The Construction of Blended Online/Offline (O2O) Course of the "Introduction to E-commerce"

Qiongwei Ye[1, a], Yingxuan Xu[1], Yumei Luo[2, b]*

[1] Business School, Yunnan University of Finance and Economics, Kunming 650500, China

[2] College of Business and Tourism Management, Yunnan University, Kunming 650021, China

[a] yeqiongwei@163.com, [b] uoyumei@ynu.edu.cn

*The corresponding author

Keywords: Introduction to E-commerce; Curriculum construction; Blended online/offline (O2O) courses

Abstract. In order to help colleges and universities' e-commerce majors to cultivate e-commerce talents who are equipped with both ICT and the competence on business model innovation for enterprises and society. After years-experience on curriculum construction and with rich teaching resources accumulated, this research explored a series of effective teaching methods and analyzed how to construct blended online/offline (O2O) course of "Introduction to E-commerce" with complete teaching system and significant teaching effects. The discussion covers teaching design ideas, teaching methods, teaching effect evaluation and etc.

1. Introduction

1.1. Current situation of "Introduction to E-commerce" course construction

E-commerce stems from the development of Internet and communication technology (ICT), its penetration into business sectors, and the demand for economic development [1]. The course of "Introduction to E-commerce", as a guide course on professional basics, plays an important role in e-commerce curriculum. Feng Yuhui explored the construction of traditional e-commerce teaching system and put forward a main framework fore-commerce curriculum system [1].Wang Wei and Jia Shaohua discussed the construction of e-commerce entrepreneurship courses and proposed to build an open curriculum system by changing teaching subjects and breaking the closed traditional education model [2]. Zheng Shengying studied the reform of e-commerce courses under the background of mass entrepreneurship and innovation, summarized the issues and solutions of traditional e-commerce curriculum construction, and proposed the importance of practice in e-commerce curriculum [3]. Zhao Songbo believes that "E-commerce Theory and Practice" as a compulsory course, should be equipped with new online teaching platforms based on the design concept and course content of massive open online course (MOOC) platforms. The platforms should shift their minds to be more positive and try to meet students' needs through real-time comments and phrase testing. The platform should conform to the trend of information era and lay a solid foundation for the talent reserve of e-commerce industry [4].

However, there are few researches on the blended online/offline (O2O) curriculum system of "Introduction to E-commerce".

1.2. Online Open Courses in China

In recent years, the rapidly developing MOOC has become a focus of attention [5].From 2011 to 2016, the number of online open courses at North Carolina Central University (NCCU) increased by 60%[6]. In 2018, China announced list of 801 recommended online courses recognized by the Department of Higher Education of the Ministry of Education (MOE), and there are 2564 courses available on iCouse163.org, a major MOOC platform in China. The platforms built by universities have also started a prairie fire, igniting a large system of online open courses in China [7].

Since 2010, the MOE has been paying close attention to the development of online open courses represented by video open classes and MOOC. The MOE organized delegations to investigate the

  DOI: 10.25236/ic3er.2019.072

MOOC provided by overseas universities and the construction status of MOOC platforms around the world, and actively promoted the large-scale discussion on the reform of higher education in regard to online open courses. Based on years teaching reform, recommended courses and construction of excellent open courses, through in-depth investigations, special studies, extensive discussions and pilot programs in high-level universities, a consensus has been reached that MOOC construction in China should take a road consistent with national conditions. We need to satisfy the demand on personalized development and diversified life-long learning and build an open online curriculum system with Chinese characteristics based on self-improvement and sharing[8]. Meng W discussed the path of improving teaching quality in private colleges and universities in the context of open online curriculum construction [9].

With the development of open online courses, the course of "Introduction to E-commerce" should build an online open course system based on its traditional course forms, improve and reform curriculum system, so as to better conform to national education policies, share high-quality teaching resources, and promote the reform of e-commerce curriculum system in colleges and universities.

2. Current Issues in the Construction of "Introduction to E-commerce"

Many colleges and universities in China have started MOOC on e-commerce. However, most of the courses are still at the superficial stage, failing to form a closed loop of online/offline (O2O) courses to achieve better teaching effects. At present, there are mainly the following issues in the online/offline (O2O) course construction of "Introduction to E-commerce":

2.1. Incomplete transformation of teaching concept

In fact, in the traditional model, "teaching" by teachers and "learning" by students occurred simultaneously. However, "teaching" and "learning" are two separate processes in logic. Equipped with ICT, there are more possibilities for the exploration of "teaching" and "learning" [10]. The existing traditional concept of "teaching" has many limitations.

2.2. Vague teaching design

Traditional teaching design of the offline course of "Introduction to E-commerce" is not applicable to the blended online/offline (O2O) learning. There will be issues such as unclear logic and repeated content during the course blend, which will lead to the underperformance of blended online/offline (O2O) learning and fail to achieve the effect of 1+1>2, the ideal teaching results of blended online/offline (O2O) courses.

2.3. Lack of innovation in teaching methods

MOOC make the learning process more flexible, facilitating the popularization of high-quality educational resources. However, during this process, the responsibilities of regularizing and managing learners are transferred from teachers to individual learner [11]. Existing teaching methods lack thoughtful exploration and innovation in fully mobilizing learning initiative. Meanwhile, in the empirical researches of Jennifer D. [12], Kun Li[13], and Crues R.Wes [14]on the fairness of MOOC proved that MOOC did not achieve ideal teaching effects.

2.4. Imperfect curriculum system

"Introduction to E-commerce", as a blended online/offline (O2O) course, requires a self-contained teaching process. However, at present, the online/offline (O2O) teaching environment and the evaluation on teaching effects still need improvement.

3. Construction Initiatives to E-commerce Blended Course

3.1. Teaching Concept transformation

An objective and practical concept is the starting point of teaching practice. In traditional teaching process, "teaching" and "learning" are closely combined. While in online courses, "teaching" and "learning" are two separate processes. Therefore, for the blended online/offline (O2O) courses, the relationship between "teaching" and "learning" should be specified that the separation of teaching and learning does not mean teacher-domination. In the course of

“Introduction to E-commerce”, a teaching concept should be erected that 1)“teaching” and “learning” are separated; 2) there is no domination between “teaching” and “learning”; and 3) “teaching” and “learning” occur simultaneously.

3.2. Teaching design ideas

For the course of “Introduction to E-commerce”, the design of teaching content is divided into three stages: 1) to instruct students on the theory of e-commerce and propose a business model combining business intelligence (BI) and e-commerce [15]; 2) to cultivate innovative thinking of e-commerce application. In this stage, the major theories and development trend of e-commerce are revealed by deeply exploring real cases in the teaching form of “Theory + Case + Analysis”; 3) to combing theory and practice through project teaching. The innovation of ICT-based business model runs through the development and evolution of e-commerce, which stimulates students' curiosity and learning enthusiasm on e-commerce model innovation and entrepreneurship planning and practice. The overall teaching ideas are shown in Figure 1.

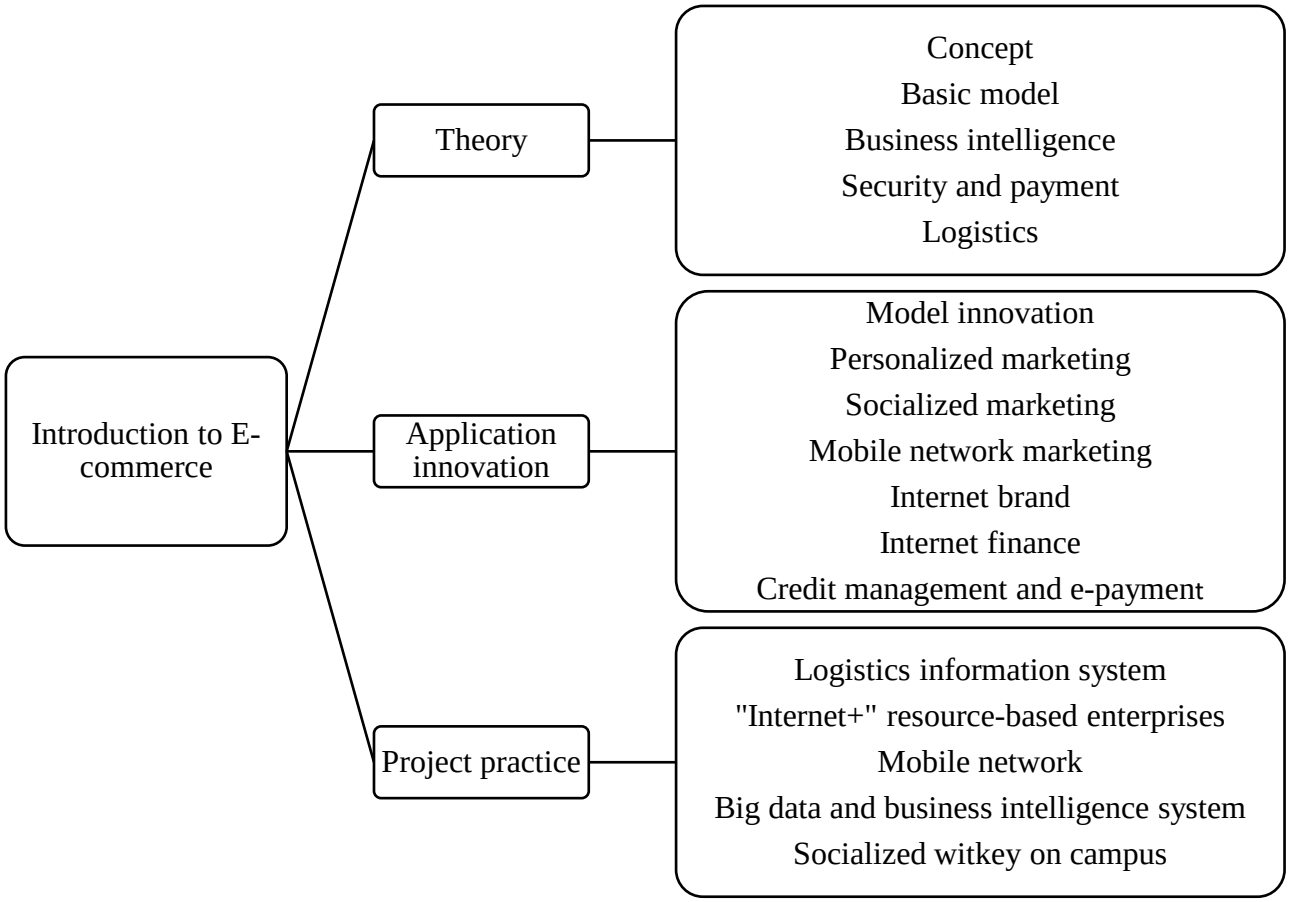

Figure 1. E-commerce Teaching Content and Ideas

The arrangement of teaching contents should be logical and rational for blended online/offline (O2O) courses. On the one hand, the teaching content for online and offline learning should be clearly distributed with definite priority. Theory can be instructed in the form of online courses to improve learning efficiency through online interaction between teachers and students. Project practice is arranged offline with real-time on-site communication, facilitating teachers’ instruction. On the other hand, the mapping of practice to theoretical knowledge should be strengthened, so as to achieve the perfect integration of theory and practice and create a closed loop of online/offline (O2O) teaching.

3.3. Teaching methods

Good teaching methods bring better teaching effects with less effort. The emphasis on stimulating learners’ initiative is of great importance due to the students’ low motivation on self-

directed MOOC learning. Therefore, “Introduction to E-commerce” should adopt the teaching methods of: teacher instruction, MOOC self-directed learning, case study, onsite Q&A, field practice, simulation operation and interdisciplinary integration. In the whole teaching process, multimedia courseware with vivid images and strong operability is used to assist teaching, increasing the intuition and vividness of teaching. Meanwhile, flipped classroom is adopted to change the traditional teacher-dominated teaching model. A variety of teaching methods, such as task-driven, project-oriented, heuristic, discussion-based and case-based teaching method are adopted to realize interactive teaching and mobilize students' learning enthusiasm and initiative.

Meanwhile, CREAM and Project-Based Learning (PBL) are promoted among students. The brand-new CREAM represents creative, reflection, effective, active, and motivated [16].PBL is a learning mode emphasizing students' self-directed learning, online learning and problem-based learning [17].The combination of scientific and effective learning methods by students and targeted teaching methods by teachers both lead to better teaching effects.

3.4. Construction of Online/Offline (O2O) Teaching Environment

Based on the above teaching ideas and methods, the teaching environment construction of “Introduction to E-commerce” follows the principle of blended online/offline (O2O) teaching environment. Offline teaching is not only limited to traditional multimedia classrooms, but also includes virtual simulation experiment centers. In addition, according to the teaching content, students should be provided with practice environment, such as teaching practice bases. Offline teaching should emphasize e-commerce scenarios by cooperating with enterprises to arrange visit and training, internship and employment after graduation, so as to comprehensively cultivate students' practical capability and improve the quality of practical teaching.

Online teaching environment should also be diversified and not limited to MOOC, such as online communities for learning communication, online teacher-student interaction platforms and online courses extensions, which is to cooperate with other learning platforms in sharing high-quality teaching and learning resources. Online teaching environment should make full use of online resources and collect and analyze students’ data through data mining, so as to summarize focal and difficult teaching points, analyze students' learning situation, and design personalized learning plans in an intelligent way.

3.5. Evaluation of teaching effects

Different from traditional courses, the teaching effect evaluation of blended online/offline (O2O) courses includes both the overall effects and online/offline (O2O) teaching effects.

3.5.1. Offline

To reinforce learning assessment at ordinary times, weaken the emphasis on paper exams, and strengthen the organic combination of process evaluation and course examination. The teaching aim is to improve students' professional competency, with theoretical knowledge playing a partial role. Therefore, the offline learning assessment should focus on both examinations and practical abilities. However, due to the difficulties of quantifying students' practical abilities, the method and standard of evaluating teaching quality in regard to students’ practical ability should be considered. In addition, self-evaluation and peer-evaluation, especially process-oriented evaluation, should be provided.

3.5.2. Online

As a forerunner of online education, the education department of the US attaches great importance to the quality of online education. The US certification authority of online education quality is composed of regional certification authorities, online learning alliances, quality matters (QM) and distance education training committee, forming a sound system of quality certification. Among them, QM draws much attention due to its well-equipped evaluation standard and effective guidance on curriculum construction. Many online curriculums taken QM as the guidance [18].Different from traditional evaluation methods which emphasizes “teaching results”, QM pays more attention on the “learning process” and sets specific requirements from eight aspects, namely course overview and introduction, learning objectives, evaluation and assessment, teaching resources, curriculum activities and learner interaction, curriculum technology, learner support and

barrier-free curriculum environment [19]. The theory of QM provides a new idea for teaching quality evaluation. Schools can evaluate teaching quality and effects from various aspects based on QM.

3.5.3. Overall evaluation of teaching quality

Teaching is always student-oriented. Therefore, teaching quality should not only be evaluated based on students' learning effects from teachers' views but also on the teaching implementation from students' perspectives. In addition to the online/offline (O2O) evaluation of teaching quality mentioned above, attention should also be paid to students' feedback on teaching implementation. Teachers should reflect on and improve teaching based on the feedback, thus forming a virtuous circle of mutual promotion between teachers and students.

4. Conclusion

As a blended online/offline (O2O) course, "Introduction to E-commerce" has more difficulties in curriculum construction compared with traditional offline courses. The current blended online/offline (O2O) courses do not make full use of ICT, such as the design of personalized learning schemes based on the big data analysis of students' online behaviors, which is also the direction of our future research. Meanwhile, we also expect more researches based on the curriculum construction of "Introduction to E-commerce", promoting the construction of blended online/offline (O2O) courses.

Acknowledgment

This research was supported by the National Natural Science Foundation of China under Grant (71402159, 71362016), Yunnan Province Young Academic and Technical Leader candidate Program (2018HB027), Yunnan Science and Technology Fund (2017FA034, 2014FB116), Yunnan Provincial E-Business Entrepreneur Innovation Interactive Space (2017DS012) & Kunming Key Laboratory of E-Business and Internet Finance (2017-1A-14684, KGF[2018] 18), Educational and Teaching Reform Fund of Yunnan University (2019), Yunnan Provincial E-Business Innovation and Entrepreneurship Key Laboratory of colleges and universities (YES 2014 [16]), and the Prominent Educator Program (Yunnan [2018]11).

References

[1] Feng Yuhui. The characteristics of e-commerce specialty and the construction of its curriculum system [J]. Journal of Yunnan University of Finance and Economics, 2004(S1) 333-337.

[2] Wang Wei, Jia Shaohua. On the Construction of E-commerce Entrepreneurship Course System [J]. Vocational & Technical Education Forum, 2011(35)74-75+78.

[3] Zheng Shengying. Research on the Reform of "E-commerce" Course in Higher Vocational Education under the Background of Innovation and Entrepreneurship [J]. E-Business Journal, 2019(08)71+94.

[4] Zhao Songbo. E-commerce foundation and MOOCs platform construction [J]. Modern Marketing (Information Edition), 2019(04)201.

[5] Lowenthal P, Hodges C. In Search of Quality: Using Quality Matters to Analyze the Quality of Massive, Open, Online Courses (MOOCs) [J].The International Review of Research in Open and Distributed Learning, 2015 (5) 83-100.

[6] Gail P Hollowell, Racheal M Brooks, Yolanda B.Anders. Course Design, Quality Matters Training, and Student Out-comes [J]. American Journal of Distance Education. 2017(3) 207-216.

[7] Pan Xiaoyan, Jiang Jiaqiong, Mo Lan, Zeng Weike, Deng Siqi. A Comparative Study on the "Quality Matters Rubric Standards" in the U.S. and the Evaluation Index System of Excellent

Online Open Course in China [J]. Journal of Educational Science of Hunan Normal University, 201918(03)105-110.

[8] Zhang Daliang. Promoting the deep integration of modern information technology and education and teaching in colleges and universities – speech summary at the seminar on teaching reform of basic courses [J]. China University Teaching, 2016(07)6-11.

[9] Wu Meng. A Path for Private Colleges and Universities to Improve Teaching Quality against the Background of Open Online Course Construction. Proceedings of the 2nd International Conference on Contemporary Education, Social Sciences and Ecological Studies (CESSES 2019). 2019.

[10] Yu Dengke. Exploration on teaching mode of graduate student methodology based on online learning community [J]. Academic Degrees & Graduate Education, 2016(04)12-17.

[11] Xu Ming, Long Jun. The Exploration on Network Information Security Series Courses Based on MOOC Paradigm [J]. Journal of Higher Education Research, 2013 36(03)16-19.

[12] Jennifer, D., Haney, C., Atiq, S. Z., et al. Hands-on Engagement Online: Using a Randomized Control Trial to Estimate the Impact of an At-home Lab Kit on Student Attitudes and Achievement in a MOOC [J]. European Journal of Engineering Education, 2019(44) 1.

[13] Li,K. MOOC Learners' Demographics, Self-regulated Learning Strategy, Perceived Learning and Satisfaction: A Structural Equation Modeling Approach [J]. Computers & Education, 2019(132) 25.

[14] Crues, R.W., Henricks, G.M., Perry, M., et al. How do Gen-der, Learning Goals, and Forum Participation Predict Persistence in a Computer Science MOOC? [J] ACM Transactions on Computing Education (TOCE), 2018 (4)7.

[15] Ye Qiongwei, Song Guangxing, Tan Jijiang. Empirical Research on the Application of Business Intelligence in E-Business Enterprises: The Case of YNYY Pharmaceutical Chain Enterprise [J]. Science & Technology Progress and Policy, 201027(21)112-115.

[16] Ren Jiajia, Yu Xiaosheng, Zhang Mengmeng, Bing Han. Construction and teaching practice of provincial top-quality online open course of fresh electronic commerce and cold chain logistics. Proceedings of the 2nd International Conference on Humanities Education and Social Sciences (ICHESS 2019), 2019.

[17] Stella Cottrell. The Study Skills Handbook. Macmillan Publishers Limited, 2008.

[18] Shattuck K, Zimmerman W A, Adair D. Continuous Improvement of the QM Rubric and Review Processes: Scholarship of Integration and Application (2014) [EB/OL]. [2018-12-20]. http: www.Ipsonet.org/images/Westphalia_Press/Internet_Learning_Journal_2-2/3-1/3.% 20Shattuck%20ILJ%203-1.pdf

[19] Course Design Rubric Standards Current Edition Sixth Edition [EB/OL].2018-07-25. https:// www.qualitymatters.org/qa-resources/rubric-standards/higher-ed-rubric.