

With a view to compensating for students' lack of learner autonomy and limited access to technology, instead of gaining content knowledge online at home, students participated in Lab sessions (2 hours per session) at the institutions before taking part in Class sessions (2 hours per session). During

those Lab sessions, they were equipped with laptops to learn new contents at their own pace by watching lectures, reading assigned texts and answering guided questions and closed-quizzes. There were also Lab coaches whose English language competence was adequate to provide support and ensure that those high-school students could follow and understand the online learning contents in this stage. It was also in this stage that class activities to help students recall and understand main ideas, strategies and new words were encouraged when students finished watching videos. After this, students took part in Class sessions in which they do higher-order tasks. With this model, teachers could utilize the data from students' lab performance to plan a lesson that addresses individual needs by grouping students according to their level of language competence. It should also be noted that Lab sessions and Class sessions were not on the same day.

3.2. Data collection methods

This study employed a combo of two data analysis methods: quantitative analytical and qualitative analytical strategies in order to obtain a deeper insight into how blended learning is practiced at a private English language institute in Vietnam. Quantitative analytical method was used for answers from the questionnaire survey and classroom observation form so that the frequency could be calculated. For the open-ended items in the questionnaire, the interview as well as classroom observation, qualitative analytical strategies were adopted. By analyzing responses from both student and teacher participants, the researcher could gain thorough understanding of the practice of blended learning and flipped classroom for high school students in Vietnam.

The data analysis procedure experienced three steps, beginning with data being collected among students and teachers via questionnaires in order to elicit participants' perspectives towards blended classrooms. Based on data collected from the questionnaires, interview items were designed with a view to understanding the responses and further supporting the quantitative analytical results above. Finally, classroom observations were conducted so as to triangulate the data collected and gain a more thorough understanding of blended learning implementation in the institute. Classroom observations focused on essential features of teaching and learning practices (as suggested in the Teaching Dimensions Observation Protocol, Osthoff et al., 2009), including the instructor's teaching methods and

activities, the nature of student-teacher interaction, pedagogical strategies of the instructor and students' engagement.

4. FINDINGS AND DISCUSSION

The aims of the study were to understand students' and teachers' perceived benefits and challenges of blended learning in the private English language institute, as well as the teachers' practice of blended learning in their classroom. To this end, data from the questionnaire and interview survey and classroom observations were analyzed, which yields certain worth-considering results.

4.1. Questionnaire and Interview survey

The survey explored both students' and teachers' perspectives towards the blended learning courses. From the benefits and challenges examined in previous studies and compiled by Akçayır and Akçayır (2018), the items for the questionnaire and interview survey had been designed.

4.1.1. Students' perspectives

The findings about students' perceptions towards the blended learning courses revealed that a larger number of students, 69.2%, felt their learning skills has improved after a Class session, while the other 30.8% felt not. When being interviewed, the latter group reasoned they had learnt the skills during the Lab session, so exercises and group-work in the Class session did not help them improve any other language skills. One student participant also added: "Because my teacher didn't have enough time to answer our group questions and help us with exercises, we couldn't improve our reading skills" (S4). Concerning the fact that in applied flipped classrooms, since teachers were expected to provide customized activities to address individual weaknesses, it was possible that while some 'weak students' were provided with more assistance, other more able learners received much less teacher attention. This finding is also in line with what was found in another study which pointed out learners' hesitant attitudes towards blended learning classroom since everything could be learned from the videos, and "there was no need to attend class or participate in group-discussion activities" (Chen et al., 2015, p.625).

Regarding teachers' in-class instructions, three questions were posed to student participants: "Did the teacher help you identify your points of improvement?", "Did the teacher address all your questions/concerns?" and "Did the teacher review all the contents that you had learned in the previous Lab session?". The aims of these questions are to elicit students' perceived assistance from their teachers, and compare to teachers' perceptions as well as actual classroom practices. Regarding the first question, up to 41.1% of participants stated that their teachers helped them identify some points of improvements, while 5.1% were unaware of their progress. Similarly, more than a half (53.8%) of learners reported that their questions and concerns were addressed, but roughly 45% held the idea that their teachers only addressed some of the concerns. Positively, most students (up to 84.6%) believed their teachers reviewed all the contents they had learned in the Lab session, though there were 7.7% of the participants said that important contents were missing. This finding, together with findings from other studies, emphasizes the importance of teacher's assistance both in and out of the class in this flipped classroom model (Chen et al., 2015).

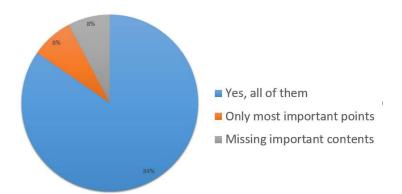


Figure 1. Teachers' review of important Lab-session contents (Students' perceptions)

However, when students were asked about the main contents they had covered during the Lab sessions, many of them were hesitant, and some students even recalled details from the lecture videos instead of the main contents. This may indicate that students' limited preparation to utilize the flipped classroom would also have adverse effects on their in-class experience. Other studies also pointed out learners' lack of preparation and its detrimental effects on their learning (Wanner & Palmer, 2015).

Improvements in students' learning experiences were also investigated, and when this group of participants were asked what their teachers could do to improve their learning experience, some prefer more games and break

time. There was also the idea that tasks should be from easy to difficult as some students struggled with competing their task. This notion is aligned with principles for teaching English language. Interestingly, several students believed that classes should not be divided into groups so that there would be less interactions during the lesson – these students were probably more oriented towards a traditional classroom, and thus showed certain resistance to changes. In another research, Chen et al. (2014) also reported students' unwillingness to change from a traditional approach to the flipped classroom approach.

As can be seen, from students' perspectives, the flipped classroom model implemented in the research posed both negative and positive aspects to students' learning experiences. On the positive note, students benefited from this model as they could receive constructive and customized feedback for personal development. Also, the blended classroom allowed them more time for and types of higher-order activities and group work while ensuring quality time for language and knowledge input during Lab sessions. Nevertheless, the challenges students experienced should not be ignored: more able students received much less teachers' attention, which could make them demotivated in the classroom. Several students, additionally, showed indifference to changes while others demanded a wider variety of inclass activities.

4.1.2. Teachers' perspectives

Concerning teachers' perceptions of the course, when evaluating the course content, they agreed that there was a rich source of materials, and such materials are graded ones suitable for assigning various tasks. However, since contents were compiled and converted from paper-based books to interactive online tasks, mistakes were found: some of them could be ignored, while others were reported to make students confused. One teacher added: "Some answers in the interactive online tasks were incorrect, and students received a lower score than their actual performance". This could become a factor that demotivates students from their learning. Furthermore, because of typos in the online reading texts, students found some tasks more difficult as "learners were unaware of the typos and thought they were new words" (Teacher 2). From teachers' perspectives, it should be noted that while the flexibility and comprehensiveness of online contents were ensured, more heed to accuracy should be provided.

While monitoring their classes, teachers also found problems with addressing students' weaknesses. They reported this was due to limited class time and a large number of students within a class while the teachers were required to address individual needs. Some teachers felt that they were more familiar the traditional classroom, so applying the new flipped model were uneasy for them. Teacher 3 did not address learners' individual strengths and weaknesses, but rather reviewed the lessons and improved class performance as a whole. In general, according to failure to provide customized lessons to individual learners was due to two main reasons: limited class time and unfamiliarity with the flipped classroom model. These two challenges are also found in other studies (Wanner & Palmer, 2015; Sage & Sale, 2015; Chen et al., 2015).

Teachers were also interviewed about the effectiveness of Lab sessions and Comments, and they concurred with the idea that they had the awareness of students' strengths and weaknesses, yet the comments were not of significant use. Comments from lab sessions were intended to provide useful information that could be utilized to inform teachers of students' overall performance, strengths and weaknesses. In fact, some teachers reported that these comments they received from lab coaches were the same as they would aware in a traditional classroom. Yet, late comments about students' progress might adversely affect teachers' preparation for lessons. Also, from the data, teachers disclosed that students might skip videos and head for quizzes even when they were under monitor of the Lab coach in the Lab sessions. Similarly, studies also found that teachers' difficult task management due to lack of information about students' preparedness before lessons is also one contributor to challenges of this leaning model (Chen et al., 2015).

With everything considered, teachers' perceptions revealed that while learning materials were abundant, their quality should be under rigorous scrutiny to ensure students' learning experience. Also, time constraint and classroom management were two main factors that made addressing students' weaknesses another challenge for teachers. Students' preparation and performance in Lab sessions was an additional element affecting a lesson. These are aligned with previous studies in the same field which pointed out benefits and challenges of the flipped classroom model.

Generally, both teachers and students concurred with the idea that teachers did not have enough time to address students' individual needs in

class, and some of the participants were unfamiliar with the flipped classroom, thus were resistant to change at a certain level.

4.2. Classroom observation

Findings from classroom observation revealed that not all students remembered the learning contents or finished watching the videos in the lab class. This affected the teachers' plans for lessons. To mitigate the problem, most teachers reviewed important contents the students attained in their previous Lab sessions. Nonetheless, one teacher failed to review the learned contents and taught something totally different from the course outline. He reasoned that the online content was not effective to meet learners' needs in learning English.

Also, some students were disengaged in the lessons while their teachers spent time helping other groups. Particularly, a few (roughly 10%) students used their laptops to music videos and films during the lessons. This, in turn, led to teachers' low level of classroom management due to a greater amount of work (Wanner & Palmer, 2015).

Additionally, only one teacher used customized tasks to address students' individual needs and weaknesses, which did not conform with the course description. Of the teachers observed, some teachers were not used to the flipped classroom model and still used traditional methods of teaching English with teacher-centered approach. To be specific, teacher 4 went through all the theories with the whole class before assigning students tasks and exercises.

Regarding the lab session, quite a lot of high school students were not engaged in watching videos and answering quizzes, while some of them felt comfortable as they were able to learn at their own pace. This indicates that two hours for Lab sessions could be too long and tiring for students at high school level.

5. IMPLICATIONS AND CONCLUSION

The study investigated how blended learning and the flipped classroom model are implemented in a private English language institute in Vietnam. By and large, the findings were in line with what was found in previous studies, specifically students' failure to prepare for tutorials (Wanner & Palmer, 2017), students' and teachers' resistance to change (Khanova et al., 2015)

and teachers' difficult task management (Chen et al., 2015). In former studies, while certain benefits of blended learning were found, such as higher level of students' engagement (Khanova et al., 2015), higher motivation for students (Huang & Hong, 2016), and more collaboration opportunities (Foldnes, 2016), the results in this study were mixed. However, a beneficial feature of blended learning was reinforced in the course - that is flexibility, "a main reason for students' reported satisfaction with the flipped model" (Nguyen et al., 2016). From the findings, it is implied that teachers should create enjoyable in-class activities to increase the level of students' engagement. Also, the fist activity should be engaging and the one that students could not take part in if they did not finish all the videos. By so doing, students may gain more motivation during the Lab sessions and thus, yield more desirable results in their learning. Students should, additionally, be well-informed about how a flipped classroom works and its importance so that they could be more autonomous in their own learning as learner's autonomy is of significance for the success of a blended learning course. Based on what is investigated, more thorough teacher training is demanded to ensure teaching quality and support those who are unfamiliar with the flipped classroom model. The results of this study could be used to provide further understanding about how blended learning is adopted by high school students and teachers in Vietnam. Thus, it would be of much benefits to English course designers, especially those who wish to apply blended learning and the flipped classroom model to teaching English as a foreign language for high school learners. A thorough understanding of benefits and challenges of this model would provide educators with sound background and strategic approach to successfully develop better versions of blended learning classrooms.

REFERENCES

- Akçayır, G., & Akçayır, M. (2018). The flipped classroom: A review of its advantages and challenges. *Computers & Education*, *126*, 334-345.
- Al- Zahrani, A. M. (2015). From passive to active: The impact of the flipped classroom through social learning platforms on higher education students' creative thinking. *British Journal of Educational Technology*, *46*(6), 1133-1148.
- Bersin, J. (2004). The blended learning book: Best practices, proven methodologies, and lessons learned. John Wiley & Sons.

- Bhagat, K. K., Chang, C. N., & Chang, C. Y. (2016). The impact of the flipped classroom on mathematics concept learning in high school. *Journal of Educational Technology & Society*, 19(3), 134-142.
- Chen, L., Chen, T.L., & Chen, N.-S. (2015). Students' perspectives of using cooperative learning in a flipped statistics classroom. *Australasian Journal of Educational Technology*, *31*(6), 621–640.
- Chen, Y., Wang, Y., Kinshuk, & Chen, N.-S. (2014). Is FLIP enough? Or should we use the FLIPPED model instead? *Computers & Education*, 79, 16–27.
- Driscoll, M. (2002). Blended learning: Let's get beyond the hype. *E-learning*, 1(4), 1-4.
- Foldnes, N. (2016). The flipped classroom and cooperative learning: Evidence from a randomized experiment. *Active Learning in Higher Education*, 17(1), 39–49.
- González-Gómez, D., Jeong, J. S., Airado Rodríguez, D., & Cañada-Cañada, F. (2016). Performance and perception in the flipped learning model: An initial approach to evaluate the effectiveness of a new teaching methodology in a general science classroom. *Journal of Science Education and Technology*, 25(3), 450–459.
- Graham, C. R. (2006). Blended learning systems. *The handbook of blended learning: Global perspectives, local designs, 1,* 3-21.
- Hardin, B. L., & Koppenhaver, D. A. (2016). Flipped professional development: An innovation in response to teacher insights. *Journal of Adolescent & Adult Literacy*, *60*(1), 45-54.
- Huang, Y. N., & Hong, Z. R. (2016). The effects of a flipped English classroom intervention on students' information and communication technology and English reading comprehension. *Educational Technology Research and Development*, 64(2), 175-193.
- Khanova, J., Roth, M. T., Rodgers, J. E., & McLaughlin, J. E. (2015). Student experiences across multiple flipped courses in a single curriculum. *Medical education*, *49*(10), 1038-1048.
- Moraros, J., Islam, A., Yu, S., Banow, R., & Schindelka, B. (2015). Flipping for success: Evaluating the effectiveness of a novel teaching approach in a graduate level setting. *BMC Medical Education*, *15*(27), 1–10.

- Nguyen, B., Yu, X., Japutra, A., & Chen, C.-H. S. (2016). Reverse teaching: Exploring student perceptions of "flip teaching". *Active Learning in Higher Education*, *17(1)*, 51–61.
- Osthoff, E., Clune, W., Ferrare, J., Kretchmar, K., & White, P. (2009). Implementing immersion: Design, professional development, classroom enactment and learning effects of an extended science inquiry unit in an urban district. *Wisconsin Center for Educational Research*.
- Rossett, A. (2002). The ASTD e-learning handbook.
- Sage, M., & Sele, P. (2015). Reflective journaling as a flipped classroom technique to increase reading and participation with social work students. *Journal of Social Work Education*, *51(4)*, 668–681.
- Singh, H., & Reed, C. (2001). A white paper: Achieving success with blended learning. Centra software, 1, 1-11.
- Slomanson, W. R. (2014). Blended learning: A flipped classroom experiment. *J. LegaL educ.*, *64*, 93.
- Staker, H., & Horn, M. B. (2013). Blended Learning in the K12 Education Sector. *Blended learning: Research perspectives*, 2, 287-300.
- Wang, Y. H. (2016). Could a mobile- assisted learning system support flipped classrooms for classical Chinese learning? *Journal of Computer Assisted Learning*, 32(5), 391-415.
- Wanner, T., & Palmer, E. (2015). Personalising learning: Exploring student and teacher perceptions about flexible learning and assessment in a flipped university course. *Computers & Education*, 88, 354–369.