GUEST EDITORIAL PREFACE

Special Issue on "Massive Open Online Courses (MOOCs)"

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1. INTRODUCTION

Online learning is the fastest-growing education system. One of the recent popular innovations is the massive open online course (MOOCs). Since 2008, numerous MOOCs have been run by public and elite universities. Recently, Stanford, MIT, Harvard, and other universities have embraced the MOOCs format through significant resource allocation. MOOCs are not solely confined to elite US universities, as the format is now offered by institutions and education systems around the world. While MOOCs are beginning to burgeon in the higher education space, research in the area is still very limited. For educators, learning designers, and university administrators, making decisions around MOOCs design and deployment can be difficult given the lack of published research. For the aforementioned reasons, this special issue intends to give an overview of the state-of-the-art of issues and solution guidelines for the Advanced E-Learning Technologies. In addition, it will provide completing the panorama of

current research effort, which is widely inherent to topics of high interest for this special issue. In this special issue, we accept five high-quality articles. These papers illustrate the research trend in the field of MOOCs. We address the detail in the following article overview section and finally conclude this special issue.

2. ARTICLE OVERVIEW

In the first journal article, Barbara Moissa, Isabela Gasparini, and Avanilde Kemczinski proposed the paper entitled "A systematic mapping on the Learning Analytics field and its analysis in the Massive Open Online Courses context". This study aims at surveying existing research on LA to identify approaches, topics, and needs for future research. A systematic mapping study is launched to find as much literature as possible. The 127 papers found (resulting in 116 works) are classified with respect to goals, data types, techniques, stakeholders and interventions. Despite the increasing interest in field, there are no studies relating it to the Massive Open

Online Courses (MOOCs) context. The goal of this article is to present the systematic mapping on LA and after authors analyze its findings in the MOOCs context. As results they provide an overview of LA and identify perspectives and challenges in the MOOCs context.

In the following article entitled "Auto Grouping and Peer Grading System in Massive Open Online Course (MOOC)", written by Yi Chiou and Timothy K. Shih addressed that they developed an online learning platform and improve the existing methods of peer grouping and peer assessment, to promote the concept of MOOCs. E-learning is a progressive way of learning through online courses. Instructors pass information to learners via context and videos embedded in active webpages, so that learners intake knowledge of what they need. Now e-learning is not simply providing course materials, while the trend of Massive Open Online Courses(MOOCs) is recently applied widely, the concept of flipped classroom is well deployed everywhere. Courses are designed more practical, suitable, and problem-solving inclined. By this way, learners' learning effectiveness and learning motivation are triggered.

The third article contributed by Qing-Guo Zhou, Shou-Chao Guo and Rui Zhou, this paper entitled "Investigation about Participatory Teachers' Training Based on MOOC", proposed collaborative teachers' training model with analysis and argumentation on theory, performance and learning support both inside and outside the classroom, aiming for a reference for every education trainers. In consideration of shortcomings of general teachers' training module, such as less chance, inefficiency, theory-practice gap and short duration, authors expounds the concept and process of teachers' training module based on MOOC, discusses how MOOC platform promote collaborative teachers' training development and improve teachers' training methods and other issues in this paper.

In the fourth paper, "Project Based Case Learning and Massive Open Online Courses" written by Bo Jian and Cheng Yang. In this article, they provide a new approach to massive open online course: project based case learning. Although there are many online teaching websites, such as Coursera and Edx, most of the courses are video based, that is, students learn knowledge through watching lecture videos. This method may apply to theoretical subjects, but for engineering courses, since they have strong practical background, watching videos is not an effective way for these courses. In order to solve this problem, this article offer new approach This project based case learning method uses "learning-by-doing" as a central theme and E-learning as a carrier. Compared with video based learning, this new method is a combination of theory and practical operation that enable the students to master the knowledge in engineering subjects more thoroughly and profoundly

In the last piece of the article, "Exploring the Effectiveness of Self-Regulated Learning in Massive Open Online Courses on Non-Native English Speakers" proposed by Liang-Yi Chung. This study aims to offer some insight into self-regulated learning strategies of non-native English speakers taking MOOCs, so relevant instructors can subsequently provide more suitable and effective learning methods. For learners worldwide, MOOCs offer a wealth of online learning resources. However, such a diversified environment makes the learning process complicated and challenging. To achieve their objectives, learners need to adapt regulation strategies based on different situations in the process, which is called self-regulated learning. Previous research findings emphasize that self-efficacy is one of the key factors that influences self-regulated learning. It is evident that there is a positive and significant correlation between non-English learners' self-efficacy and self-regulated learning in MOOCs; the higher the English self-efficacy, the better use of self-regulated learning strategies.

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As the guest editors, we would like to express our appreciation to all contributing authors and reviewers for their time and effort in preparing this special issue. We would like to thank the IJEDT Editor-in-Chief, Maiga Chang, for his assistance and guidance. We hope that the research findings in this special issue will help and encourage further research in e-learning and in education using new techniques.

Jason C. Hung is an Associate Professor of Department of Information Technology at Overseas Chinese University, Taiwan, ROC. His research interests include Multimedia Computing and Networking, e-Learning, E-Commerce, and Agent Technology. From 1999 to date, he was a part time faculty of the Computer Science and Information Engineering Department at Tamkang University. Dr. Hung received his BS, MS, and Ph.D. degrees in Computer Science and Information Engineering from Tamkang University, in 1996, 1998 and 2001. Dr. Hung has published over 120 papers and book chapters, as well as participated in many international academic activities, including the organization of many international conferences. He is the founder of International Workshop on Mobile Systems, E-commerce, and Agent Technology and International Conference on Frontier Computing. He is also the Associate Editor of the International Journal of Distance Education Technologies. In 2013, He is a Fellow of Future Technology Research Association International (FTRA) and serves as Hon Treasurer of IET Taipei LN. In April of 2014, he was elected as Fellow of the Institution of Engineering and Technology (FIET).

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