

## Editorial

---

### Qiyun Wang\*

Learning Sciences and Technologies Academic Group,  
National Institute of Education,  
Nanyang Technological University,  
1 Nanyang Walk,  
Singapore 637616, Singapore  
Email: qiyun.wang@nie.edu.sg  
\*Corresponding author

### Hongtao Yu

Inner Mongolia University for Nationalities,  
996 Xilamulun St, Tongliao,  
Inner Mongolia 028000,  
China  
Email: 111yuhongtao@163.com

**Biographical notes:** Dr. Qiyun Wang is an Associate Professor in the Academic Group of Learning Science and Technologies at National Institute of Education, Nanyang Technological University, Singapore. His research interests include social media for teaching and learning, online learning, web 2.0 tools, web-based learning environment design and interactive learning.

Hongtao Yu is an Associate Professor of the Inner Mongolia University for Nationalities, China. His research interests include blended learning, online learning, and technology-enhanced learning environment design.

---

## 1 Introduction

This special issue is about instructional ‘design for blended learning’. In recent years, blended learning (or hybrid learning, mixed learning) has attracted much attention of researchers and educators. Blended learning often takes the form of combining both face-to-face teaching and online learning together or replacing a portion of the traditional classroom teaching with online learning (Kuo et al., 2014). By combining the benefits of online learning and face-to-face teaching, blended learning does not only address the constrain of fixed time and space associated with classroom learning but also has greater potentials for engaging students and improving their learning outcomes (Means et al., 2010). It has become a norm in higher education. However, simply blending online learning with classroom teaching does not automatically produce better learning outcomes. Deliberate instructional design, implementation and evaluation are crucial for a blended learning environment to be effective.

## 2 An overview of the articles

In this special issue, eight articles about how to effectively design and implement blended learning environments in various settings are included. In the first article, written by Sun and Qiu, a blended learning model in college English teaching applicable in China EFL class environments is proposed, and a case study was conducted to investigate its effectiveness. The participants of the study perceived the model to be useful and helpful for improving their English proficiency. In addition, it was found that the participants in the experimental class received higher scores for their post-test at the end of the study. Further modifications were made to the model, and suggestions and implications were also provided.

In the second article, Yao studies the influence of a blended learning environment on English acquisition and the factors affecting Chinese adult students' English acquisition. Results show that the blended learning environment could help learners overcome anxieties and cultivate autonomous learning abilities. In addition, those with better academic performance in English acquisition had low levels of anxieties and strong autonomous learning abilities. They used more learning strategies and they were willing to seek academic help. While those with lower academic performance in English acquisition had high degrees of anxiety, they were reluctant to ask others for help when they encounter problems or difficulties; and they did not know how to choose individual learning strategies and were generally weak in self-learning abilities.

In the third article, Wang proposes a set of blended learning modes which integrate online judge into computer programming courses. In this article, he first describes design ideas of the blended learning mode in a learning environment, including resources, learning contents and forms and learning evaluation. Then he takes the C programming language course as an example to elaborate practical measures of blended learning. The comparative experiments show that the application of the mode has improved significantly in the knowledge points, the amount of codes and test scores of students than traditional methods. The application of the blended learning model based on the online judge system in programming courses plays a positive role in students' programming, logical thinking, research and innovation capabilities.

In the fourth article, written by Liu, a flipped classroom model was applied in a blended learning environment at a university. This study found that the flipped classroom model was feasible and effective, and it could effectively improve students' learning interest, self-directed learning competence, collaborative learning competence and practical capacity. However, this study also identified that not all instructional contents were suitable for flipping and only certain content were appropriate for a flipped classroom to use.

In the fifth article, written by Jia, a framework was established for studying the teaching model of blended learning. The course of college English listening was selected to exemplify the implementation of blended learning. Results show that the experimental class well mastered the main English listening strategies and could make use of them in the listening test skillfully. He also found that it was necessary to obtain abundant teaching resources suitable for online independent learning; students tended to make insufficient psychological and learning skill preparations for network teaching and the evaluation method should also be changed accordingly when network teaching is adopted.

In the sixth article, Xu and Zhou study on the mode and factors of blended learning in a public course at a university. In this study, they designed the course and tested it out in the university and collected data through a questionnaire, interviews and other methods. They suggested that teachers needed to pay high attention to students' participation in the curriculum construction of practical courses and also to emphasise the development of good learning habits in theoretical learning.

In the seventh article, Li presents a blended design model for the English teaching methodology course guided by the theory of constructivism and offers specifications of its implementation and learners' results. This study found that the learners actively involved in the teaching practice, and the theories taught in a blended learning context were taken up in mind in a more natural way. The blended learning environment also created more opportunities for learners to work out various teaching designs in a collaborative way. Moreover, the learners liked the way of self-paced individual learning, in which they could regulate their learning process according to their needs. Guided by the theory of constructivism, learners gained more abilities in the blended learning context.

In the last article, written by Wang, Quek, and Zhong, 25 empirical studies published in recent years were reviewed to investigate what instructional activities in online courses require teachers to spend a great amount of time on than in classroom teaching, what factors affect their time commitment and what strategies can be used to reduce their time investment but without compromising the quality of online courses. Results show that teachers often spend a large quantity of time communicating with individual students, participating in and grading of online discussions, and preparing and maintaining online courses. The primary factors affect teachers' time commitment in online courses include class size, communication, and institutional support. Strategies for balancing students' learning outcomes and reducing teachers' time investment are summarised.

### 3 Summary

Among the included articles, seven are empirical studies and one is a meta-analysis of the literature. Four studies were conducted in the subject of English, two in the subject of educational technology and one in the computer science. Seven articles were written by Chinese researchers and one by Singaporean experts. This special issue covers a variety of articles from different subjects. Hopefully, by reading the articles, readers can gain experiences of how to effectively design and implement blended learning environments to improve teaching and learning.

### References

- Kuo, Y.C., Belland, B.R., Schroder, K.E. and Walker, A.E. (2014) 'K-12 teachers' perceptions of and their satisfaction with interaction type in blended learning environments', *Distance Education*, Vol. 35, No. 3, pp.360–381.
- Means, B., Toyama, Y., Murphy, R., Bakia, M. and Jones, K. (2010) 'Evaluation of Evidence-based Practices in Online Learning: A Meta-analysis and Review of Online Learning', *Center for Technology in Learning*, U.S. Department of Education. Retrieved from: <http://www.ed.gov/about/offices/list/oepd/ppss/reports.html> (access May 10, 2015).