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OUJ MOOC Platform: A Case Study of a Japanese MOOC Platform

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Abstract

As a founding member of Japan Massive Open Online Course (JMOOC, http://www.jmooc.jp/ en/) Consortium, the Open University of Japan (OUJ) opened two MOOCs as the first releases from JMOOC. One of the courses was "NIHONGO STARTER (Japanese primer)" for the starter (A1) level of Japanese language education, which was based on a CEFR (Common European Framework of Reference for Languages)-oriented curriculum standard developed by the Japan Foundation (JF); another was "Computer system: A primer", which was remixed from an OUJ regular course. The OUJ MOOC platform is one of the three official platforms approved by JMOOC and powered by "CHILO Book" system, which a Japanese NPO, CCC-TIES, developed. It was constructed by mash-up technologies of multimedia e-textbooks, LMS and SNSs. It was consisted of iBook or e-pub packaging (e-books), Facebook (registration and learner community), YouTube (video delivery), Moodle (LMS) and Mozilla Open Badge (evaluation).In this presentation, the characteristics of the system and preliminary evaluation in the pilot experiment will be introduced.

Keywords: MOOC, e-textbook, LMS, learning metrics and analytics, open education, lifelong learning, OER, OCW, CEFR, Japanese language education

Background

In 2013, MOOCs (Massive Open Online Courses) was grown up into a social trend in Japan. Japanese top-class universities started MOOCs by joining international consortia that is, Coursera and edX. After the discussions at various meetings and seminars, Japanese stakeholders shared the social needs and visions and launched Japan Massive Open Online Course (JMOOC, http://www.jmooc.jp/en/) in November 2013. As of the establishment of JMOOC, they had already examined the essentials and fruits and started discussions for post (x) MOOCs in the North America. We also learned their lessons and adopted the features of xMOOCs (e.g. big data and learning analytics, mentor support functions and the respects on spontaneous learning activities in learner community, the use of flipped classroom and e-textbook, prospects on sustainable business models) in looking for the differential features from the precedents. One of our features is to accept multiple platforms. While MOOC platforms contain many innovations, all of the elements were not developed from the scratch. Our platform providers reused each original component when collaborating inthe development of entirely new components. So, we may have potentiality for "joint MOOC" platforms. Another feature was to have collaborative frameworks between academia and industries. We had also the history of OER

more than ten years. However, the movements still remained inside academia and the numbers of members and registered OCWs stopped the increases. We expect MOOCs will find new social roles and sustain the position in Japanese open education.

The Open University of Japan (OUJ) is supported by the Bureau of Lifelong Learning Policies under the Ministry of Education, Culture, Sports, Science, and Technology (MEXT) as the national center for lifelong learning and open education in Japan (cf. Yamada & Yoshida, 2010). From the establishment in 1983, OUJ has broadcasted educational programs free of charge over terrestrial/ satellite TV and radio stations. As a unique open university in Japan, OUJ launched "OUJ Open Courseware (OUJ-OCW)" in 2010 and opened some of the broadcasting courses via Internet streaming (17regular courses, 8special lectures and 50+ sample lessons available as of June 2014). In addition, OUJ launched Japan Massive Open Online Course Consortium (JMOOC) with other Japanese leading universities and corporates.

OUJ-MOOC Curricula and Content

We have developed two initial MOOCs in order to launch on 14th April 2014 (Table 1). "NIHONGO STARTER (A1)" was a course for non-native speakers of Japanese who are preparing to study in Japan. International students can learn basic Japanese at the course, which takes up various topics and scenes that students may encounter when they stay in Japan. The leading part was an international student at a science and technological university. However, because the content is basic, it also applies to those studying in other areas or to general users. The curriculum was based on the JF Standard for Japanese-Language Education. The Standard was developed by the Japan Foundation and has common definitions for 6 levels of language proficiency with CEFR (Common European Framework of Reference for Languages). The course was based on the coursebook, "Marugoto: Japanese Language and Culture (Starter A1). "Computer System" (Prof. Yoichi Okabe) was developed using the course materials of his official TV broadcasting course of OUJ. The syllabus is open at the homepage of OUJ (in Japanese, http://www.ouj.ac.jp/hp/kamoku/H26/kyouyou/B/joho/1570102.html).

| Courses | Authors / Lecturers | Characteristics |
|--|---|--|
| NIHONGO STARTER (A1 level of Japanese language) | OUJ-JF NIHONGO STARTER Project Team (Principal Investigator: Tsuneo Yamada, OUJ) | Short Course (10 lessons) English version 2 Lessons/week Pilot subject |
| Computer System | Yoichi Okabe (OUJ) | Regular Course (15 lessons) Japanese version Based on OUJ broadcasting subject |

Table 1 OUJ MOOCs provided at the JMOOC opening on 14th April 2014

Details of "NIHONGO STARTER (A1)"

The course was a short course of five weeks. It consisted of 10 lessons and each lesson consisted of 2-4 "Can-do". The estimated learning time of a lesson was 45 minutes.

| Lesson | Title | Can-do |
|--------|--|---|
| 1 | Hello Konnichiwa | Exchange greetings Recognise Japanese characters |
| 2 | Would you say that again? Moo ichido onegaishimasu | Use basic classroom expressions Write your name and country in Japanese |
| 3 | Nice to meet you. Doozo yoroshiku | 5) Give a simple self-introduction6) Recognise the parts of a business card |
| 4 | There are three people in my family Kazoku wa san-nin desu | 7) Talk briefly about your family8) Tell someone about your family, using a family photo |
| 5 | What kind of food do you like? Nani ga suki desu ka | 9) Talk about your favorite foods10) Offer someone a drink11) Talk about your breakfast |
| 6 | Where are you going to have lunch today? Doko de tabemasu ka | 12) Say what your favorite dish i 13) Talk with a friend about where to go for lunch 14) Read a menu 15) Order food and drinks at a hamburger shop |
| 7 | There are three rooms in my home. Heya ga mittsu arimasu | 16) Say what kind of home you live in17) Say what you have in your home18) Write an e-mail inviting someone to your home |
| 8 | It's a nice room. Ii heya desu ne | 19) Ask/Say where to put things in the room20) Visit/Welcome a friend21) Show someone around your home22) Recognise the name and address on signs |
| 9 | What time do you get up? Nan-ji ni okimasu ka | 23) Say the time you do something 24) Talk about your daily routine |
| 10 | When is convenient for you? Itsu ga ii desu ka | 25) Talk about your schedule for this week26) Talk about when to have a party27) Write a birthday card |

Table 2 A OUJ-MOOC"NIHONGO STARTER (A1)": Content and goals (cf. the Japan Foundation, 2013; Yamada, 2014)

"NIHONGO STARTER (A1)" is for the starter (A1) level of Japanese language learning, which is based on JF Standard for Japanese-Language Education (http://jfstandard.jp/pdf/jfs2010_all_en.pdf) and the coursebook, "Marugoto: Japanese Language and Culture (Starter A1)". Italic shows the lesson title in Japanese.

We planned to have three online classrooms with the same course materials. The period of the Class 1 was from 14th April to 18th May; the Class 2 was from 2nd June to 7th July; the Class 3 is from 4th August to 7th September. Every week, two lessons were delivered.

OUJ-MOOC Platform: An Official JMOOC Platform

The architecture of the OUJ MOOC platform was shown in Figure 1. The OUJ-MOOC platform was powered by "CHiLO Book" system, which a Japanese NPO, CCC-TIES, developed (Hori, Ono, Kobayashi & Yamaji, 2013). It was constructed by mash-up technologies of multimedia e-textbooks, LMS and SNSs. It was consisted of iBook or e-pub packaging (e-books), Facebook™ (registration and learner community), YouTube™ (video delivery), Moodle™ (LMS) and Mozilla™ Open Badge (evaluation).

Considering the diversity of the learners' environments, we adopted two e-book formats (specifically, epub and iBook™) with a LMS (Learning Management System, specifically, Moodle™). Each learner visited one of the online stores to access the e-textbook and studied independently using either epub viewer on Windows™ PCs/Android™ smartphones/tablets, or iBook™ reader on Mac™ PCs/iPhones™/iPads™. The user identification and the interactions among participants were held using social networking services of Facebook™. We consider lifelong learners should be autonomous, manage each own learning process and be co-responsible at least partially for their outcomes. Reflecting both results of the quizzes in each lesson and performance at various social interactions in Facebook™ and in her/his real life, the learner was asked to evaluate their own achievements by marking the "Can-do" check at the end of each lesson. Using the Mozilla™ Open Badge system, we issued a certificate finally. We examined the requirements of the platform usable in developing countries. One of them was to use standalone, that is, without persistent Internet connections because, still in many environments in developing countries, the use of the Internet was limited.

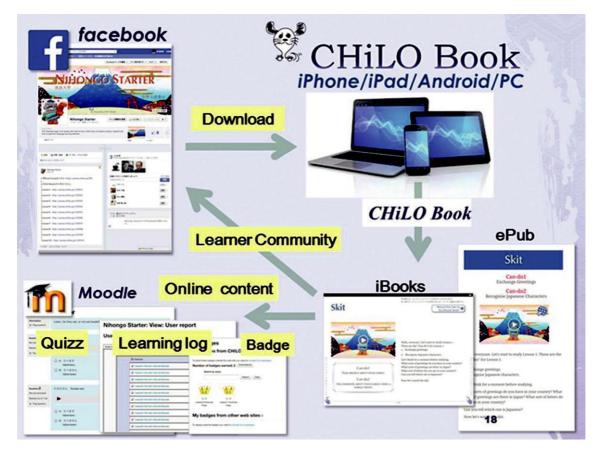


Figure 1 OUJ-MOOC platform system (from "NIHONGO Starter A1" Top Page, https://www.facebook.com/nihongostarter: Yamada, 2014)

Results: An interim report of the Class 1

As of the end of May 2014, the Class 1 closed the course at "NIHONGO Starter A1". Although we need several months to finish the data analyses, we will show a prompt report of the Class 1.

Although we had 1308 of "Likes" (According to "Facebook", the number of "likes" are "the number of people who like their Page") and several thousands of "Reaches" (According to "Facebook", the number of "reach" is "the number of people who were served any activity from your Page including posts, posts by other people, Page like ads, mentions and checkins", the number of the download of the e-textbook (volume 1) was 913 and that of registration to the "group" (that is, "Class 1") was 455. The ratio of the women who liked "NIHONGO Starter" Top page was 56% and the ratio of the men was 44%. The tendency was different from that of all Facebook (46% for women and 54% for men). The age distribution was shown in Figure 2.

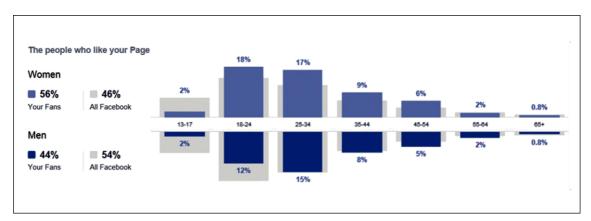


Figure 2 The age distribution of the people who liked "NIHONGO Starter A1" Top Page (Based on the Facebook metrics, https://www.facebook.com/nihongostarter, as of 15th June 2014).

The issues remained

As of May 2014, a variety of MOOC consortia were still emerging in various regions and fields and the essences of the trend, called "MOOC phenomena", have not lost but expanded to various contexts beyond the narrow definition of "MOOC". In addition to the possibilities of "Big Data and learning analytics", the innovation was shown in the relationships with other existing research themes and business areas, such as blended approach (e.g. "flipped classroom"), standards for electronic textbooks (e.g. EDUPUB, http://www.imsglobal.org/edupub/) and course accreditation (cf. Eaton, 2012). We need a variety of the models, which can adapt to diversified academic and user environments, although we may give the new name to the phenomenon in the near future.

The main issues of OUJ-MOOC were 1) the scale of the course and 2) the quality of the instructions as the online courses. We were still running the pilot courses but the number of the registrants was around 850 ("NIHONGO Starter" Class 1 and Class 2, as of June 2014). The number was similar with those of our regular courses of OUJ and far from other major MOOCs. "Gacco" platform of JMOOC, which was managed by NTT groups, also released two Japanese courses in Japanese language but they had over 10 – 20 thousands at the same period. The result showed the difficulties in which we launched non-Japanese language services from Japan and disseminated to the world. We examined the possibilities of the collaborations with more Japanese education organizations and communities and those with MOOC consortia overseas.

The preliminary questionnaire survey suggested the complicated structure of the platform had negative effects. The main content of the course was delivered in a package of e-books (epub™ and iBook™ versions) and learners could use them without the Internet connections. However, when a learner answered the quizzes and self-checks, they had to wait for connecting with Moodle server via the Internet. As we used Facebook™ for the user identification and student supports, learners had to launch a Web browser when they needed Q&A services and community services. In addition, Facebook™ was not available for some of the potential users from geographical and private reasons.

The registered learners could access to the e-textbooks through commercial providers, that is, iTunes[™] and Google Play[™]. While our e-textbooks were free, some providers asked them to personal information, such as credit card information, at joining their own services. Some potential learners could not accept the procedures.

As we are still in the pilot stage, we plan to clarify the technical issues and usability issues and to revise our platform for the next stage.

One of the essential features of MOOCs is to collect and analyze big data and to utilize the results for the customization and optimization of the courses and guidance. However, we have just begun the research on learning metrics and analytics. In the collaborative framework of JMOOC consortium, we will share the knowledge and test bed in participating in the international standardization activities, such as IMS Global Caliper (cf. http://www.imsglobal.org/caliper/) and Tin-Can API (cf. http:// tincanapi.com/). In Japan, data sharing and learning analytics are the most important areas which we should collaborate and concentrate our resources. The legal solution on the use of private data is another issue and some social agreements are indispensable.

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