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Master's Thesis  
Academic Year 2018

Enriching Social Learning Experience on  
FutureLearn Platform for Japanese Rare Book  
Series Courses

Keio University  
Graduate School of Media Design

Siyao Jiang

A Master's Thesis  
submitted to Keio University Graduate School of Media Design  
in partial fulfillment of the requirements for the degree of  
MASTER of Media Design

Siyao Jiang

Thesis Committee:

Professor Keiko Okawa (Supervisor)  
Professor Hiro Kishi (Co-supervisor)  
Professor Sam Furukawa (Co-supervisor)

Abstract of Master's Thesis of Academic Year 2018

Enriching Social Learning Experience on FutureLearn  
Platform for Japanese Rare Book Series Courses

Category: Action Research

Summary

In recent years, online learning platforms have become well-known as an online education approach and been used globally. Online learning platforms help learners choose the courses or content they need or interested in and allow them to create a virtual learning environment in which they can communicate with each other as well as the course development team. This is a type of social learning behavior that can allow students to take the initiative to get new knowledge on their own without direction from tutors.

This paper's research is on enriching the social learning experience for learners taking the Book series course on the social learning platform FutureLearn. We researched as facilitator in the course developing circulation and implemented three actions based on the following approaches: Story telling, Provoking conversation, and Celebrating progress. By designing the supporting material for multicultural-learners who feel a lack of knowledge in cultural background of the course content, we provided continuity between each step in the course using story telling. We also improved how facilitators provided support to learners by encouraging them to provoke conversation using prompts. Finally, we added a quiz at the end of the course to help learners to get feedback from educators. This enriched the learners' social learning experience by celebrating progress. After these actions were taken, learners of the Sino-Japanese Interaction Through Rare Books course were able to experience more from their social learning during the course as well as improve communication with educators, facilitators, and peers from course.

Keywords:

Social learning, Timeline, Innovation, Education

Keio University Graduate School of Media Design

Siyao Jiang

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# Chapter 1

## Introduction

This chapter will discuss about the background of developing of MOOCs and higher education involved, especially the current situation and MOOCs' development in Japan. As well as clarify Keio FutureLearn' s role in the development and goal that this research is contributed to.

### 1.1 Background of MOOC course development

University opens their education content as one of the educational service, which can be regarded as Online University Education is worldwide developing in recent years. In 1997, MERLOT was created by California State University firstly to identify and provide access to online course materials for higher education which are mostly free [12]. Massachusetts Institute of Technology (MIT) stepped on the first as developing online education in 2001. After the develop of a proposal on financially sustainable online course dissemination, MIT and related committee offered their high-quality educational materials to Internet as a result of redefinition of relationship between academic institutions and society that it serves to [19]. In late 2010, America scholars and committees had new strategy on focusing more on promoting open educational resources infrastructure into the education practice in the United States . More movement even involving federal governments had been made to support open education research and the development of open educational services.

Later on, Stanford University started to offer online course to public and was welcomed by learner all over the world. Not only do they open the course contents, but also provide certification for completion of the course. Educational service has been accepted by more people and the concept of open online education has been spread worldwide. In 2012, more institutions and community get involved with providing open education service and Massive Open Online Courses (MOOCs) has

been developed on a big scale. In February 2012, Stanford developed Coursera, and in April 2012, Massachusetts Institute of Technology and Harvard University corporate on launch edX.

MOOCs platforms provide chances for learners all over the world to study more within the higher education. It offers possibility for learners to study same course without the limitation of place, time and as long as they have Internet they can access the courses. This is a revolution on spreading knowledge and disseminate of higher education. The role of universities became more close to the society and is able to contribute more towards people. Besides, joining MOOCs and deliver courses on the Internet can also help on the promotion of universities. By spending the cost in developing course, university can both delivery knowledge and promote themselves to learners worldwide. Instead of join the university in real, and cost on administrative stuff, learners can accept the education content from universities worldwide with various courses they are interested in. Currently, Keio University does not join Coursera nor edX. Tokyo University joined Coursera in February, 2013 and Kyoto University joined edX in May, 2013. The trend of University education currently is not only deliver speech within classroom, but also provide courses on the open massive online platforms, where shares information and knowledge to various learners worldwide.

## 1.2 Japanese MOOCs development

Under the influence of Coursera, edX and other MOOCs platform as well as the trend of online open education, Japan started to join the MOOCs in 2013 and have the committee called JMOOC to administrate and help on developing the online education. Including Tokyo University, Keio University, over 200 of universities and enterprise joined as partner and started to provide first course in April, 2014. With the development of mobile terminal devices, there are more and more Japanese learners choose JMOOCs as one of the method to learn new knowledge. Besides, according to the requirement from company, more salaryman choose online course also to satisfied the need on acquiring new skills [10]. Target learner is the most difference between American developed online learning platform and Japan developed MOOCs platform. American MOOCs organization mainly provide courses for undergraduate and other students for taking more courses as they are interested in, but in Japan, courses are mainly target at assisting self-study and provide knowledge or skills to satisfied work needs. However, with the pop-

ularity of JMOOCs, more and more various learners will come and the structure of learners will change again [9].

As course platform launched by Japan, JMOOCs mainly use Japanese for course content, including course materials from Japanese University or enterprises and educators are mostly talking in Japanese. Japanese have language barriers when facing to the whole world, and only use Japanese limited the promotion on JMOOCs to learners who cannot speak Japanese. As one of the member of JMOOCs also, Keio university wants to provide a more flexible higher education in the future, and spread Japanese culture worldwide. Therefore Keio University chose to cooperate with FutureLearn platform which is founded from British and focused on social learning experience development educational platform. So that working as a subproject in Global Education, Graduated School of Keio Media Design, and started to provide courses not only in Japanese but also in English which is able to deliver courses to learners all over the world.

### 1.3 About FutureLearn Platform

FutureLearn is a private company set up by Open University from 2012 which provide free online courses for learners worldwide. This online learning platform launched first courses in September 2013 and have 144 partners from all over the world. The initial joiners of this platform including twelve top universities from British and mainly known by European universities. [7] [3]

Currently FutureLearn has over 100,000 learners registered from all over the world. To meet the needs from learners and promote higher education, FutureLearn provided courses in a broad range. All of the courses are sort out into 13 different categories and learners join the courses mainly by using course materials such as watching teaching videos, reviewing course related passages, taking quizzes etc. And learners get interactions with each other as well as course developers (professors or tutors) mainly by leaving comments in each courses. Students will get certificate after finishing the course and will have a academic certificate as long as they paid for upgrading the status of course.

The launch of FutureLearn platform provided more education organizations to get access directly to learners worldwide and learners have one more approach to touch high level education. This interaction can enhance the education development and enrich the learning experience for learners worldwide.

### 1.3.1 Keio-FutureLearn Project

Keio University is the only Japanese university running courses on FutureLearn platform. Simultaneously, Keio-FutureLearn project started and researched as one sub-project under Global Education project in Graduated school of Keio Media Design. Keio started corporate with FutureLearn since 2015 and delivered first course, Japanese Culture Through Rare Books, in July 18th, 2016. Currently Keio has already launched 4 courses for several times (Figure 1.1), 3 courses are undertaking and will all be launched before 2020.

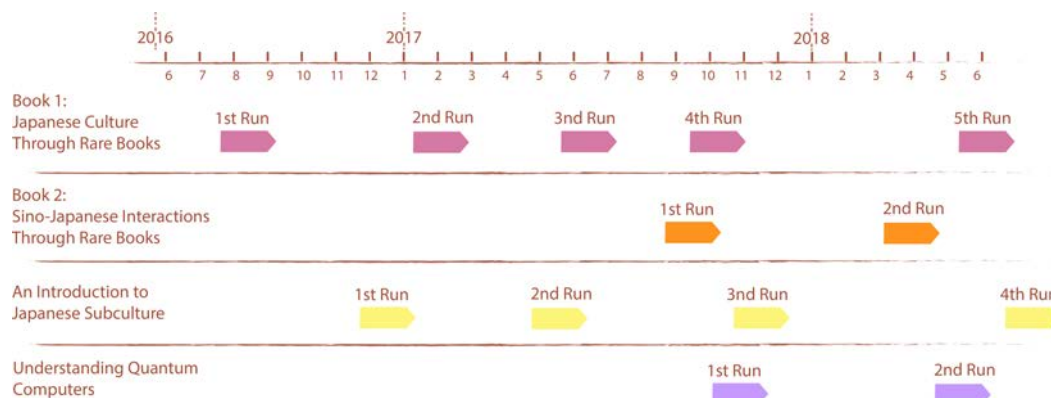


Figure 1.1: Course launched by Keio FutureLearn team

Courses launched by Keio University can be categorized into 2 big range, one is related with Japanese culture, including Japanese Culture Through Rare Books, Sino-Japanese Interactions Through Rare Books and An Introduction to Japanese Subculture and The Art of Washi Paper in Japanese Rare Books. The other is about modern technologies and social topics, such as Understanding Quantum. Among courses related with Japanese culture, there has a Book series course which mainly talks about history using rare books collected in Shido Library (KEIO Institute of Oriental Classics). For the developing courses, there are also multi-content including modern culture as well as historical culture. One course related with Japanese culture by introducing the history of paper appeared in Japanese rare books will be launch soon.

### 1.3.2 Learners' Analysis In Keio FutureLearn

Considering to the existing courses, there are over 45,000 people joined who come from 179 different countries. It can be seen from Table that every year FutureLearn has new joiners took part in the courses and as Figure shows, FutureLearn have diversity of learners come globally. The area with deeper color have more joiners and it can be seen that most of learners came from Europe and America. Since FutureLearn platform is based from British, learners from British are always the most. Also as the developing country in online education, America have a lot of learners become FutureLearn learners. Besides, Keio University is famous in Asian university group, learners from Japan and China also have some proportion.

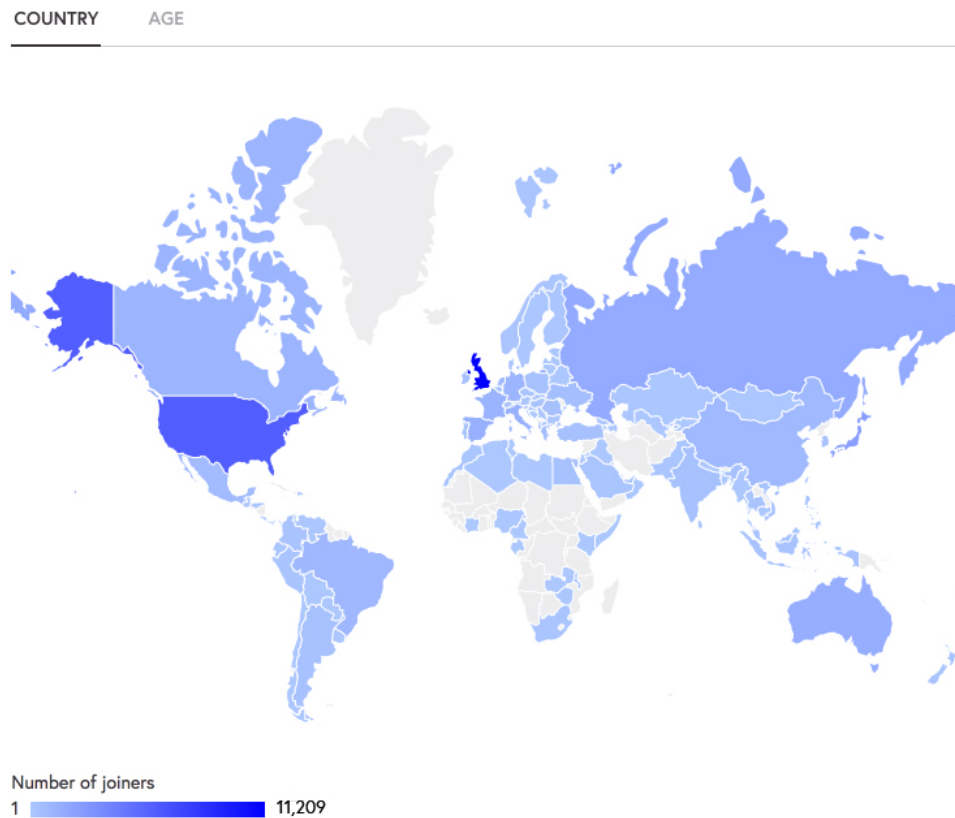


Figure 1.2: Joiners from different countries (Data from FutureLearn)

Table 1.1: Number of learners in FutureLearn platform (until May.26th, 2018)

| Year | Joiners |
|------|---------|
| 2016 | 24,152  |
| 2017 | 18,085  |
| 2018 | 3,654   |

### 1.3.3 Course structure in FutureLearn

Course developed in FutureLearn are organized under course structure proposed by FutureLearn Development community. One course is organized by weeks, according to the content, one course can be separated into 2 to 4 weeks. Inside one week, there are several activities designed. Sometimes one week have around 4 to 6 activities. Usually one activity presents one topic, one activity is consist of 2 to 6 steps. There are different types of steps, including video, article, discussion and quizzes. Averagely learners need to spend around 10 minutes to finish one step, and there has a button at the bottom of each step page for learners to mark the completion of each step. Course content are open to all learners during the launch period, and learners can control the study pace by themselves. Some learners register as learner before the course open, and join the study as soon as courses are available. Some learners do not notice the course until the course start, so that they join after the course started. In all, to provide the most convenient learning experience for learners, course are designed well for different learners to get used to.

To enhance the social learning and communication between learners and educators is one of the key components in FutureLearn platform. Each step has designed the function of comment and simple reply. Also there are social media function designed in the course such as Like and Follow. This research is working on design the social learning experience well combine the basic structure provided by FutureLearn and will talk about the related functions in the following chapters.

## 1.4 Contributions

This research contribute to enrich social learning experience for course related with Japanese history and provide solutions to solve the problem of multicultural learners have deficiency on knowledge background and solution for facilitators to conduct on assisting learners' learning experience.



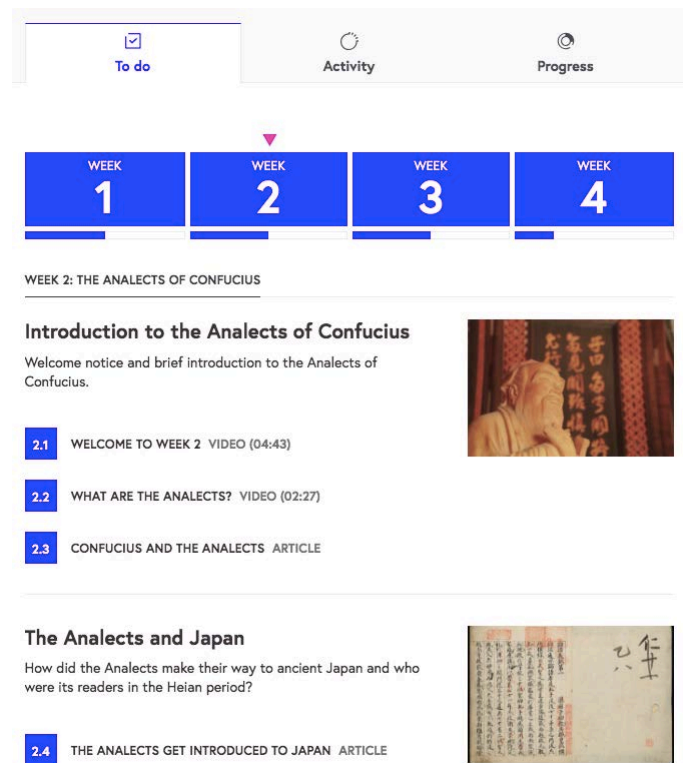



Figure 1.3: Course page of Sino-Japanese Interaction Through Rare Books

Through the application of social learning theories and FutureLearn course learning experience developing approaches, this research provide solutions for multicultural learners, who are interested in Japanese culture or want to communicate with educators and learners in Japan, but do not know Japanese, on solving problems during learning on social environment and enhance the communication and interactions between learners and educators. For facilitators who join the course learning experience develop, this research contribute to solutions on actions to help enhance interactions and motivate learners.


**Jane Booth**



I'm interested in food, embroidery, textiles and quilting amongst many other things. I love to learn.

LOCATION STOCKTON-ON-TEES

[Follow](#) **Follow**



**What are the Analects?**

Have you ever heard of the Analects of Confucius? (孔 子 言 行 录) Do you know what they are? And why should studying the Analects help you to understand Japanese culture?

**Comments**

**Alvin Long** (100%)

Hi Jane, I'm interested in your video. I'll be sure to watch it.

**John M. Anderson** (100%)

Hi Jane, I'm interested in your video. I'll be sure to watch it.

**Alvin Long** (100%)

Hi Jane, I'm interested in your video. I'll be sure to watch it.

**Comment**

Figure 1.4: Functions in FutureLearn Learning platform

# Chapter 2

## Related Works

### 2.1 Overview on Social Learning

With the development of digital world, more and more online activities are build up for different network users. As for online education, big scale network and data provide convenience and benefits on enhance the flow of knowledge and ideas across the geographical resistance. Since in the global and massive network space, it is possible that many people online together at same time and many of them are willing to solve problems for others. Even some professional questions in special field could be answered under the help of others who is willing to solve. Under this digital condition online learning became possible and able to fit into the trend of development.

There are a lot of researches that proves social interactions are good for people as a learner, but also there are many learners who don't want to engage socially, particularly online. According to the analysis on behavior of learners at other MOOC platforms found, normally only around 10-20% of active learners take part in forum discussions. They also generally only post a small number of comments (around 5 posts a course average). To encourage learning motivation, FutureLearn choose the approach of enhance social feature and all the interactions happens in the platform are shared. Learners who are not willing to post initia-tively should also benefit from vicariously learning from seeing others' question, shared knowledge and discussed ideas. Like other social media platform, Twitter use this open model so that everyone can see the conversations happen and join the social interactions as long as they want. It creates an open and inclusive environment where ideas are shared through network without worries about other joiners cannot see the content. Open and social become the right approach to allow learners who are not willing to join social interaction learning and engaged from others' social interactions. Also this model provide chance for them to join the social interaction as soon as they want. FutureLearn choose social concept to

develop the platform following this reason and the learning process based on this open model is the social learning experience that FutureLearn wants to create for learners.

Since there are over 100,000 people in FutureLearn, both for new learners and for educators there has a challenge of massive information which is overwhelming to new comers on this platform. Also, how to help learners create intimate connections with other learners, groups and educators is a challenge to design and manage for this platform which is focused on social feature. For FutureLearn online learning platform, encourage social connections is one method that prevent engaged learner leaving out the course. During online distance learning, it is vital to build relationship with peers or educators so that the support from them can help keep learners motivated and avoid let them feel alone or lack of help. Moreover, trigger learners' motivation on sharing knowledge within groups is believed to be good for creating a closer relationship. As a social learning platform, interaction and social sharing is the most important part. Instead of a platform operating like broadcast system with one-direction relationship and the content created for large scale learners, FutureLearn wants to get closer to learners and help learners' get used to this social platform through knowledge sharing and other learning activities.

To figure out the problem and enable social learning for learners, FutureLearn designed the framework of the platform from different perspective of learning methodologies.

### 2.1.1 Direct learning from others

- Link conversations to content

For current digital contents, they are designed to have “discussion” space in the context and the interaction is integrated and visible. In this way users can have a better quality on social experience since they not only get the content but also share information about the content with others in time. Thinking of this point, FutureLearn designed the framework of course website as following:

Under this directly design, allows learners to write their feeling, notes and ask questions next to the corresponding paragraph as long as they concurred during the learning process. Moreover, for the video and audio or presentation slides, exact timecode of these materials are provided so that bene-

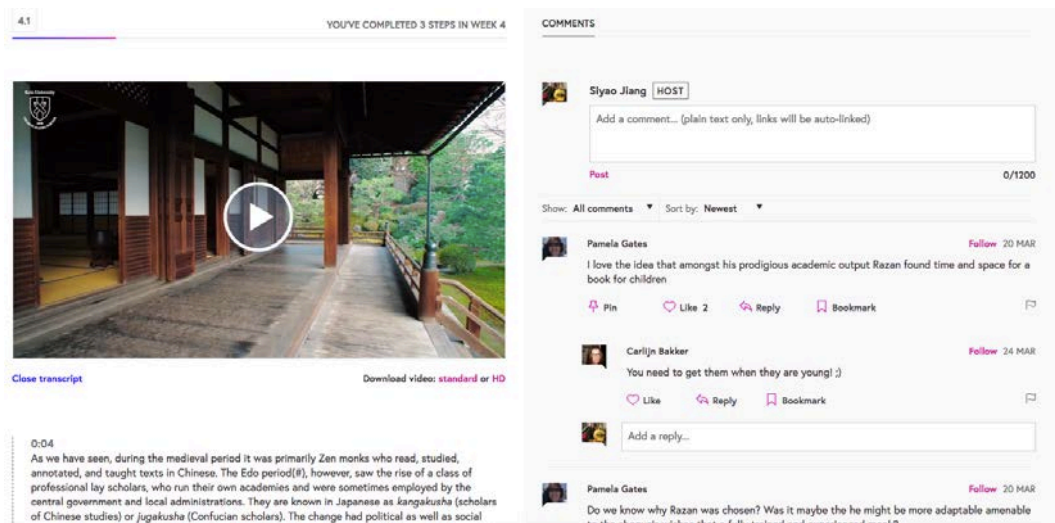


Figure 2.1: Framework of course with comment next to course content

fit learners on trace back to the question point and put forward questions precisely. Also comments can be present by chronological order, reverse chronological order and number of likes. In this way can help learners and educators on filtering the comments as their need.

Learners and educators can have a direct view on which paragraph or topic has more debate and interaction between learners and can join the conversation initiatively as they like. For the learners who is not willing to post comments during the course, they can also learned knowledge from the discussion directly when they are going through the content. For educators, this design also become a important part to see which part of the course caused most discussion, what kind of content is understood or not understood by different kind of learners, so that they can answer questions on time and react to the discussion as well [15] [22].

- Provide a personal activity feed

Other than seeing discussion around the course content, learners and educators are able to see the latest happening things by the design of course activity feed:

Activity feed presents a list ordered by reverse chronological rules of all the notes and replies made by the social relationship members. This design

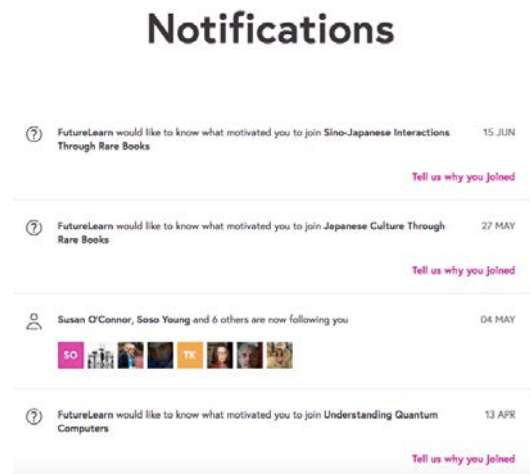


Figure 2.2: Activity feed with notifications listed

allows learners discover the content which they are interested in quickly and randomly. Also will help questions be answered more rapidly as questions are arranged to be appeared at the top of the list. Moreover, the framework and design style created the similar experience as Twitter on capture people's focus and interests through the highlight and pick up of others' activities

### 2.1.2 Zone of Proximal Development

Zone of Proximal Development means learners learn new knowledge through interaction and conversation with a more knowledgeable other.

FutureLearn organize social learning behaviors by allowing learners to “follow” others and “be followed” within and across different courses, setting up groups under the assist of mentor in different scale for learners to share knowledge during a course or engaged them to work out course activities periodically.

The design of “following” is one of the social factor that build and enrich social learning experience. Learners are allowed to follow any people they are interested in and can have a general view of their latest activities such as their posts, comments and replies or likes of others' posts. Also, learners can have a look on who is following them and decide whether to “follow back”. As long as they “follow back”, one “two-way relationship” is build up. This “follow relationship” will not change with the course status, and many learners create connections

with learners who has same course interests or similar choice on course categories. This mechanism support learners to build up lightweight connections with other learners and educators as well as filter interactions that only interested in topics will be provided. Relationship can be start very casual and easy but go deeper into developing potential study buddy among other learners and educators [17].

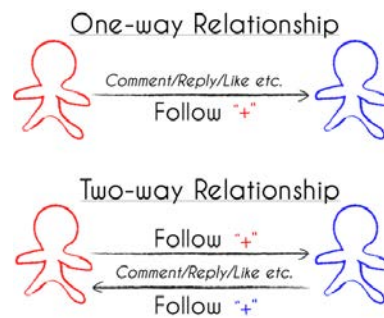


Figure 2.3: Building up connection in online activities

In the field of social learning, there are 4 possible individual relationships which would be developed. First one is unidirectional connection, which means get inspiration from the learner that you are following. And if the learner agree to be followed and follow back, the second relationship, study buddy, is build up. This is a bidirectional relationship which will also be kept even one course finished. Other than the study buddy relationship, if someone can answer to some questions and provide individual support to one learner, no matter it is voluntary or paid, this relationship is called as tutor. The last one is called mentor, which describes the relationship of one person support or teach many learners and build connection with them who are interested in one common topic. Under this design, within the course, learners can find the group where they can learn knowledge and can get messages or feedback from mentors or educators.

System will tell learners about who has followed them and give suggestions on who might have same interests with you according to the record on somebody have answered your question or noted you in their comment or reply. No matter learner follows other learners or educators, they are able to see their comments of things or reply to questions in the active stream. This framework enhance the feature of social and decrease the distance between each other learning on this platform. Currently, FutureLearn is also working on providing the function of sending direct private message so that learners can share more information that they don't want to post under public status. For this perspective, learners are encouraged to get

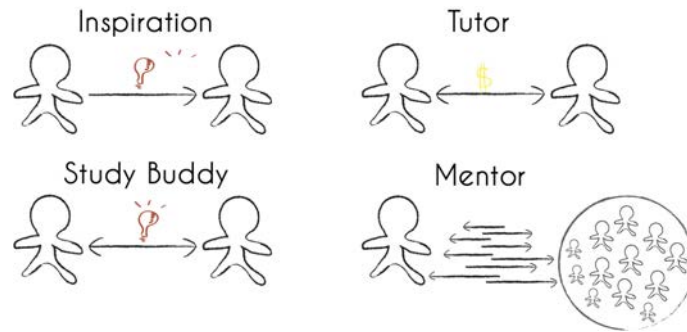


Figure 2.4: 4 possible individual relationships

more interaction with other learners or mentors and also get more knowledge start from their own interests. FutureLearn provides “follow” as a social function in learning environment and enhanced learners find their learning buddy during the study process. Learners get encouragement from the relationships and the network build in FutureLearn also support their study and social learning. Moreover, for the relationship with educators, learners would feel less distance if they can see the social activities of educators appear in their activity stream. And the learners would be more engaged by this connection happened with educators [11].

### 2.1.3 Orchestrated collaboration

Orchestrated collaboration means that there has a mentor whose role is to guide a group of learners toward explore of difference or share understanding of knowledge.

FutureLearn applies the algorithm which tagged all learners by their interests or by the mentor they are followed, therefore created Cohorts 2.0. For individual learners, activities and new posts from member in same cohort owns higher priority to be presented in their feed. So as direct message from mentors but listed according to the priority of mentors they followed. Under this design, every learners can know others’ activities and the burden of activity stream has been decreased [20].

In learners’ activity feed, system designed to be a prioritized activity list. For the convenience of interaction, learners will see the latest update from the people they are following, answers with high rate (more likes), notes made from mentors and not answered questions as well. This activity feed created the atmosphere of social learning and reduce the burden of learners on finding information on their own. With reviewing the activity feed can learners get information to some extent



about the content they are interested in and then continue with next step whether to click in checking the detail or start a new topic among learning peers.

In mentors' activity feed, FutureLearn also designed one field called MY MENTEES, which will prioritize present latest update from mentees in the same cohort therefore create chance for mentors get more interaction with mentees and enhance the connection on sharing learning knowledge [6].

#### 2.1.4 Shared knowledge building

Shared knowledge building means that learners develop knowledge through interaction with peers around a shared representation.

In FutureLearn there are a lot of active groups existed in different courses. These groups are formed automatically for the period of one activity. Every time learners are allocated into different groups which may be randomly build up or assigned by their interests, learning experience. They work together resisted in one activity and form a new group with other people for another activity. In this way can learners get in touch with as many as learners in a limited time and also build connection with them faster. During co-work on one activity, more interactions are enhanced and learners can sharing their knowledge as well as build shared learning experience together.

There are two types of activity group. One is called On-demand activity group, which describes groups that formed by a small number of learners who are online at the same time and they are gathered to participate in one common activity. The other is called Discussion in on-demand activity group, which is the formed by the participators in one discussion specific to one topic in the course content [20].

Still FutureLearn is working on develop the mechanism for more group activities such as providing small groups activities that educators are able to define the size of the group for a small simple discussion or providing peer review and assessment function which can be happens within learning groups organized by learners. In this way not only knowledge can be shared, learners will have feedback from their mentors and peers to support them better on continue learning and find out more knowledge they are interested in initiatively [16].

#### 2.1.5 Summary

Methodologies used in FutureLearn course learning experience design are focused on assistant developing social learning experience. Social learning experience is

constructed by both learning experience and interaction experience. For different social learning situation, one or more of them will be applied. Basically, Direct learning from others and Shared knowledge building are contribute to create learning experience during study process. Zone of Proximal Development and Orchestrated collaboration are expected to help on creating interaction experience.

By application these methodologies on social learning as the instruction of designing activities or materials, formative learning environment can be build up for more learners to get involved with social learning experience. Sometimes it is difficult to clearly clarify the component of design, but the key of contributing to social learning environment is enhance the interaction between learners, learners and educators or facilitators, as well as being motivated by interactions and learning progress.

## **2.2 Quiz design and evaluation in Social learning platform FutureLearn**

For social learning platform, other than providing visible materials for learners to study, platform and organizations also provide quizzes as one approach to learners as practicing and demonstration of knowledge that they have been exposed to. Not only video and article materials, there also have quizzes set as one of the activities in FutureLearn course.

### **2.2.1 The reason of setting quizzes in FutureLearn**

Under the framework and principle decided by FutureLearn, quiz steps are expected to provide opportunities for learners to be able to check the understanding of new knowledge and receive meaningful feedback or suggestions on their learning progress. Quizzes also have the function to start conversation between educators and learners, talking around one or several specific point of the content. Then learners are able to check whether they have grasp the new knowledge as well as applying knowledge to solve problems. Compared with off-line education, quiz step works like the discussion inside one seminar or tutorial. This approach is effective on questioning and convenient for online course learners on quick check as well as getting feedback. Educators can also use this chance to guide learners on thinking deeper and instruct learners to reconsider misconceptions they kept

in mind. This behavior helps creating the experience for learners that feels like doing a real tutorial online [8].

Also, in FutureLearn education platform, course experience designers intentionally differentiated quizzes from “tests” and focus more on celebrating progress through feedback from educators. Instead of giving visible scores to evaluate the performance, learners will have feedback or comments from educators no matter the answer is correct or incorrect. FutureLearn wants to create an activity for learners to get motivated from the interaction with educators but not stick on the scores or correctness. Learners are expected to get engaged from feedback of each quiz and enhance the learning performance in order to understand more related knowledge. Tests tend to be an activity which presents result by scores and learners get motivated from the high scores. This will somehow lead to learners persist on results instead of content reflected by the test. Even at off-line classroom education will apply quizzes during one slot of teaching session to give a chance for students to demonstrate the knowledge they have learned. Tests are taken to check result of a relative long period study at the end of one stage of learning. For FutureLearn online learning, both educators and learners do not want to have too much burden during the learning. Quiz is the proper activity which can be taken during the course launch and social study situation.

### **2.2.2 How could quizzes helps in FutureLearn**

During the design stage, course experience designers need to consider from the methodology of designing the good quizzes which is meaningful to learners and contributive to course experience. Questions are designed not only to enable learners to check their understanding of knowledge but also challenge learners to apply concepts into solving problems. To support implementing social learning environment also, questions need to be designed as a reflection of educators’ voice, which can engage learners in the communication started around learning. Moreover, good questions should help learners to check the understanding of concepts and ideas presented in the course. FutureLearn requires questions to be designed focusing on skills such as solving problems by applying acquired and existing knowledge, analyze questions by identifying facts and evidence to support proposition or present opinions by making evaluation on information, ideas or quality of work rather than just recall and understand knowledge. Good questions can assist educators observe learners from answers and can provide learners a way to develop various skills. Moreover, every possible question response should mean-

ingful and present the deficiency on knowledge or learning process. Also need to provide feedback to motivate learners on solving the problem by themselves.

In FutureLearn platform, other than provide quizzes as a chance for demonstration, but also regard feedback after quizzes as a key part of course content. In support of this, feedback is designed as a response from educators to learners answer and also a inspiration towards the knowledge attached in the question. Not only just imply the answer is either correct or incorrect, feedback is expected to guide learners on what they can do to arrive the correct answer. As one part of this, feedback for incorrect responses also need to be designed meaningful and avoid directly presenting the correct answer [4]. FutureLearn wants to encourage learners that even they choose the incorrect answer, their reason on selection is worth to be celebrating as if they can tell the misconception and misunderstanding. In this concept, no matter which answer they choose, the progress on study will be encouraged. Feedback is believed to facilitate the development of self-assessment in learning for learners [13]. Therefore even if learners do not have the correct answer, they can still be motivated by the response and want to explore more on the related field to solve the problem they discovered from this question initiatives. Also, good feedback are expected to encourage dialogue between educators and learners. High quality information can be delivered to learners about their learning and reflection of course design can be provided to educators.

# Chapter 3

## Research Design

### 3.1 Research Field Explanation

#### 3.1.1 Stakeholders

In order to provide to the society for more high quality education via the Internet and create a learning environment under the social communication, to enhance the interaction between each other during the learning process, FutureLearn platform works with different stakeholders together to developing courses and launch to the public learners. This research joins as one part of the corporation work and deliver course to learners together with other stakeholders.

- FutureLearn Platform

FutureLearn works as a platform, proposing the vision and spirit of FutureLearn social learning platform. They support different from the very beginning by deciding the core part of platform, making out the mechanism of delivering a course, and approaches on designing the course and learning experiences. FutureLearn platform also responsible for management on various of courses and developing the system on recommending courses to learners and observing learners' behavior overall. Not only learners, but also course providers such as universities will get suggestions and information from FutureLearn platform and continue running under support from FutureLearn platform.

- Keio University

Keio University is the only Japanese university corporate with FutureLearn on providing courses. Keio University support the course content developing and become the content provider to different courses. By corporations with FutureLearn related stakeholders, Keio University spread Japanese culture

and explore more on high quality online education knowledge. Under the help from Keio University, course development can well use all the resources owned by Keio and contribute to Japan massive open online course development by the experience of providing course in FutureLearn platform.

- Learning Design Team

Learning Design Team is mainly formed by member from Research Institute for Digital Media and Content, Keio University. Corporate with educator from Keio University, learning design team focus on design the learning experience following the approaches proposed by FutureLearn platform and responsible for all the course management from the beginning of course development to the course launch period. By observing learners' behavior and doing the corresponding research on social learning, learning design team also responsible for updating and improve learners' social learning experience. This research belongs to one of the research under learning design team and mainly focus on the course Sino-Japanese Interaction Through Rare Books.

- Society

To support providing social learning experience to public, there also need assistant from society. Such as promotion of courses on the social network service, doing marketing with publishing company or education organization. Also, related organizations get to know about social learning and online learning platform by corporations with FutureLearn project so that get in touch worldwide online education methodologies and knowledge.

- Learners

Currently there are learners come from over 200 countries registering as learner on FutureLearn platform, and courses launched by Keio University has over 40,000 joiners from 179 countries. Learners come globally share their ideas and comments with peers any time they want, choose courses with the topics they are interested in or they need to know more. Moreover, they build connections with peers, educators or facilitators in the platform meanwhile join the course. FutureLearn provided a new type of learning experience to learners and receive the feedback and suggestions from them to update the content as well as the approach to social learning.

### 3.1.2 Course of Book series

In the courses launched by Keio FutureLearn, there are one series of courses focused on introducing Japanese culture by using rare books collected in the Keio University, which is called Book series, including Book 1 Japanese Culture Through Rare Books and Book 2 Sino-Japanese Culture Through Rare Books. Book 1 talks about Japanese culture history by introducing the evolution of scripts and materials used in traditional Japanese books and the relationship between format and content in traditional Japanese books. Also talks history of printing and publishing in Japan as well as the development of scholarship in early-modern Japan [2]. Book 2 talks about the history of textual culture in East Asia and Japan and the influence from China and Korea on Japanese book culture. This course introduce the evolution of printing technology in Japan and the relationship with religion. Also, there has brief introduction of well-known Chinese poem collections, receptions and transitions of Analects of Confucius and their influence on Japanese society [5]. Both of these two courses provide abundant knowledge on East Asian culture or history and basic knowledge of Japanese and Chinese literature. Book 1 is an introductory course and Book 2 develop for more widely and multiple Asian history knowledge. Therefore Book 1 launched earlier than Book 2, and learners who registered for Book 1 have the notification on studying alongside companion course Book 2. Though both of these courses are taught in Japanese, there are Japanese and English subtitles prepared for different learners. Also, these courses use a number of visual resources in different activities for learners to have a clear image on rare books.

The most feature of Book series is the historical knowledge. East Asia history are divided by dynasties or period, and in different dynasties or period, it have different culture features. Therefore it is important to tell the name and time logical of dynasties and periods as well as typical characters under typical historical background. Moreover, visual resources are mainly rare books pictures collected in Keio University, and content are written in Japanese or Chinese. Learners can have a very close look by reviewing on the e-book system.

## 3.2 Learners' Analysis In Book series

In FutureLearn platform, learners can choose any course freely and join the course mainly by registering the course during the open period. Then join the course

when the course start by browsing the webpage. Relatively, no matter what category of course content is, learners from English speaking countries owns the highest proportion, so that when considering to the course learning experience design, it is important to take English speaking countries' background as a reference and have supporting materials to assist during the learning process.

According to the survey conducting to learners in every course after study (Figure 3.1), averagely over 41% of learners have the Bachelor degree, 26% of them have Master degree, 7% of them have Doctor degree. A considerable proportion of learners have secondary degrees and some of them have even tertiary degrees. This result shows that course are mainly based on higher education level and gathered some professional learners in the field in the learning environment, who can share more with amateur learners. Higher education learners have the ability and skills to accept new style of learning and can get used to the changing learning environment faster. Moreover, they have the desire to explore more on course content and look for answers as long as they have problems. Therefore most of learners are expected to start conversation actively no matter with learner peers or with educators and facilitators. But on the other side, for learners who have not join the survey, some of them may have the different level on background. Therefore when design the course interaction experience, it is important to think of how to assist on building up connection between learners with gap on knowledge recognition. Also during the learning experience design, educators and facilitators need to consider more on help learners in different level to have meaningful learning experience as well as improving their skills after taking the course. How to guide professional learners to share learning information and join the conversation with other learners initiatively is the key component need to be notice.

Besides, take the general view of all course running by Keio FutureLearn team, learners aged from 18-35 takes the highest proportion and other age range takes proportion averagely also. Learners come from a wide age range joined the course. This is also another component need to be considered during the course learning experience design. Learning method and acceptance of knowledge is different according to different generations. It is interesting that various age range learners are interested in the same field of knowledge, but have different learning behavior during their study. How to help them on solving problem and experience more on social learning is worth to be observe as well as thinking during the research.

Most of learners join different courses by their interests and some of them wants to learn more on supporting their daily work. Also, FutureLearn will recommend



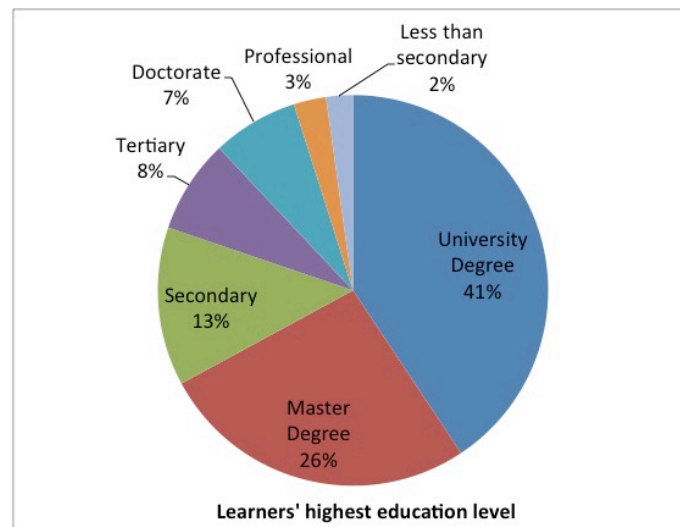


Figure 3.1: Learner's Highest Education Level (Data from FutureLearn)

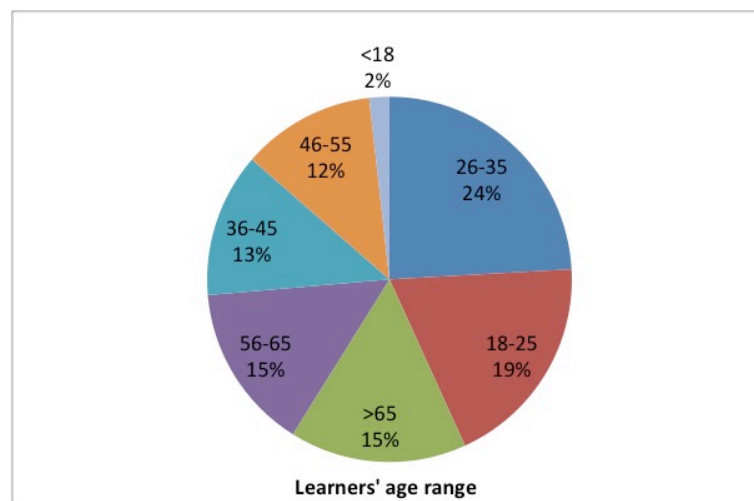


Figure 3.2: Learner's Age Range (Data from FutureLearn)

course to learners according to their interests and previous learning record. For Book 2, as companion course, there may have some learners come from Book 1 and choose Book 2 for more knowledge. For learners who wants to enrich their knowledge on specific field, they may chase for more professional learning content and specific conversations towards the topics thy are interested in. For learners who wants course content to help their work and probably use the after-work time

on study, it is important for them to have a comprehensive understanding of the course so that course content would not be the burden during their experience. To sum up, there are learners choose course with different purposes and expectations. When designing learning experience, it is also important to consider these factors.

### 3.3 Circulation of Running the course

Every course launched by Keio FutureLearn will be managed by the circulation of running a course. Learning design team worked together with other organizations to ensure the quality of each course. Once the course is decided to be provided, learning design team will start this circulation and continue update following the procedures, ensure the content satisfied learners' need and knowledge being renewed in time.

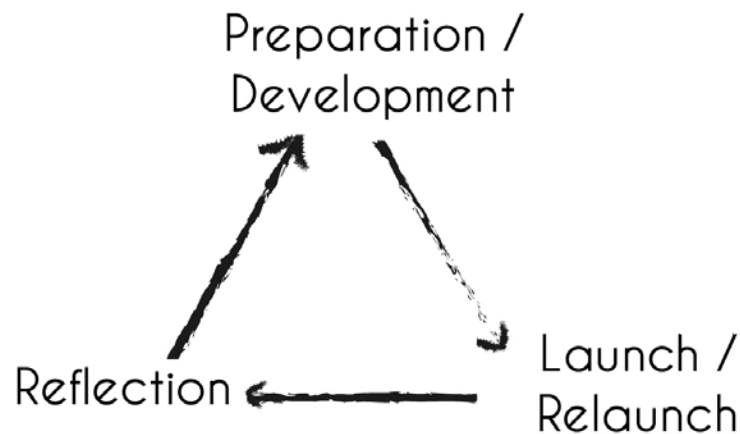
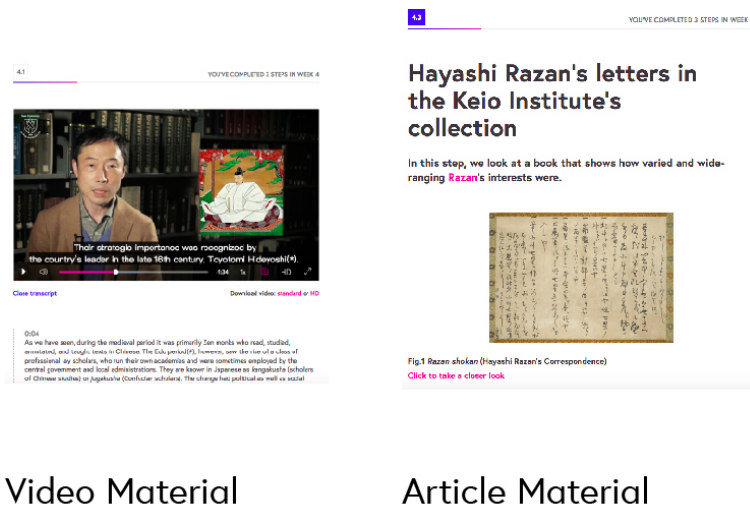


Figure 3.3: Circulation of running a course

- Preparation/ Development

When course category and theme are decided, FutureLearn team will start with step preparation. In this step, FutureLearn team will cooperate with professors in Keio University and educators from other organization, discussing about themes' detail and what kind of content should be provided. Then develop and produce the course content following the schedule of content preparation. Various of materials including video, article, quizzes, discussion board and so on will be developed by Keio FutureLearn team and

other organizations to fulfill the course content. For example, FutureLearn team will cooperate with video shooting team, working on course video shooting and editing. Also works with professors on gathering literature material and collecting figure material which will be used during the course. Once the course has been launched for the first time, educators and learning designers will summarize learners' survey, collect the feedback and suggestions towards course content and management. Then revise the content and prepare for the next launch.



Video Material

Article Material

Figure 3.4: Video material and Article material provided in FutureLearn course (Screenshot from FutureLearn)

Meanwhile, considering to support social learning experience, materials are designed referring the feedback from learners and apply “Direct learning from others” by fulfill the course content to trigger more comments. This research mainly focus on Book 2 which is developed after Book 1 but share the same category with Book 1. Therefore content of Book 2 are prepared combining the feedback from learner behavior observation, surveys and comments from Book 1.

- Launch/ Relaunch

After all the contents are well prepared and developed, course will be launched following the schedule. During the open period, course content are open to every registered learners. Global learners share their knowledge and opin-

ions here and discuss questions with educators, facilitators and peers during launch time. Usually the course contains contents which takes 3-4 hours per week to learn and last for 2-4 weeks. For each week, contents are distributed into several “steps” and learners can press “Complete” button to mark this step as finished. Learners can also have a look of their learning progress from homepage of the course. To enrich learners’ learning experience, facilitators joined course launch as assistant during the period and help build interactions during the learning.



Figure 3.5: Progress of learning for learners to check (Screenshot from FutureLearn)

- Reflection

Course will be closed after the launch period and learners will be informed to help finish a survey to assist educators and facilitators on revising and updating the course. This stage is called Reflection in the circulation. There will have usually 5-6 months between two launches. During these months, facilitators need to analyze data gathered from learner’s answer of the survey. Questions are designed very detailed, using the template from FutureLearn framework. To enhance social learning experience, questions focus more on knowing different kind of activities such as evaluation from learners about various course content, interactions between each other, engagement of educators etc. Questions can be answered by multiple choices or commenting for more suggestions. Result are presented as percentage of graph or summary of comments and suggestions. Contents will be changed according to the reflection result from learners to satisfied learners’ need. Also, facilitators and educators will discuss about problems they met during the course assisting period. Observing learners from another angle and come up with

new ideas as well as solutions towards the potential problems.

## **3.4 Research Problems and Questions**

### **3.4.1 Course Content Analysis**

This research focused on course Book 2, Sino-Japanese Interaction Through Rare Books, trying to find out method to help enriching the social learning experience during study this course. As the companion course of Book 1, this course mainly talking about the development of Japanese culture from the perspective of interaction between Japan and other Asian countries such as China and Korea. By introducing a lot of Chinese books, this course tells different literature knowledge and how these books represent one short period in the history. Therefore it would be better if learners have preview of knowledge on Chinese books, which is “foreign book” to most of learners. Also, this course introduce how books and the corresponding culture made their way from China to Japan and what kind of impact had been made to that period and after world. Since course professors are Japanese and talking in Japanese, it will be difficult for learners to have a comprehensive background just by reviewing this course. Moreover, one of the goal of this course is about exploring the connection of religion culture among Asian countries. Topics including Buddhism are covered and introduced along side with rare original books. Though learners may have difficulties on reading original books, there are pick-up articles designed for learners to have a summary idea on the inheritance and flow of religious culture as well as the influence created from those periods.

### **3.4.2 Problems found**

During the course reflection of Book 1, there are feedback pointed out that learners from Europe and America has problems on some historical point such as Japanese history has too many period and they cannot handle time logic, they are not familiar with Japan history and want to know more about the background knowledge. Book 2 has the similar field of knowledge but more counties and topics are involved, so taking the feedback from Book 1 as a reference, during the preparation of course supporting material, problem is considered mainly as multicultural learners may have the problem on the lack of historical knowledge. For Book 2, not only Japanese culture but also Asian culture like Chinese history,

Korean history are mentioned. Other than that, it has been found that if learners have too many confusion on history knowledge, they tend to talk less in the comment field since they have worries on cannot catch up with peers who already know these knowledge and they feel embarrass to put their basic questions to the public. But for the “professional” learners, they are willing to share more experiences on deeper topics or know more about some details, which is also difficult for new learners to catch up and learning. So for the learners lack background knowledge, they just don’ t join the discussion but cannot learn more from other’ s discussion. In this way of learning, their cannot experience “direct learning from others” during their study.

### 3.5 Approach to research

FutureLearn promoted the concept that best courses for learners are developed narratively, providing content for learners with more opportunities and experience that guide learners from evaluating existing knowledge, exploring new knowledge and topics to examining and sharing conflicting opinions, and as well, toward to the resolution of problems or questions by conversational and interactive learning. Therefore, FutureLearn proposed the approach of learning and course design which has the principle on “visible learning”. Visible learning here emphasis on designing teaching and course structure visible and clear to learners and learning process is visible and straightforward to educators. Considering to learners come from a wide range of nationalities and backgrounds, course and learning experience need to be designed well adaptive with multiple paths get closer to the content according to the performance of different learners. Learners have various method to learn so that they can make their own choice on what should be paid more attention and works to study by visible and clear structure and label on course content [1].

To conduct this principle of visible learning, there are three approaches that considered as constituting the design concept which is story telling, provoking conversation, and celebrating progress. This research targeted in the course Sino-Japanese Through Rare Books also complement course and learning design by these 3 approaches to enriching learners’ social learning experience.

### 3.5.1 Story telling

Story telling is the unified framework of direction on how the course being developed to learners. Course are designed into steps with a progressive and engaging thread. Every step connects with each other consistently and ideas and knowledge should be interconnected from content design rather than dependent from each other. Even if learners skip some steps, they should be able to start from one point to dip-in to any steps which they are interested in and be more aware of the main thread that the course wants to deliver. Learners may change their learning method at any step, or change their mood because of the acceptance progress of content. To correspond to these situation, and continually engage learners on learning, making the content linked with each other and help learners on build up the image of course main thread is important for course and learning design. Accordingly, supporting materials works as assistant for course content. To fulfill story telling of the course content, and lead learners experience different method of social learning, this research works on the observation of learners and design supporting from the story telling to help learners enriching their social learning experience from the course Sino-Japanese Interaction Through Books.

### 3.5.2 Provoking Conversation

Conversational learning is the core part of FutureLearn's principle on design course and learning experience, which also guide to the solution of gathering learners come and learn. Including VIDEO, there are also ARTICLE, DISCUSSION and QUIZ designed as different types of steps. Every step is designed to lead learners to reach the expectation from educators under the environment of sharing and interacting with others inside course, no matter which step they choose to be the start or jumped in. Make the content continuously is important for learners to feel welcomed and integrated.

VIDEO and ARTICLE steps provided more knowledge than other steps, and therefore need to be well considered on leading learners to think more and understand comfortable for different knowledge background learners. Alongside these materials, this research focus on using supporting material to help build the continuity, connecting spaces between each steps and provoking potential conversation from learners to courage the interaction happens. Additionally, other than the comment field in each step, type DISCUSSION is designed for further conversation between learners, educators and facilitators. For courses in FutureLearn, a

large proportions of learners are willing to join the conversation. In course Book 2 which is also the main course this research aimed, there are small proportions of learners join the conversation actively. For the learners who doesn't choose to comment nor interaction with others, they may have one-way relationship by just reviewing others' comment or pressing "like" to others' comment. To help them learn more knowledge from the shared comments and ideas, design of DISCUSSION step is very important. Information shared here can also contribute to their learning experience through this kind of "one-way relationship". It has benefits to learners for provoking meaningful conversations other than just answer questions by yes or no. Therefore questions designed in DISCUSSION part should be able to trigger the thinking of applying new knowledge into conversation and to solve the problem with combination of new knowledge and existing ideas. In this way can learners share not only their existed knowledge but also different ideas toward common course content [14].

### 3.5.3 Celebrating progress

Creating opportunities for learners to demonstrate knowledge they learned and celebrating their progress is important for course and learning design following the social learning concept in FutureLearn platform. Steps like DISCUSSION and QUIZ are designed for demonstration of new knowledge and combination between existing information with learned knowledge. DISCUSSION provide a way for learners to reflect what they have learned and be encouraged by demonstrating their point of views through the conversation and get assigned from peers, facilitators or educators. Learners also need QUIZ step to check how much they have understand new ideas and concepts. Therefore must provide them meaningful feedback that can guide them to deeper understanding towards the course content as well as support them for further growth. Good question should be designed which can create the comfortable environment which every response are worth to be celebrated. Under this situation can learners been encouraged and face to the problems existing currently. This is also important for building interaction between educators and learners. Instead of simple "correct" or "wrong", more detailed feedback related with course content will help more on guiding and engaging learners on continue study. Feedback from educators with more words and comments can help a lot on that and also contribute to build the continuity of the course story telling.

After finish reviewing content of each step, there have one design called com-



pletion step. Learners use this to mark the steps they have learned. Though this action is just a small scale of celebrating, it can accumulated to be a larger scale celebrating on progress page which have finish progress visible to learners. Course are designed not to emphasis the completion rate of course to make learners study under a comfortable environment, and leaving this action to be a motivated and engaging behavior for learners to experience the encourage and celebration from themselves. During their learning experience, each step should be design as one progress which lead to their goal of study. Since the completion step is conduct under learners' will, this research also analyze the completion rate as one of the standard on learning experience evaluation [21].

### 3.6 Research Mission

This research aims to help enriching social learning experience in course Sino-Japanese Interaction Through Rare Books (Book 2) for learners who choose this course using social learning methodologies FutureLearn platform promoted. By observing learners' behavior and performance during course launch period to find out existing problems and conduct corresponding method and design to help enriching the learning experience following the concept of social learning.

**Developing a course and Running a course** To launch a course following the circulation, there are several related organizations worked together in different roles. Under the corporation between each other, can courses being active and continuing update. During course developing period, there are 3 issues need to do, including course content design, course content development and course management.

As for course running period, there are 2 issues need to deal with, one is overall facilitation during course launch time, second is the support during running period. To implement the social learning experience and help learners get motivated, stakeholders worked together on keeping course active.

During the course development period, this research aims to be the role of course learning designer by proposing design that implement from the perspective of Direct Learning From Others. Through the design of supporting material of the course to fulfill learners' need and trigger more of their potential on learning socially. Combine the feedback from surveys and observation from Book 1, analyze to find out how learners behave during course launch, how to they react with

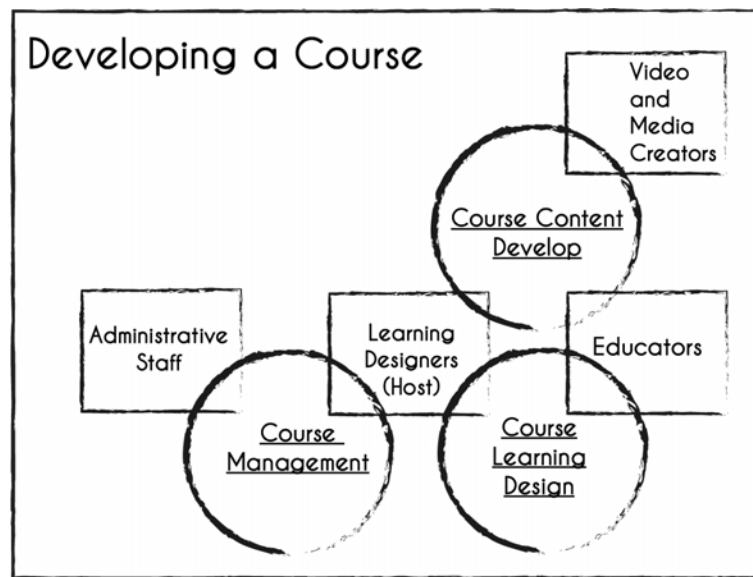


Figure 3.6: Developing a course

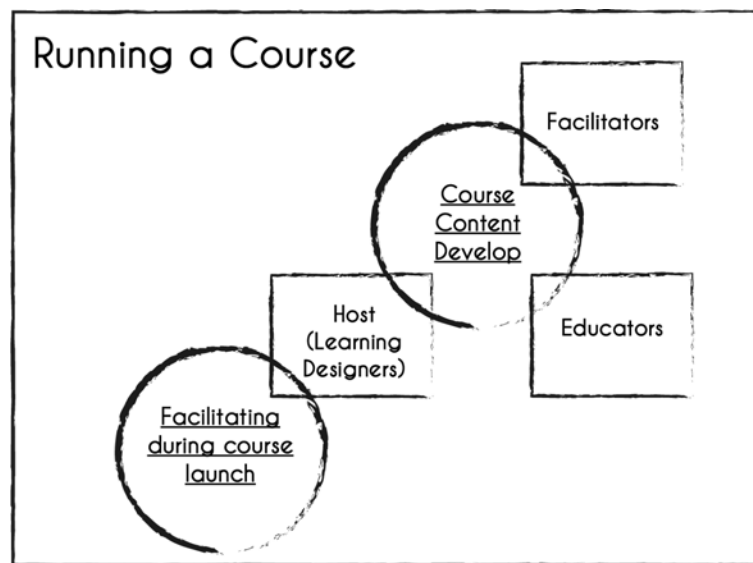


Figure 3.7: Running a course

existing contents and materials and how do they interaction with other stakeholders. Direct learning provide the most direct and visible contents for learners to study and also be the first engagement that may trigger the further interactions

between learners and other stakeholders. Considering of this, contents and supporting materials need to be designed for common learners and into the way that they can absorb and respond naturally and smoothly.

During the course running period, this research works as the role of facilitator and help learners enriching the social learning experience from the perspective of Zone of Proximal Development. While observing learners during the launch time, join the course as facilitator to enhance the interaction between learners and educators. One of the advantage of social learning platform is to gather people with same interests towards one topic and encourage them to share comments and help each other by providing answers or ideas if there is questions put forward. This course works as a media for gathering learners. Not only learning from the course content, but also learning from other learners' comment or discussions between learners and educators. This research works as facilitators is the role of enhancing the communication and provide the environment for learners to learn from others in a more easy and relax way.

# Chapter 4

## Actions

To enrich learner's social learning experience in Book series course, this research started from preliminary research in the first book course Japanese Culture Through Rare Books, then take actions in designing course learning experience for Book 2, Sino-Japanese Interaction Through Rare Books, to solve the problems which may happens in companion courses. According to the course developing circulation, get inspiration from the reflection part and take another action to implement for the further learning experience. This research totally have 3 actions taken, following the approaches of FutureLearn course and experience development approaches.

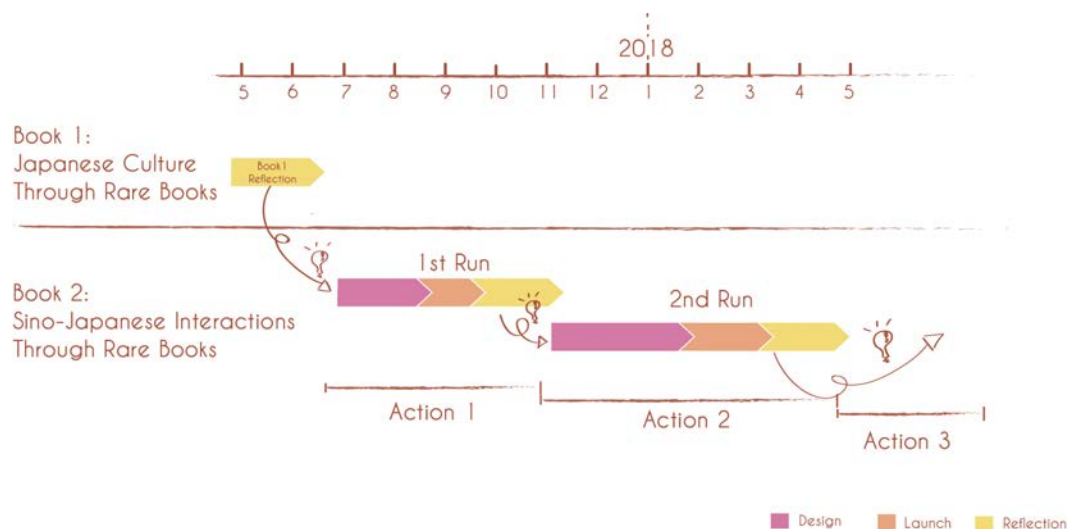


Figure 4.1: Actions been taken in the research

Combine the observation of learners' behavior during preliminary research and analysis of reflection from course survey, the problem of multicultural learners lack on Asian culture background has been found. Different level on existing knowledge of every learners leads to the result that some of the learners cannot study clearly

and fully understand the content in the time as expected. Moreover, it affects them on joining the discussion with other learners who may handle deeper than them as well as educators. Also, since it is a burden for some learners to get well understanding of course content, it is also difficult for them to learn new things from the discussion. Therefore they cannot learning under the comfortable environment, and get frustrated from not able to have social learning experience. To solve the problem and help learners enriching the social learning experience, this research works as facilitator and experience designer, can solve from the following 3 approaches proposed by FutureLearn:

First, according to “Story Telling” approach, lead learners on continuing study and help them fill the deficiency of course content. To implement it, this research takes action on designing supporting materials for multicultural learners to help understanding historical and geographic relationship among Japan, China and Korea.

Second, following the “Provoking Conversation” approach, help learners on building connection with each other and enhance social learning environment. To achieve this, this research takes action during course launch period as the facilitator of course which assist and guide learners on discussion and communicate more based on course content.

Finally, following the “Celebrating progress” approach, engaged learners on continuing study and interact with others. To support this, this research designed quiz step within one activity to motivate learners from answer questions put forward by educators and get encouragement from feedback of the answer.

It is difficult to distinguish 3 approaches clearly since every action taken in the course learning experience design influenced each other and works together to achieve one goal which is to enrich the social learning experience. Though in this research, every action are taken focused on one approach, other two of approaches will be inferred and used to support on achieving goals.

## 4.1 Action 1: Extra supporting materials to improve Story Telling

### 4.1.1 Supporting material designed for first launch for multicultural learners

The first action taken to enrich learners' social learning experience following the approach of "Story Telling", which try to help on understanding the course content and create learning environment for multicultural learners on decreasing the burden on culture background knowledge. To achieve story telling, this action designed supporting material combing the historical timeline with geographic location spot of related countries, to support and help complete the image of history background talked in week 1 and week 2. The supporting material is expected to be the role of connecting different steps and build connection between each steps for learners to grasp the main thread this week wants to talk [1].

In Book 2, common theme is about Asian history, especially on Japanese history, which is a little bit difficult for some learners not from Japan or Asia. To help multicultural learners who has problem on lack the knowledge of Asian history, this action thinking of the design of supporting material for learners as the assistant during their learning. Therefore, considering to history, the key components here are chose to be the historical timeline, and geographic spots.

Considering with the feature of Asian history, Japan has different periods and the role of Shogunate and emperor changed with the history too. China has also various dynasties with different emperors. Books are the publishment of culture, and Sino-Japanese Interactions Thorough Rare Books also emphasis on books not only from the content, but also introduce the pattern of producing a book to present how culture been imported and localized. Interactions between countries are shown in Books. To explain this idea of the course, a lot of rare books are introduced from different periods or dynasties. From the feedback by learners of Book 1, it is difficult for some of multicultural learners who has no pre-knowledge to make it clear on the historical timeline. Also when name of location mixed with name of dynasties it will be more confusing. Thinking of the unfamiliar with Asian history and geographic location of countries and cities, this research worked on the design of timeline mapping materials for learners as supporting materials to have more direct and smooth understanding of course content.

#### **Historical timeline**

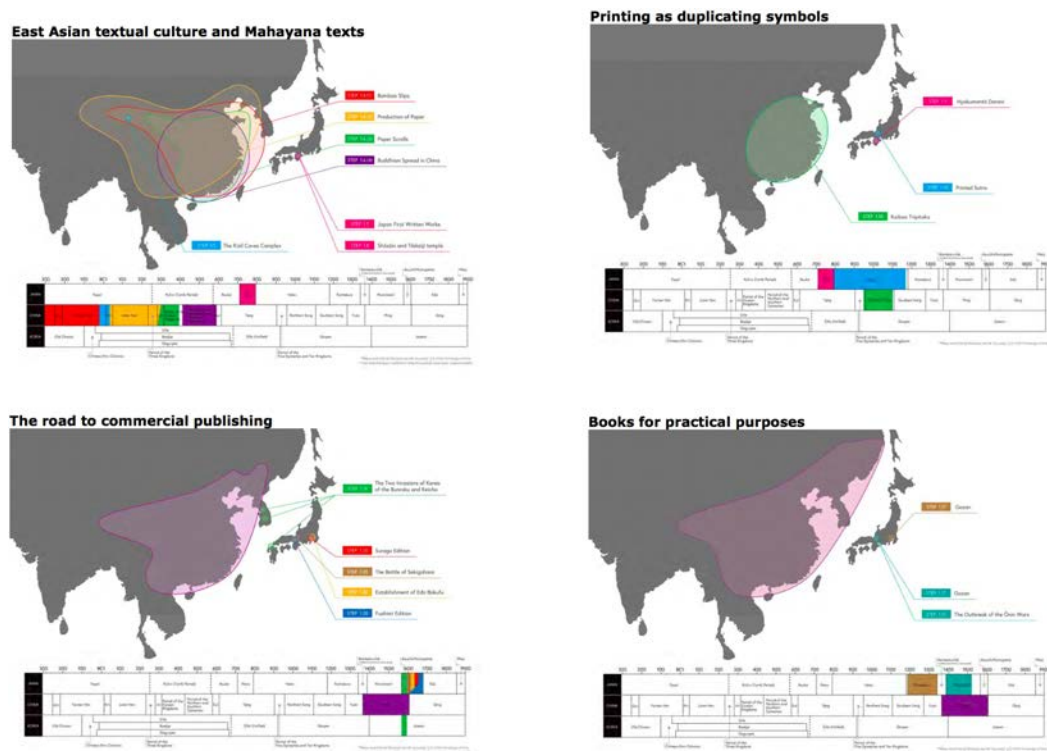


Figure 4.2: First version of Supporting Material - Week 1

Content of week 1 and week 2 focus on the interaction between China and Japan by transmitting Analects of Confucius from China to Japan and influence created in Japan under the spread of Analects. To help implement the story build up in the course content, supporting material firstly make the historical timeline of China, Japan and Korea, then lined them up together for learners to have a clear comparison so that they can have a full image on the timeline parallel with their own country. Then picked up main events introduced in every step and pointed them out from the timeline with step marks. This is expected to be the role of guidance and summary of the content for the week. Also, to support the content story telling, a clear time period picked up can provoke their existing knowledge towards that time. This can encourage learners on sharing more familiar knowledge with others and demonstrating existing knowledge with new information taught in this course.

### Location Spots

Other than historical period, there are also some spots where happened histor-

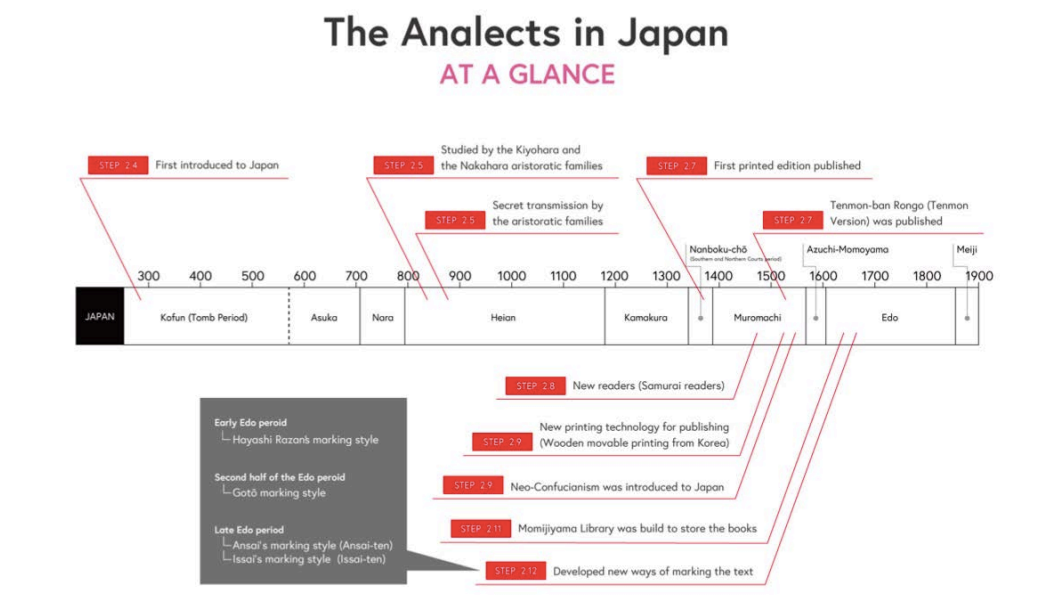


Figure 4.3: First version of Supporting Material - Week 2

ical event. For learners come from globally, it is difficult that everyone is familiar with Asian geographical location or even Japanese, Chinese and Korean geographical location. As the important knowledge, transmission of books talked in this course happens from China to Japan, or from China to Korea then to Japan. To have a image on the relative position is helpful to learners to figure out the process of transmission. Moreover, course provides video material which is shoot from the historical location as well as the picture material that is current view of historical spot too. Point out which locations have been talked during the course on the map also contribute to help learners build the whole image of the course content.

The goal of the supporting material is to help learners have a clear framework on the timeline logic and locations so that balance the difficulty created by the course content and decrease the culture burden for multicultural learners. Also on develop interaction experience, learners are expected to have more discussions on related knowledge and more willing to share existing information with each other such as answer questions and provoke conversation actively.



### 4.1.2 Interaction During the Course Launch

The designed supporting materials are insert in the PDF material which provided to learners for download in each week. For week 1, designed timeline and map is combined with the script material and set at the start of each step, and for week 2, timeline is separated to be another PDF and provide the link at first step in week 2 for learners to download.

#### Questions and answers

During the course launch, facilitators also join the discussion as well as observing the learners' behavior during their study process. It can be seen that in step 1.3 which provided the timeline and map material, learners leave comments about not only the course, but also about the timeline and map materials. Learners leave comments under the comment field showing that they feel helpful of having this timeline and map material and get clear on the new knowledge. As it is shown in the figure, other than knowledge related with history, one of the learner put up the question on language also got reply from learners who have knowledge on Japanese language. Supporting material here just provide the name of different period and dynasties, learners are guided to find out new information and build up communication by this new knowledge mentioned.

#### Sharing information

There are some learners created the common online note on their own initiative, talking about their understanding towards different period in Japanese history and shared the link with others in the comment field. Since everyone can share their ideas and existing knowledge in the common note and comments, learners with less knowledge on dynasty or time periods learned a lot from the knowledge sharing. Step 1.3 set the the beginning of week 1 as well as the whole course, learners start their conversation by replying to the shared information or just by pressing "Like" to show their participation to the course. According to the approach of "Telling Story" and "Provoking Conversation", supporting materials help learning on engaging them to complete the story talked in the course content and trigger the discussion by themselves. Even without the teaching and existing of educators all over the study time, learners can help each other and build up their knowledge framework by sharing the knowledge.

#### Building social learning environment

Besides than instant conversation, interactions happens no matter when learners come to the course. This course was launched in August 21, 2017 for the first time and as it can be seen from the figure that the post of sharing common note

happens in August 23. For learners who start the course together from the open time, their process of learning are almost same and can share the information in time. For learners who start the course or join the discussion late than others, they will not have so much learners study together with them in the same process. For these late comers, this post also contribute on creating social learning environment since they can still view the common notes marked here and learn from others who posted comments.

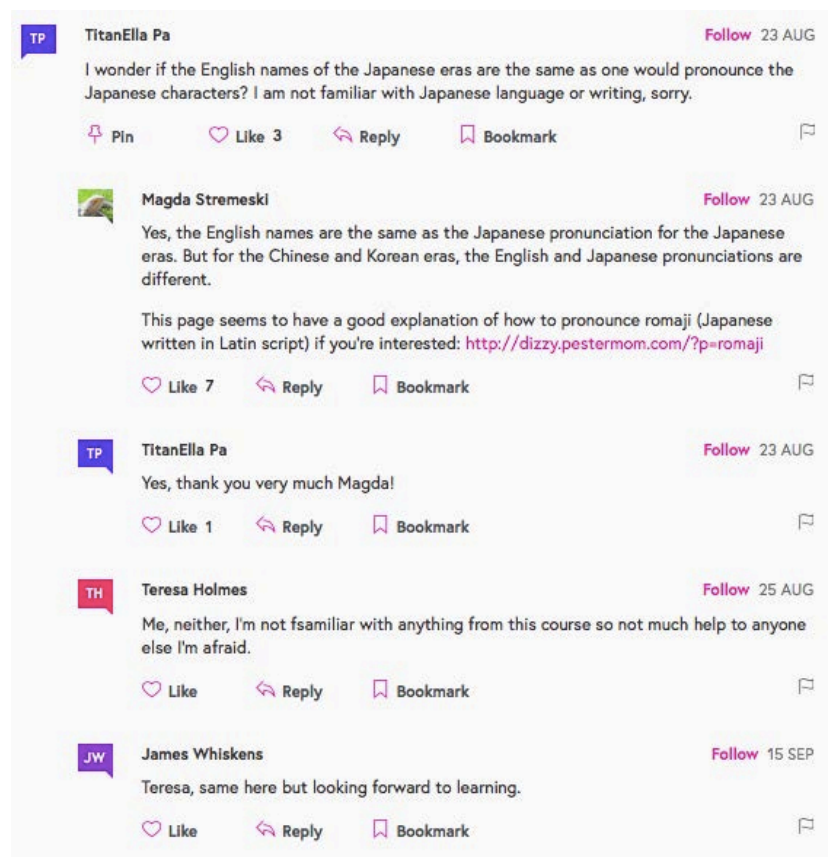


Figure 4.4: Course comment area (Screenshot from FutureLearn)

### 4.1.3 Evaluation and Feedback From First Launch

After the course launch, FutureLearn has designed survey for every learners giving their feedback towards the course. Therefore, other than the learners' behavior

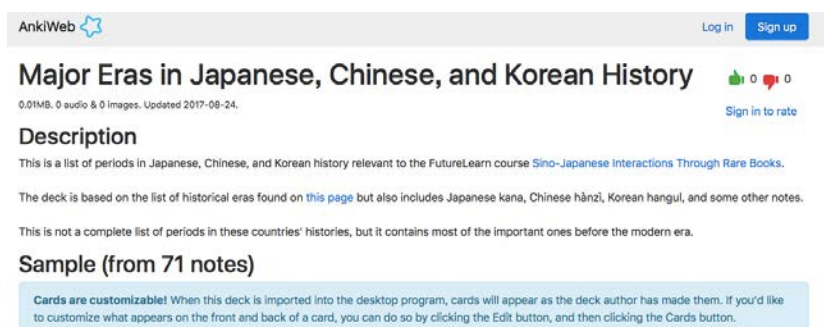


Figure 4.5: Screenshot from of the note’s link provided by learners

observed during course launch time, evaluation and feedback mainly comes from the survey and the result analysis.

### Overall Participation

For the first time of launch, there are totally 4,119 joiners who registered this course, 1,734 of them started learning on time and became the learners of the course. Learners are totally from 127 countries, most of them come from British, America and Japan. Joiners from multiple countries shows the various background of learners and the existing of learners’ difference on Asian history knowledge background. Among these learners, about 27.0% of them completed 50% of the course and pressed “step completion” button and about 22.4% of them complete 90% of the course. Compared with 4th launch of Book 1, the completion rate of 50% and 90% have been raised.

Table 4.1: Course Measures of Book 2, first launch

|  |              |
|--|--------------|
| Joiners                                | 4,119        |
| Learners                               | 1,734        |
| Learners with over 50% step completion | <b>27.0%</b> |
| Learners with over 90% step completion | <b>22.4%</b> |

### Weekly Complete Rate

From the data of complete rate for each steps, steps in week 1 has higher complete rate than other weeks. Compare with other courses, complete rate after first week of course launch will all drop a little bit. But for Book 2, the change of complete rate tended to be stable from the later half of week 1. This stable rate comes earlier and fixed than other courses. It can be referred that most of

Table 4.2: Course Measures of Book 1, forth launch

|  |              |
|--|--------------|
| Joiners                                | 8,668        |
| Learners                               | 4,213        |
| Learners with over 50% step completion | <b>25.8%</b> |
| Learners with over 90% step completion | <b>15.7%</b> |

Enrollment of learners

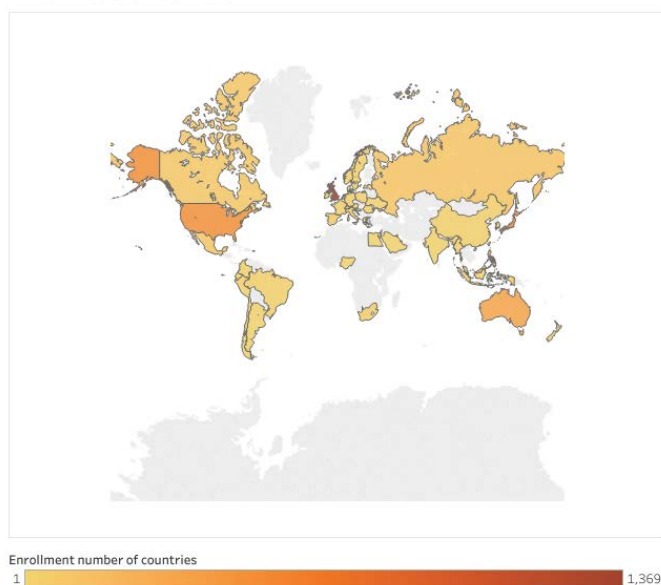


Figure 4.6: Enrollment learners background

learners made their mind on continuing the course or not earlier than other course because they feel the learning pace and environment during the first week study. For learners who continue learning, they are attracted by the course content and encouraged by the learning experience that they can continue study with others together. Supporting materials provided in week 1 contribute to build the helpful learning environment and learners' discussion triggered by course materials also enhance the social learning experience at the start.

### Learning Experience

The supporting material designed aims to help multicultural learners feel more comfortable on joining the course content and help on supporting continuity for the course content. According to the data from learners who accept the survey, 70.65%

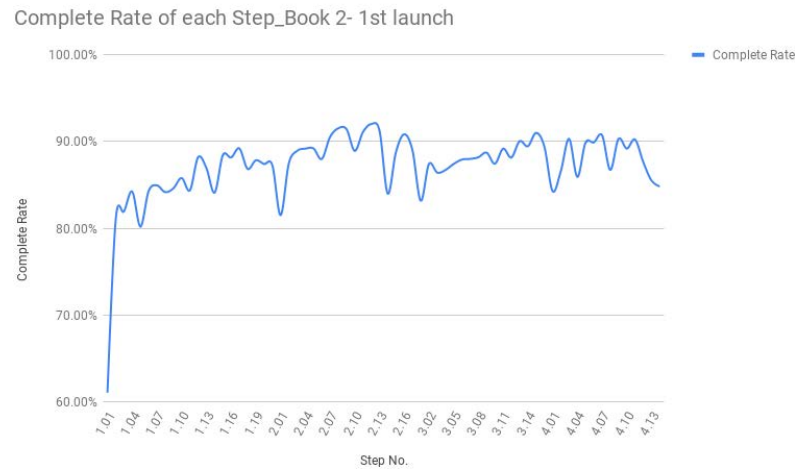


Figure 4.7: Complete Rate of each Step of Book 2, first launch (Data from FutureLearn)

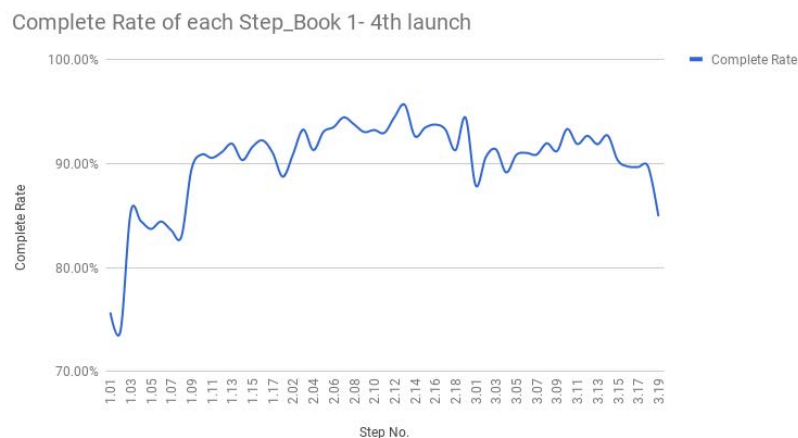


Figure 4.8: Complete Rate of each Step of Book 1, Forth launch (Date from FutureLearn)

of them feel the level of course is about the level they wanted. Though there are 13.04% of them feel that it is slightly harder than they wanted, but it doesn't affect the learning seriously. It is important to design the learning experience to be comfortable and suitable for learners so that they can get motivated alongside their study process. The feedback from learners reflected both supporting materials and course build the study content satisfied learners expectation.

Also, it is positive to see that learners give the feedback that feel attractive

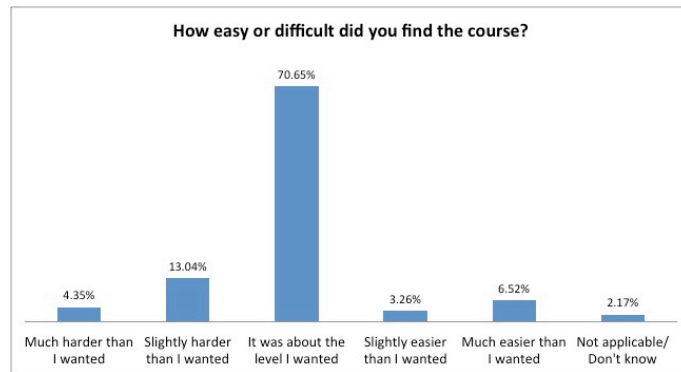


Figure 4.9: Result of Survey Question: How easy or difficult did you find the course (Data from FutureLearn)

about the course and feel the course is technical but really useful to their expectation. By reviewing supporting material with course content together, over half of learners feel they gained knowledge that can use in their work or career. Not only learning from the course content, but also get support from materials on connecting geographic location with historical timeline we got feedback on learners think they know more about topics they are interested in and informed about social, cultural and political topics which help them know more.

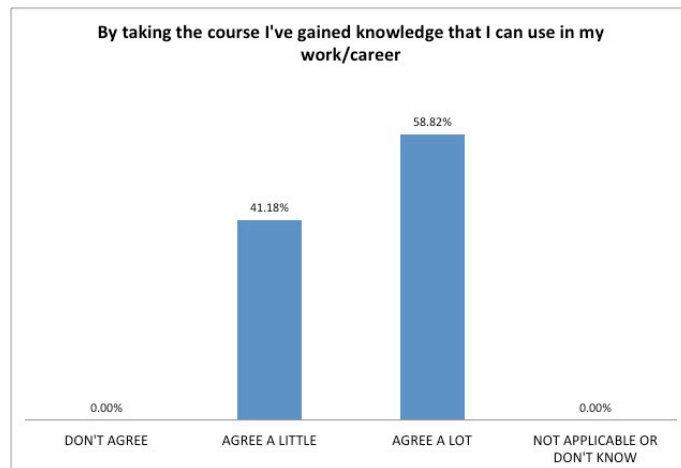


Figure 4.10: Result of Survey Question: To what extent do you agree with the following?-By taking the course I've gained knowledge that I can use in my work/career (Data from FutureLearn)

### Interaction Experience

To enhance the social learning experience, interactions such as comment and build connections between each other during the course is treated as the important experience which can be evaluate and analyze. This research works also for improving the interaction experience for learners as part of enriching the social learning experience.

Among learners who accept the survey, over 80% of them like or very like to read comments posted by other learners, educators or facilitators. And 48.93% of them like or very like to post their own comments. According to the social learning methodologies, reading comments is one of the way to learn directly from others. Especially for comments in week 1 and week 2 which the supporting material designed for, there are 2,516 comments out of 3,841 comments in total. Just as the observation during course open period, learners who has less knowledge gave the feedback on they feel some comments are high quality that are constructive to their learning though they cannot join the conversation sometimes.

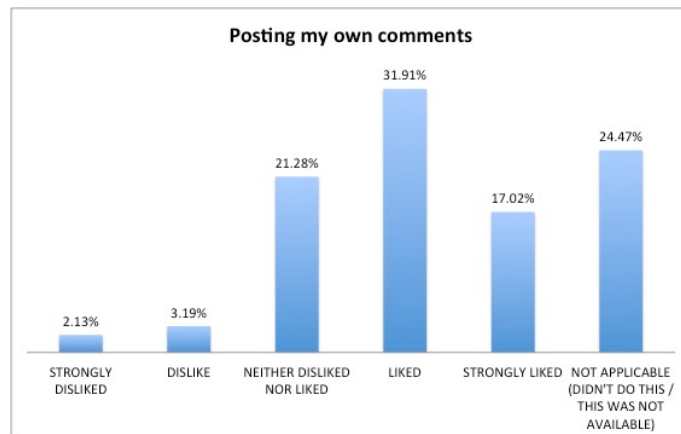


Figure 4.11: Result of Survey Question: Please rate how much you liked or disliked doing the following activities during this course- Posting my own comments (Data from FutureLearn)

Table 4.3: Comments in 1st run (Data from FutureLearn)

|        |       |
|--------|-------|
| Week 1 | 1,701 |
| Week 2 | 815   |
| Week 3 | 704   |
| Week 4 | 621   |

Most of the learners like to comment and share the learning experiences. For learners who comment and reply to each other, communications are built and they got encouraged from “have reply” from their peer learners. Here is the engagement account of top conversations from week 1. The question put up by starter talking about not only related with course content, but also combined with existing information and as a result of conversation, 52 replies here with 106 likes showing a lot of learners participated in and shared their ideas with others. Though there is only one comment from course team in this conversation, learners still get engaged by others without the direction from educators, which is the social learning expected to be.

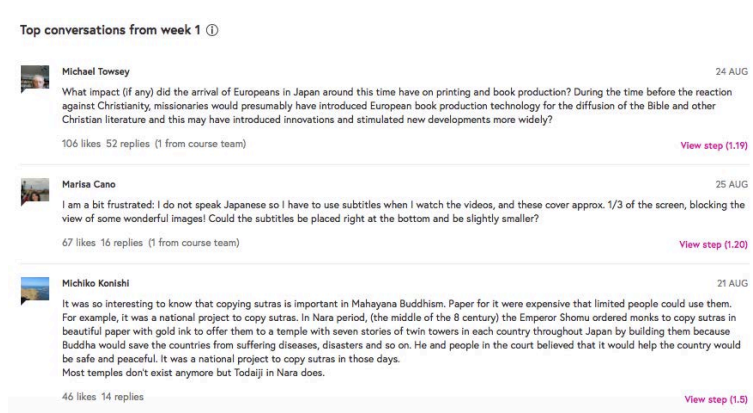


Figure 4.12: Facilitation dash board on top 3 engagement comments (Screenshot from FutureLearn)

68.54% of learners feels that the interaction with other learners is “About right”, and 53.93% of learners feels the interaction with course team is “About right”. It is positive to see that over half of learners feel good and comfortable for the interaction experiences and they give the comment that get engaged from comments by other learners or by course team. To some extent, from the approach of provoking conversation in FutureLearn experience design, what this research done has motivated the potential communication and enhanced interaction experience also.

### Summary

According to the survey, 52.81% of learners feel “Excellent” to the overall experience and 40.45% of learners feel “Good”. Learners gave the positive feedback towards the course learning experience as well as the supporting material which



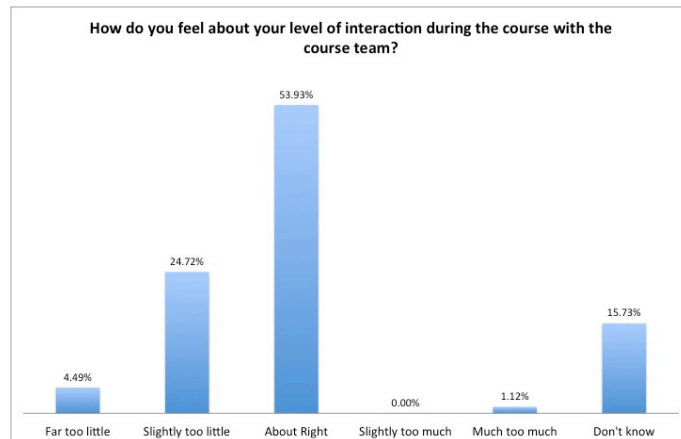


Figure 4.13: Result of Survey Question: How do you feel about your level of interaction during the course with the course team? (Data from FutureLearn)

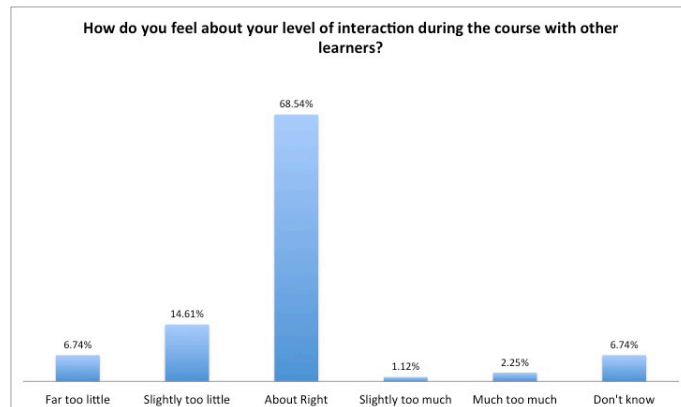


Figure 4.14: Result of Survey Question: How do you feel about your level of interaction during the course with other learners? (Data from FutureLearn)

helps on fill the cultural difference and facilitators' support on building up the connection and conversation between peers.

Additionally, there also have feedback with suggestions and new problems appeared after first launch of the course. Compared with week 1 and week 2, week 4 has the least comment and complete rate also decreased from the data. Learner pointed out that in week 4, there are many important historical figure appears and involved in important event. From the perspective of learning design approach, there still exist problems on continuity of course story telling. For example, there are feedback brought forward that for the learners who was not grown up in the

Asia culture, it would be a little difficult to deal with the overwhelming or complex figure names. Moreover, they feel confused on keeping track of which figure get involved with what kind of event or activities so that it will be a burden for them to spend more time on memory instead of absorbing and demonstrating. To solve these problems and enrich learners' social learning experience, between the first launch and second launch, second action was taken.

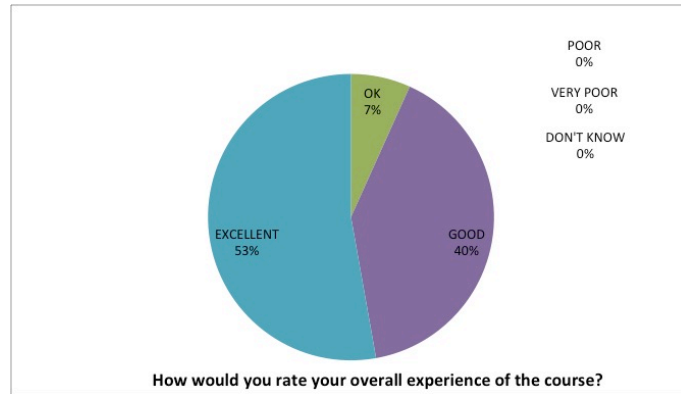


Figure 4.15: Result of Survey Question: How would you rate your overall experience of the course? (Data from FutureLearn)

## 4.2 Action 2: Facilitation method to Provoke Conversation for learners with a gap in knowledge

### 4.2.1 Actions Preparations for Second Launch

The second action taken to enrich learners' social learning experience following the approach of "Provoking Conversation", which tried to enhance more communication between learners and learners with educators or facilitators during the course study so that improve the interactive experience and trigger learners to study from each other within the social learning environment. To achieve provoking conversation for multicultural learners, this action works on decreasing the difficulty of joining conversation during the course learning process and changing facilitators' actions on joining the conversation actively. This action is expected to enhance learners' performance on communicate actively with each other as well

as with educators and facilitators to experience a more comfortable interactive learning experience.

### 4.2.2 Decreasing the difficulty of joining conversation

According to the observation of learners' behavior and feedback from survey, there still have learners with different culture background knowledge, sometimes conversation only happens between professional learners, and the question they discussed is sometimes difficult for learners with less knowledge [21]. To encourage communication for these learners, it is important to help them on decreasing the difficulty on joining the conversation during the learning process. So first part of this action is design the supporting material of a framework of course content with important historical figure to assist learners have a clear and fast view of different steps. Also can support on continuity of story telling, therefore create a comfortable learning environment for multicultural learners to catch up conversations and build communication with others. Meanwhile, for the learner who don't have too much time on reading, reciting and reviewing for a lot of times, this supporting material is expected to help them on grasp the content conveniently and contribute in their own learning pace.

From the feedback of learners, content of week 4 has a lot of professional historical knowledge and spent hours over planed on learning. Therefore the supporting material designed mainly focused on week 4. Week 4 talking about the history that happened from medieval to early modern Japan, related with developments in publishing in this period. The feature of history in this period is the change of Shogunate and therefore policy and mainstream of academic scholar in books of Chinese studies changed also. A lot of historical figures got involved with different issues happens to be different timing, which is all introduced by displaying rare books and talking about the stories hide behind the books. According to the feedback from first launch and the observation of learners' behavior during first launch, course content in week 4 has been reflected as a little bit difficult and not easy to catch up with during the course launching time. Some of learners pointed out that figures' name are too confusing and cannot match with issue correctly. Also, for learners who take this course as a development of their hobbies or interests, remembering names with timing have too much burden on them. Therefore, it is necessary to create a framework of week 4 and works as summary for learners to have a clear and fast overview towards whole week and make the history issues matching with figures chronologically. To support multicultural

4.2 Action 2: Facilitation method to Provoke Conversation for learners with a gap in ACTIONS knowledge

learners on implementing history background, this design picked up important historical figure as a key component during the design. Combine both important figure with timeline, and explain what they have done under what kind of history background. With more knowledge provided, learners are expected to learn more on the related content and feel the continuity between each step.

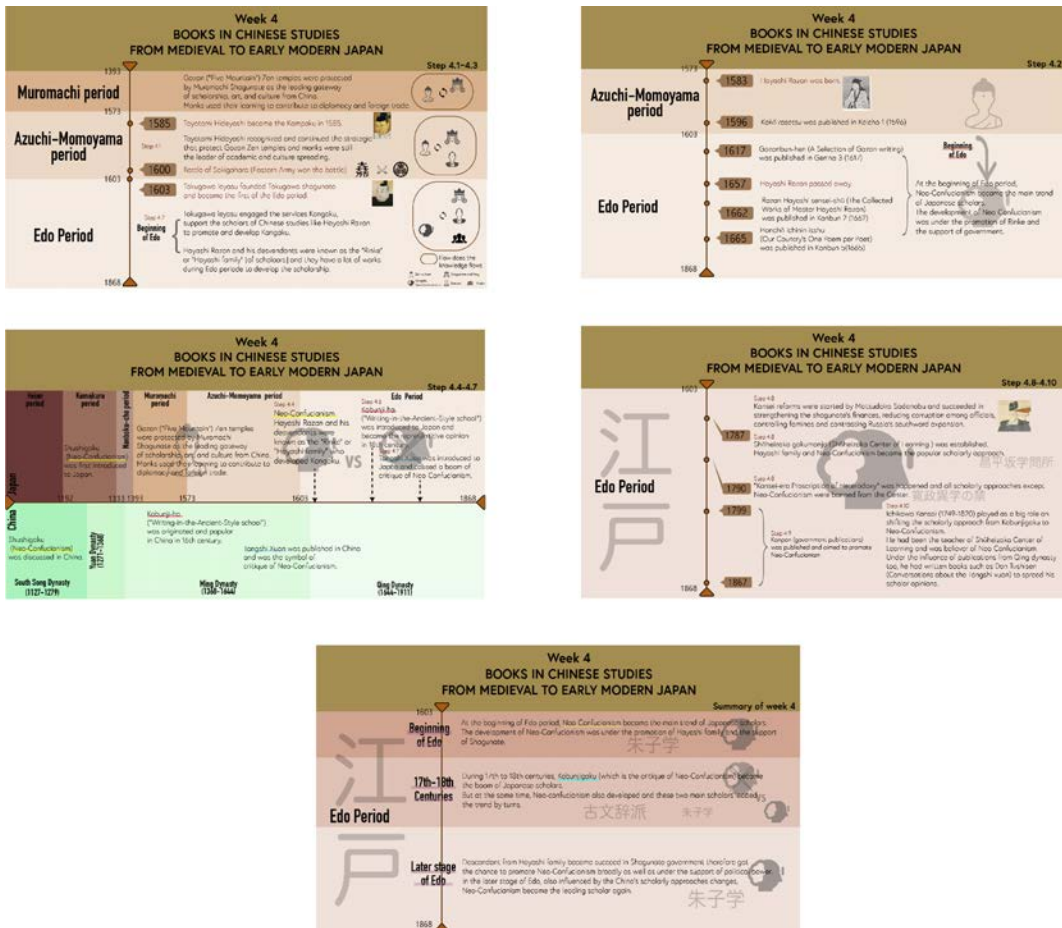


Figure 4.16: Second version of Supporting Material - Week 4

Historical timeline

In week 4, the course content itself does not emphasis on chronological timeline and the change of policy and mainstream of academic scholars caused by the change of Shogunate. To help learners on building up the framework of week 4, version 2 of supporting materials choose history time period as one key component in the design as well as make the structure from the perspective of Shogunate

periods. Moreover, paralleled timeline between China and Japan was inherited from version 1 of supporting material. In week 4, step 4.4 to step 4.7, course talked about Japanese scholarly transition by introducing Chinese poem collection books. For learners to grasp more on the history background at that time, implement the design with history timeline comparison in this version of design.

### **Important History Figure**

For learners who have problems on recognizing the historical figures and matching them with the issues they involved in, important history figures are chose to be the other key component in the second version of supporting materials. According to the course content, same figure may appears in several steps and involved in different issues. Too many names and irregular appearance of them in different steps may be the burden for learners to remember. Therefore, version 2 of supporting material designed to make the summary of each key figure mentioned in the course and matching them with the timeline from the first issue they participate till the last one mentioned in the course content. Also, for multidimensional understanding, there are pictures for figures showing together with their names to increase learners' interests. Figures and the issues they involved can be treated as the connection between each steps. Following the approach of "Telling Stories", make figures clear can contribute to connect the continuity between steps in week 4.

### **Changing facilitators' actions**

From the feedback of first launch, learners pointed out that they want more feedback about questions they put forward and communications from educators. Consider to the situation that there has language barrier between educators and learners, it is facilitators usually do the translation of questions first and translate professors' answer back to English again, then reply to learners. With this situation, communication is been delayed and learners can not have direct interaction with educators actually. The existing of educators and facilitators during learning period is important to learners. The interaction and feedback from them are the encouragement to learners directly. To ameliorate this situation and provoke conversation between learners and educators as much as possible, facilitators decided to change the actions when joining the course and help more on building communication.

### **Communication between facilitators and learners**

In this action, facilitators are considered to posted more comments under the

steps which has more questions from first launch. And instead of waiting for learners to ask questions in comment field, facilitators post comment first to be the start of communication such as welcoming words at beginning of course. Moreover, combined with supporting materials, facilitators can leave comment related with course content and guide learners to pay more attention on important knowledge point which can help them on understanding the course structure.

#### **Communication between learners and learners**

As facilitators have the data of learners when they registered before the course started, facilitators can categorize learners into several types by their existing professional knowledge or learning purpose. Then during the course launch provoke different conversations within different type of learners. In this way can facilitators help learners find out peers with similarity of them and easily to start conversation within the cohort have the same level of background or same interests toward the course.

#### **Communication between educators and learners**

For the academic questions bring forward by learners, facilitators can answer the question as participant of course and translate questions for educators to check. To decrease the waiting time, facilitators' reply will encourage learners on continuing conversation and wait for the translation of educators answer. Also, facilitators can make a summary of questions mentioned in the first launch to see if there has same question appear this time. As long as learners have similar questions in this launch, answers will be provided instantly. Though there have language barriers which cannot be overcome soon, facilitators can join the course as the bridge between educators and learners to ensure the conversation and deliver the encouragement from educators to learners.

The goal of action 2 is to improve the interactive experience and motivate learners to join the conversation so that can learn from each other. Use supporting material designed to help learners build up the framework of history happened between the medieval and early modern periods in Japan during their study, meanwhile join the communication to help on building conversation between main stakeholders involved in the learning process.

### **4.2.3 Interaction During the Course Launch**

Supporting material in this action is also inserted in with the PDF material together for learners to download. And inside the PDF, supporting materials also positioned at the beginning of each step.

### Questions and answers

In the second launch of Sino-Japanese course, facilitators also joined the conversation and discussion with learners together as well as observing the learners' learning behavior. With the comment bring forward firstly by facilitators, learners have communications started in week 1 by simple reply under facilitators' comment and press "like" to build one-way communication. Also, learners of this launch have more interests on the poem and related literature knowledge, and put forward many questions about the meaning of poems and meanings for literature content of the rare books provided as reference material. Some learners are profession on the course content and have researched on field such as ancient Chinese literature. They are willing to help answer others' questions. Moreover, compared with previous launch, learners this time have conversation not only under the video steps, but also under article steps. Many of them picked one part of the sentences from the poem or book paragraph to talk about their understanding and put up questions for further thinking.

### Sharing information

Learners who have existing knowledge are also willing to share their ideas. Some of learners this time even out up questions about related knowledge. For example, in week 4, step 4.4 to 4.7 are talking about Japanese scholarly transition through Chinese book Tangshi xuan. This book was transmitted to Japan and academically researched by Japanese scholars. Learners put up questions on the content talking about in Tangshi xuan because they are interested in the Chinese character culture. Not only develop the course content, but also attracted by the related knowledge. Some of learners also comment with extra link to share the knowledge they knew to others in the comment field. Some professional learners also shared extra knowledge to other learners in the comment field, in the figure shows, such as referring sentence from Shakespeare which has similar meaning compared with passages mentioned in course content. Since course content focused on the Asian culture, western literature and philosophy posted here can also be a interesting and useful example for learners to think and learn more. Learners started this kind of behavior subjectively and demonstrating new knowledge by putting forward new questions from these reference is a positive sign for conducting and enjoying social learning. To enhance the connection between learners and educators, facilitators also shared their idea and provoke the conversation by talking about the knowledge which is reflected to be the discussion point from the first launch.

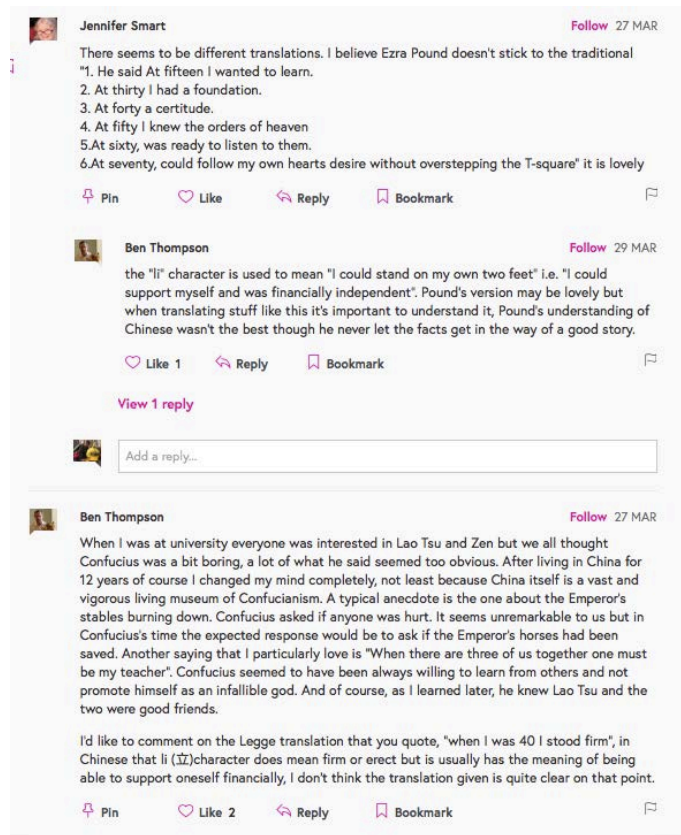


Figure 4.17: Learners share comments with professional point of view (Screenshot from FutureLearn)

### Building social learning environment

Compared with learners in the first launch, more learners in second launch prefer following facilitators and learning from others comment and press “like” building “one-way” relationship. Learning in the social learning environment, facilitators follow back to learners and build connection as well as shared information in the activity field. Therefore “two-way” relationship between learners and facilitator are build successfully. Besides, some of the learners in this launch are willing to share their personal experience related with course knowledge with other learners. One example showing in the figure is when talking about rare books collected in the library, one of the learners mentioned her experience of working as a volunteer in the Museum of Asian Art. And she talked about the knowledge with other learners. Not only put forward questions, but also sharing personal



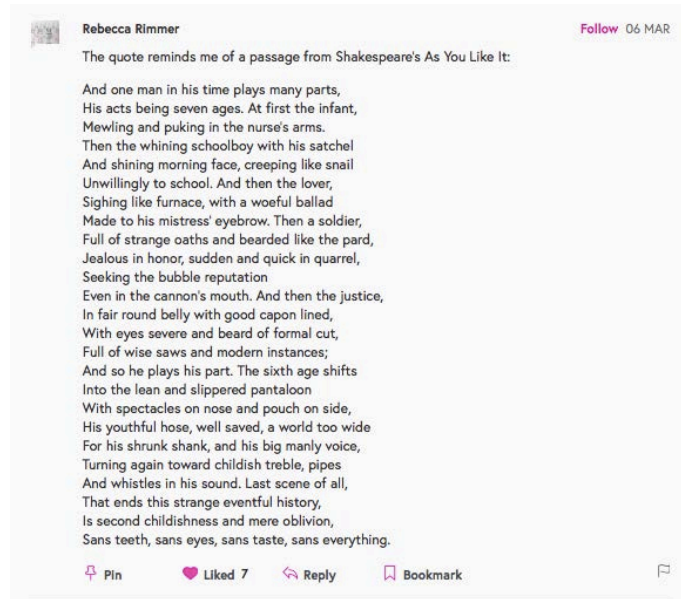


Figure 4.18: Course launched by Keio FutureLearn team (Screenshot from FutureLearn)

experience to help understanding or picture the course content initiatively. Under the social learning environment created, learners can study by themselves and associate existing knowledge with new discussion, which is the direction that educators and facilitators are expected to. In the second launch, learners go deeper and fulfilled used the knowledge facilitators can provided. Supporting materials are also been helped on creating conversation key words and helped multi-culture learners on basic framework and then are able to join the discussion with more professional opinions.

#### 4.2.4 Evaluation and Feedback From Second Launch

Same as the first launch, after second run of this course, FutureLearn provided surveys to learners to collect the evaluations and suggestions from them. 5 months between the first launch and second launch, consider to different joiners and different background, there are evaluations and feedbacks come from new perspectives showing from the data results.

##### Overall Participation

For the second run of the course, there are totally 923 joiners registered and 627 of them start learning. Compared with first launch, numbers of learners are

decreased, but still have 79 countries of learner joined the learning. Same as first launch, most of learners come from British and America, with also 77 of them come from Japan who is more familiar with Japanese history. Same as first launch, most of the learners finished course study, over 80% of learners finished 50% of the course, the completion rate compared with first launch has been raised. This course takes 4 weeks, about one month, to study and most of learners spend 27 days to complete all the steps. This data shows that the pace of learning is following educators expectation and content designed have not created too much burden for most of the learners.

### **Weekly Complete Rate**

From the data of complete rate, week 1 still has higher complete rate than other weeks. Compared with data in first launch of this course, the change of completion rate became stable at around step 1.7 which is earlier than first launch. Also, for week 4 which has the supporting material added this time, number of complete learners does not changed very acutely which means as long as learners started week 4 and interested in the content, they will continue to finish the whole content without skipping the content. Moreover, for the average visited steps of per learner, data changes raised from 11.8 steps to 11.22 steps, which can be inferred that proportionate more learners are interested in content of week 4 compared with first launch. The completion rate changes because of the number of access learners changes. Find out the reason of leaving or not completing and deal with how to extend access learners' interests and develop them to complete learners are the key components need to consider for next launch. From the line chart it can be seen that same as first launch, the changing of sloping does not change too much. But compared with unstable completion rate from step 4.8 to step 4.10 in the first launch, completion rate changes more stable this time. Since there is a sudden drop of step 4.8 in the first launch, in the supporting material for second launch, one additional summary of historical knowledge focused from step 4.8 to step 4.10 has been created. Under the help of the graph, the main knowledge are more understandable for learners who felt confusing on these parts.

### **Learning Experience**

The second version of supporting material designed according to the approach of "Story telling" and contribute to support course content in the 4th week of all the courses, which has been pointed out from some learners as confusing according to the feedback last time. According to the survey this time, in learners' employment and research area, this time has more learners come from creative/ arts

and culture area as well as teaching and education area. That explained learners' behavior on commenting with professional questions and posting information of related western literature and art field. More professional learners joined made the learning environment supported not only by facilitators but also from learners background. For the reason of choosing this course, some of learners come for vitalizing their mind and learning for pleasure or satisfying intellectual curiosity, some of them want to complement their personal hobbies or voluntary activities. It can be analyzed that most of learners select this course under the situation which do not want too much study burden come from course content. The design of framework on the history and important figures help them on reducing the learning time and able to handle the knowledge faster. Under the help of supporting materials, learners join and continue course with more relaxed mood which can also motivate them on completing course study.

### **Interaction Experience**

For the second launch this time, facilitators joined and posted comments more than previous time. At the beginning of course, since the number of joiners are less than previous time, facilitators joined more to enrich the discussion status as well as help learners build up conversation quicker. During the course learning, facilitators also noticed that some learners this time prefer to review others comment and press "like" and post less comment than previous launch. And some learners come from professional field are more willing to share information and personal experience about related field such as about art piece or discussing translation of poem. To balance the course learning situation, facilitators posted comment this time trended to provoke academic discussion related with course content and help learners who has problems catching up with learners talking about professional questions on engaging their learning as well as accompanying on learning process. Though some learners just build "one-way" relationship and not join into discussion positively, following to the approach of provoking conversation, facilitators assistant them on posting their ideas and opinions towards course content and create topics for other learners to join together.

According to the data, 62.50% of learners are satisfied or very satisfied to the activity of discussion with other learners. From the picture of most engaging conversation in week 4, it can be analyzed that learners are more interested in sharing knowledge in the related culture area. Since learners come from professional field more and pursuing for hobbies here, topics without too much burden are easier to provoke conversation and build interactions between each learners. Beyond that,

4.2 Action 2: Facilitation method to Provoke Conversation for learners with a gap in  
ACTIONS knowledge

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form the picture of most engaging conversation in week 2, learners are willing to put up questions related with basic course content and triggered more discussion on the course content. Compared with first launch in week 2, learners are more “brave” to share their opinion and question towards basic knowledge with each other. This behavior encouraged learners with less knowledge background learners to join the interaction. Also facilitators and educators joined the conversation to help solve the problems so that learners can get more information from the comment field.

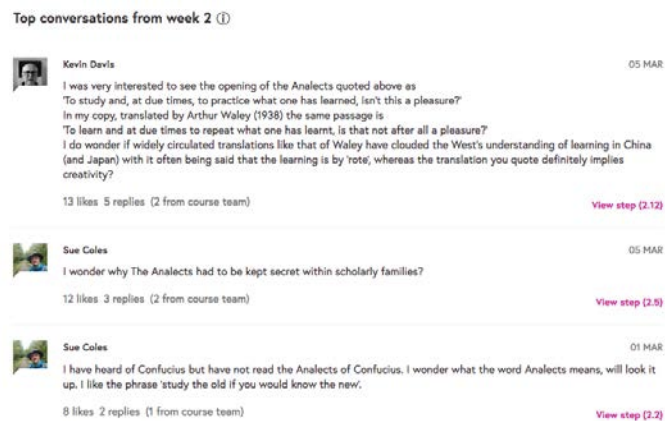


Figure 4.19: Screenshot from of facilitation dash board on top 3 engagement comments for week 2

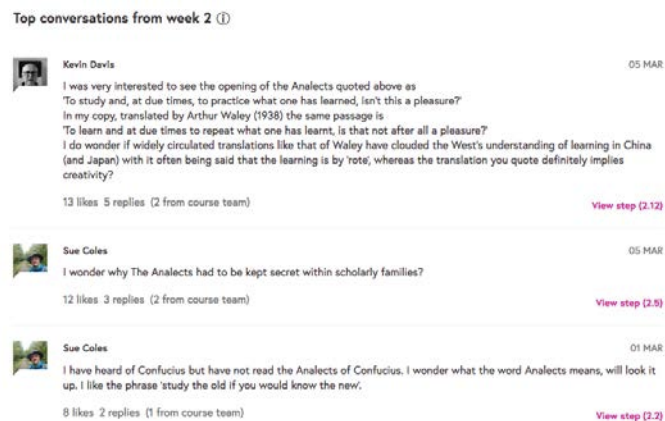


Figure 4.20: Screenshot from of facilitation dash board on top 3 engagement comments for week 4

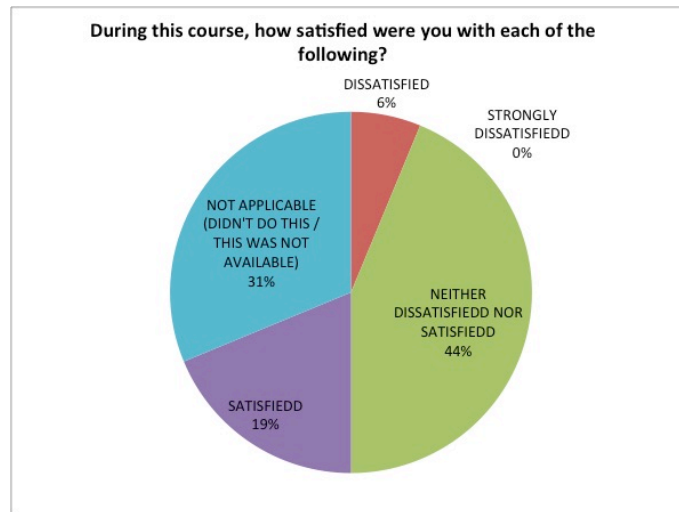


Figure 4.21: Result of Survey Question: During this course, how satisfied were you with each of the following? (Data from FutureLearn)

### Summary

According to the survey, 62.50% of the learners very enjoyed the overall experience and it is also positive to see the feedback from learners that supporting materials are fascinating for them and historical framework provided along the course is very helpful. For second launch, facilitation paid attention on provoking conversation for learners who are not from professional field and balance the discussion from academic perspective. Also supporting materials designed for learners to have a quick view of content specially for week 4 contributed to engaging learners from saving their time on study and reduce the learning burden. Under these actions on enhancing learning experience and interaction experience can learners enjoy the overall experience during the social learning. In additionally, from the feedback of learners, suggestions like want more interaction with educators became the new problem for next launch. Though facilitators and educators all come from course developing team, the role of facilitators is tend to be provoking conversation and help continuing the conversation. Learners will get indirect encourage from the answers or the comments posted. The role of educators have more image on celebrating progress for learners according to the approach. Learners have the need on communicating more with educators, which means they need the direct encouragement form educators. This becomes the key component for next design.

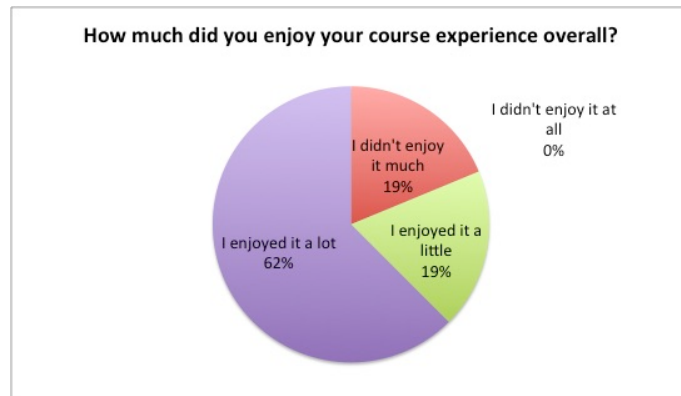


Figure 4.22: Result of Survey Question: How much did you enjoy your course experience overall (Data from FutureLearn)

## 4.3 Action 3: Support assessment for Celebrating Progress

### 4.3.1 Quizzes designed as the preparation for third launch

The third action taken to enrich learners' social learning experience following the approach of "Celebrating progress", which tried to help build learning environment and create more social learning experience for learners under direct encouragement and interaction with educators. To achieve celebrating progress, this action choose to design and add quiz as one step of the course content. Combine the supporting material created previous, quizzes and feedback focused on content of week 4 are designed as the preparation for next launch. The quiz is expected to encourage learners from the answer they choose for the quizzes. Celebrate the progress they made during the course study as well as help them find out the deficiency of knowledge so that get motivated from the feedback of educators.

Action has been taken as design the quizzes for learners to enhance the existing of educators and provide more chances for building conversation between learners and educators. Besides, from the feedback of learners, they want more quizzes to do during the course. At first, course design team and educators considered that too much quizzes might become the burden for learners during the study, therefore set one quiz in step 2.14 to test learners' knowledge.

After analyzing the learners' behavior and feedback, it can be thought that learners is actually looking for more feedback after giving the answer from ed-

ucators, which is also a expression of pursuing the encouragement directly from educators. Hence as the preparation of third launch, this action considered to design new quizzes and feedback towards each possibility answer so that help learners on checking academic deficiency, getting feedback from educators and also want to creating more opportunity to start conversation between learners and educators.

Just like FutureLearn framework designed the comment area next to course content, implemented by one of the social learning methodology called direct learning from others, take quizzes and get result of correct or incorrect, then learning from the feedback of each answer to know which part of knowledge is unclear during the study. Knowledge from different weeks will be integrated in the quiz step to check whether learners understand the theories and how to apply them to solve the problems. Quizzed content mainly focused on week 4, which is the last week of course and involved several important knowledge into one week. Also it is noticed that complete rate of week 4 is lower than other weeks, and learner suggested in survey that week 4 taken more time to learn during their study. Learners can learn directly from the quizzes and feedback provided by educators. As one of the stakeholder in FutureLearn course, learners should be able to learn from educators directly. Also, in the FutureLearn template of designing the quiz, learners can get the hint of related steps from the feedback. In this way can learners get instructions from educators and enhance the academic performance. Meanwhile when learners reviewing course content and supporting materials, questions are visible and integrated as part of course content. Learners can also put forward questions at comment field and propose for further discussion.

#### **“Quiz”**

“Quiz” is considered as one of the key component in this action. According to the survey, many learns pointed out that they want more quizzes. The need of quizzes indicated learners need more practices toward new knowledge. Quizzes are considered to be the key component in the design this time since doing quizzes is the way to demonstrate knowledge learners have studied and check whether they can apply them correctly. The application of knowledge and analysis of question is the progress made during the learning process, which is also need to be celebrate positively by educators and other peers. To achieve celebrating progress made by learners, using quiz is the most directly and easy way for learners to participate and get evaluation of their study [18].

Moreover, quizzes as demonstration is more like the connection between each

steps which can contribute to story telling for the whole course content as well as create continuous learning experience for learners. In the quizzes designed, it can be seen that though the quiz content mainly focused on week 4, to answer one question, learners need to apply the knowledge learning from week 2 also. It is reasonable to review knowledge about “Gozan ban” in week 2 during the study of “Gozan ban” mentioned in week 4 again. Knowledge talked in week 2 is connected with content in week 4. Questions about “Gozan ban” involved in the story telling, and help on implementing the story telling in week 4. This is the check of skill of summary and to see whether learners understand the relationship of different historical event.

Also, quizzes are integrated with feedback so that learners will get motivation from the result of quizzes and have another topic for communication with others to revise their knowledge. Designed the questions put forward indicated the conversation is firstly started by educators. Then learners answer the questions is like to “reply” the conversation on discussing the topic. Then feedback got from educators is the “reply” from educators to the performance on answering question. Under this way can provoke discussion within learners by the guidance of educators and during the discussion towards same question, learners reviewed knowledge and motivated to have further thinking on the topic. Meanwhile, quizzes are expected to contribute to help learners on reviewing basic knowledge and provoking further thinking towards course content. This arrangement is expected to be friendly to multicultural learners who cannot remember too much of historical knowledge and who feels overloaded on the knowledge.

### **Educators**

Educators are considered as the other key components this time to provide encouragement towards learners’ progress during learning and emphasis the interactions with learners. According to approach “Celebrating Progress”, learners need to get motivation and encouragement by educators from celebrating the progress they made during the course study. To strengthen the existing of educators, each quiz designed to have the feedback from specific educator, with educators’ name and picture integrated with the feedback. Learners can have communication with facilitators at the comment field, but since the language barrier, learners cannot have direct conversation with educators in the comment field. By providing more quizzes with educators’ feedback, can learners feel the existing of educators and create the experience that learners get instruction and evaluation from educators directly. In this way can they feel encouragement from educators according to



## 5 questions on reviewing and thinking further about Books study



### Question 1

Under the following description to Gozan ("Five Mountain") Zen temples, which one is the most suitable?

- Gozan Zen temples were protected by Muromachi Shogunate as the leading gateway of scholarship, art, and culture from China.
- Gozan zen religious was introduced to Japan at the same time with the transmission of Analects of Confucius and spread all over Japan as the mainstream religious.
- Toyotomi Hideyoshi didn't recognize Gozan Zen religious and broke the strategy on protection of Gozan Zen temples.
- During Azuchi-Momoyama period, Monks believe Gozan Zen lost the position of leader of academic and culture because they spread the knowledge to Samurai.

Figure 4.23: Part of the quiz questions designed for week 4 (see more at appendix)

their academic performance. Also, questions are set by the important knowledge proposed by educators and mark for learners to remind on review as well as trigger deeper discussion. Under this design can enhance the accompanying from educators and learners will get encouragement from the feedback no matter they have the correct answer or incorrect answer. It will be helpful for learners to get more academic instructions from educators directly. This is also designed following direct learning that learning directly from educators for learners.

### 4.3.2 Design process of Quiz

Since the next launch of Sino-Japanese Interaction Through Rare Books will happen in 2019, during the reflection and development period, quiz designed cannot be test with learners, therefore 10 testers took the hypothesis test.

The quiz is designed using the framework provided by FutureLearn. Within the defined structure, this action need to design from the title to feedback for each answer individually. Referred to the existing quiz in week 2 and improved content applying the quiz evaluation method proposed by FutureLearn, title and introduction are considered to avoid the word “quiz” to release the potential psychological pressures for learners that may create by quiz. For question design, there are two template of questions can be chosen to implement. One is the multiple choice question, which need to design the question as well as several choice for learners to select. The other is cloze question, which is the exercise of fill in the blank space of one sentence to see whether learners can get the key word described correctly. In this quiz, to improve the interests of learners during the learning experience, two pattern of questions are selected. As this quiz is set in week 4 and mainly want to help learners on improve the academic performance in week 4, questions and key knowledge are decided focused on week 4.

Based on supporting material designed in action 2, in order for learners to have a quick review on historical event and important figure presented in week 4, multiple choice questions talk about “Gozan Zen temples”, “Hayashi family”, “Neo-Confucianism”. Instead of list the definition or timeline in the question and answer for learners to recite, this quiz choose the question of directing learners to comprehensive understanding on the related knowledge and be able to combine knowledge learned from different steps in to analysis one summarized question. Each question has 4 possible choice, and one of them is correct. When doing the quiz, learners are expected to finish reading all of the 4 choices, which is designed from different perspective of historical facts. For example the question about “Gozan Zen temples”, since Gozan Zen religious was transmitted from China to Japan and experienced a long history under the change of political power, 4 choices are designed to describe 4 important facts happened in 4 different time period which influenced the development of Gozan Zen religious. But to encourage learners think more and recall the knowledge they have learned, this question set only one choice is correct, other 3 have incorrect description on confusing point which has been mentioned in the previous two launches by other learners. But for the feedback and evaluation, besides to tell learner whether their choice is correct

or not, also provide hint related with this choice and the correct description for this choice. When design the feedback content, words are chosen to be more friendly and conversational and avoid to judge learners too much. In this way, can learners study from the feedback no matter they got correct answer or not and get encouraged since they got evaluation and instruction directly from educators. Feedback designed for incorrect answers is also the way of celebrating progress with learners by assisting learners find out the knowledge deficiency or misconception.

### **4.3.3 Evaluation and Feedback From Testers**

After finish the quiz design, prototype of quiz are provided to 10 testers to test and review. Then collect their evaluation and feedback to analyze from view of learners and view of course learning experience designer. The quiz is formed in FutureLearn course page and can be only reviewed by course organizer since it has not been open to public yet. All of the test are previewed in the real situation and testers joined the quiz by click quiz step (step 4.15), which is same as learners' learning process.

#### **Learning Experience**

Firstly, feedback have positive response of the quiz structure which is consist of 4 multiple choice and one cloze question to fulfill the learning experience for learners. Quiz begins with the short introduction on guiding learners to know about the knowledge involved in this quiz make facilitators feel welcomed and friendly. Also they feel encouraged since the vocabulary and express designed for quiz title and short introduction does not use the words like “quiz” nor “test”, but choose “quick view” and “what else can you discover” to present the function of this quiz in the course content flow as well as to guide learners have more deeper thinking.

Secondly, for the content of the quiz, testers have also positive evaluation on designed for knowledge of week 4. They feel it is important to help on checking whether they understand clear in the last week of course, and provide another chance for them to ask questions and communicate with educators. After answers are given by educators, they believe learners want more communication about how they understand about the knowledge which means learners will get motivated on discovering the knowledge and think more to solve the problem. Also, if they got incorrect answer, after finish reading feedback of this answer, they also want to click on other answers to see the feedback given by educators. This is also a behavior shows they want and can have more learning experience from joining the

quiz.

### **Interaction Experience**

Since the framework of quiz is defined by FutureLearn platform, this design cannot change the system of providing the quiz, but to fully use the sections provided to create interactive environment and motivations to communicate.

All of the testers reflected that they felt encouraged by the moment of pressing “Submit” button and got the feedback of correct. Also they feel satisfied even they got incorrect since there have hint of the solution detailed to step and have explanations specific talks the answer clearly. Also, one tester who joined the course just from second launch feels good about the instant feedback. She thinks compared with put forward questions in the comment area and wait for educators’ feedback, answers chosen here will get the evaluation as well as explanation right after submission is real encouraging and helpful. And after she got academic evaluation, she still have problem with one of the answer, so that the hint of step helps her go to the corresponding steps and put forward questions. That is exactly the behavior this action expected to learners and how the new conversation is build up.

One of the Chinese tester gives the suggestion on feedback part of the quiz. For each answer, to explain in detail of the knowledge, there are one to two sentences provided as correct answer and explanation. She feels it is helpful to have response for correct or not, but too many words in feedback field is difficult to read and cannot catch the point of this question as soon as possible. Consider to learners who is busy on learning and don’t want to spend too much time on reviewing, this feedback provided could be a burden during their study and decrease their motivation on continuing as well as communicate with educators about their questions. Similar feedback has been responded from one Japanese tester. He agrees with to provide detail explanation to trigger learners’ thinking and deeper discussion, but not include all the words in feedback section set by the framework. If educators “talk” too much in the feedback section, it will also decrease the potential communication from learners. And he suggested to have link set in the feedback section so that for learners who wants to check more detail, they can choose by themselves following their own pace to build communication. Moreover, some tester also suggested on building continuity of quiz with other steps to provoke conversation. Learners will have the need to communicate with educators after get the feedback of one question. But framework defined by FutureLearn have no comment area in quiz step. To trigger the conversation happen and thoroughly

celebrating the progress to learners, following the environment created by introduction of the quiz, it will be more continuous if there are steps designed before or after quiz step to complete the conversation.

**Summary**

According to the feedback from testers, it is overall positive toward the action of design the quiz for learners to celebrate their academic progress during the learning process. And also the feedback and instant evaluation from educator enhanced existing of educators, so that creating a learning environment with companion of not only learner peers, but also educators and facilitators. Moreover, for course design process, quiz question design used to be a difficult part for facilitators. This time with the base of supporting material, quiz questions are picked up easily and cover almost all the important knowledge in week 4. Supporting material build the framework for week 4 and summarized the content. Therefore referring the summary material can facilitators find the point and related knowledge to create comprehensive questions for learners to practice. This experience can also be applied to not only Book series, but also other courses for quiz design.

# Chapter 5

## Conclusion

This chapter will give a conclusion of the research based on the evaluation of actions taken as explained in chapter 4 and briefly talk about the related future work of this research.

### 5.1 Conclusion

This research mainly focused on enriching learners' social learning experience according to the approaches applied in FutureLearn platform. Face to learners with various background and different knowledge level, this research enhanced their learning experience from course content learning experience and interaction experience. Meanwhile achieved the encouragement to learners on joining the course.

Following the approaches proposed by FutureLearn, this research enrich social learning by completing story telling. Actions on enhancing the continuity through designing the course content of supporting material assist multicultural learners on completing learning experience and build the learning environment wherever learners join the course. Also for learners who have different recognition on pre-knowledge, supporting materials help them build the whole image of framework so that they do not feel too much burden during the course study. Therefore learners get motivated on continue learning and join the discussion about course content to experience interactions with others.

Then this research enrich social learning by provoking conversations. Actions on promoting communication through building the bridge between educators and learners as well as guiding learners' discussion using the supporting materials guided learners on building conversation. To overcome the language barrier between educators and learners, join the conversation first and post comments related with the course content. Then discussions develop around course content

trigger more learners join in the conversation. By answering learners' questions referring supporting material, guide learners to start more communication with board topics. So that enrich learners' social interaction experience from different perspectives and get motivated from social learning environment during the course study.

Also, this research enrich social learning by celebrating progress. Actions on designing quizzes for of learners motivate them from encouraging every learning progress they have as well as instructing them on finding the knowledge deficiency from the quizzes. By designing not only the questions, but also feedback for every possible answer, create the learning experience that any progress in the field need to be encouraged. Also from the perspective of enhance the interaction experience, set questions is also a good start of a conversation between educators and learners. To solve the problem of language barrier, predefined feedback and posts can support on creating the positive communication environment for learners to experience sharing information and study within social platform

## 5.2 Future Work

For the future work of this research, there has third launch which is planned to start in 2019, and all actions taken need to be revised or improved towards the new launch. Actions come up in this research have strong feature on supporting course introducing Japanese culture, and learners also have the similarity who choose the companion courses like Japanese Culture Through Rare Books and The Art of Washi Paper in Japanese Rare Books. Therefore actions introduced in this research to enrich social learning experience can be applied for similar situation.

Also, with more learners joining the course, take the view of all course launched by Keio Future, next step is going to research on solutions for specific type of learners. Continued the analysis of learners like this research to find the specific feature of learners, it needs more analysis on learners' background and categories learners with learning purpose, study routine or attitude towards social behaviors. During the third launch, observe categorized learners' behavior, so that can find potential problems or needs on experience social learning. Support different learners with corresponding solutions can help them on a relative "customized" way. Also, the type of learners and corresponding solution could also be applied to other course with similar type of learners.

# References

- [1] The ideas behind our approach to learning. <https://partners.futurelearn.com/course-creation/pedagogy-and-learning-design/the-ideas-behind-our-approach-to-learning/>. Accessed: 2018-06-09.
- [2] Japanese culture through rare books. <https://www.futurelearn.com/courses/japanese-rare-books-culture/>. Accessed: 2018-06-09.
- [3] Our story - futurelearn. <https://www.futurelearn.com/about-futurelearn>. Accessed: 2018-05-09.
- [4] Quizzes and tests. <https://partners.futurelearn.com/course-creation/pedagogy-and-learning-design/quizzes-and-tests/>. Accessed: 2018-06-17.
- [5] Sino-japanese interactions through rare books. <https://www.futurelearn.com/courses/japanese-rare-books-sino>. Accessed: 2018-06-09.
- [6] Social learning. <https://partners.futurelearn.com/updates/social-learning/>. Accessed: 2018-05-09.
- [7] Uk universities to launch free degree-style online courses. <https://www.telegraph.co.uk/education/educationnews/9743703/UK-universities-to-launch-free-degree-style-online-courses.html>. Accessed: 2018-06-08.
- [8] Webinar: What is a “good” futurelearn quiz? <https://partners.futurelearn.com/webinar-what-is-a-good-futurelearn-quiz/>. Accessed: 2018-06-17.
- [9] 大学のオンライン講義日本定着を阻む壁. <http://college.nikkei.co.jp/article/52203811.html>. Accessed: 2018-06-10.



- [10] 大学のオープン化に関する調査結果報告(2017)スマホ・タブレットの普及によって、モバイル環境での学習も加速か?～無料のweb講座(mooc)が、社会人の「学び直し」に有効～. <https://www.jmooc.jp/research2017/>. Accessed: 2018-06-18.
- [11] Aljaafreh, A. L., and Lantolf, J. P. Negative feedback as regulation and second language learning in the zone of proximal development. *The Modern Language Journal* 78, 4 (1994), 465–483.
- [12] Atkins, D. E., Brown, J. S., and Hammond, A. L. *A review of the open educational resources (OER) movement: Achievements, challenges, and new opportunities*. Creative common Mountain View, 2007.
- [13] Bloom, B., and Krathwohl, D. Taxonomy of educational objectives: The classification of educational goals by a committee of college and university examiners, ed. hic domain.(1956).
- [14] Carter, K. The place of story in the study of teaching and teacher education. *Educational researcher* 22, 1 (1993), 5–18.
- [15] Destré, G., Lévy-Garboua, L., and Sollogoub, M. Learning from experience or learning from others?: Inferring informal training from a human capital earnings function with matched employer–employee data. *The Journal of Socio-Economics* 37, 3 (2008), 919–938.
- [16] Jeong, H., and Chi, M. T. Construction of shared knowledge during collaborative learning. In *Proceedings of the 2nd international conference on Computer support for collaborative learning*, International Society of the Learning Sciences (1997), 130–134.
- [17] Kozulin, A. *Vygotsky’s educational theory in cultural context*. Cambridge University Press, 2003.
- [18] Kubinger, K. D., Holocher-Ertl, S., Reif, M., Hohensinn, C., and Frebort, M. On minimizing guessing effects on multiple-choice items: Superiority of a two solutions and three distractors item format to a one solution and five distractors item format. *International Journal of Selection and Assessment* 18, 1 (2010), 111–115.
- [19] Miyagawa, S. Mit opencourseware: How it began.

## REFERENCES

---

- [20] Roschelle, J., and Teasley, S. D. The construction of shared knowledge in collaborative problem solving. In *Computer supported collaborative learning*, Springer (1995), 69–97.
- [21] Scholes, R. Language, narrative, and anti-narrative. *Critical Inquiry* 7, 1 (1980), 204–212.
- [22] Suzuki, S., Harasawa, N., Ueno, K., Gardner, J. L., Ichinohe, N., Haruno, M., Cheng, K., and Nakahara, H. Learning to simulate others' decisions. *Neuron* 74, 6 (2012), 1125–1137.

# Appendix

## A Supporting Material Designed

A.1 Action 1- History Timeline with locations

A.2 Action 2- History Timeline with historical figures

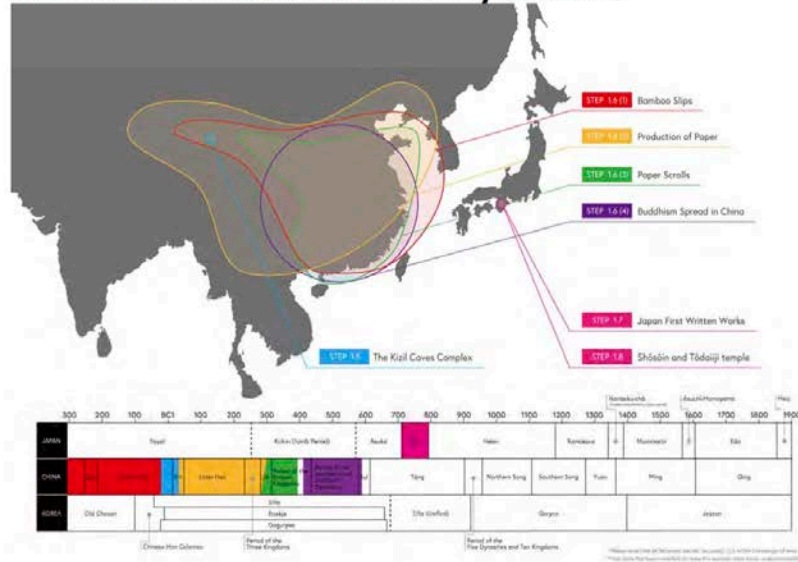
A.3 Action 3- Quiz designed for Week 4

## Timelines and Maps

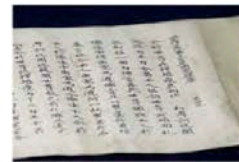


## Week1: Activity 2

### East Asian textual culture and Mahayana texts



The transmission of books was given a strong boost by the spread of Indian Buddhism. Texts spread like waves from ancient China, through the Korean peninsula, and eventually to Japan, by the 5th century CE.

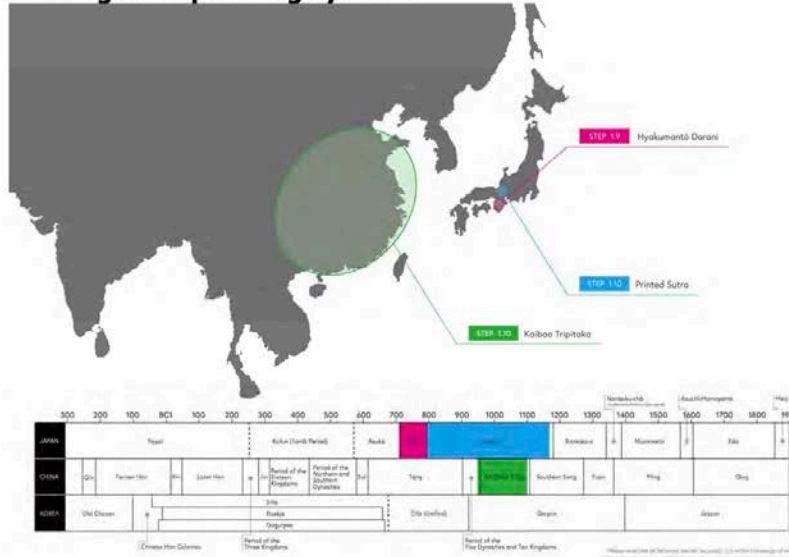


- 1.5 TEXTS AND MAHAYANA BUDDHISM VIDEO (02:19)
- 1.6 CHINESE TEXTUAL CULTURE: THE INVENTION OF PAPER VIDEO (03:23)
- 1.7 TEXTS REACH YAMATO VIDEO (03:06)
- 1.8 THE SHŌSŌIN ARTICLE

Timelines and Maps



**Week1: Activity 3**  
**Printing as duplicating symbols**



Printed texts in the Heian period were used during religious rites, and were made for their symbolic and ritual powers.

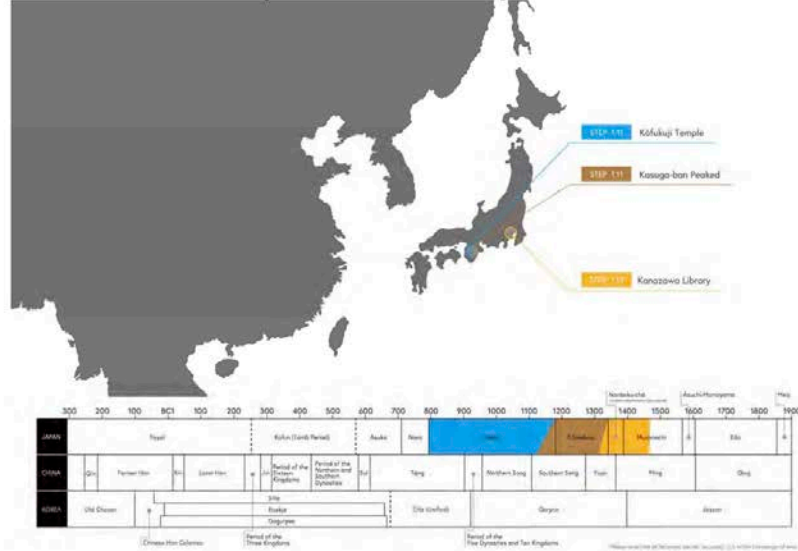


- 1.09 THE MYSTERY OF DHARANI VIDEO (03:27)
- 1.10 FROM SUTRA RUBBINGS TO WOODBLOCK PRINTING VIDEO (05:48)

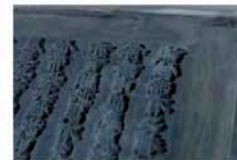
Timelines and Maps



**Week1: Activity 4**  
**Printed books as replicas of manuscripts**



Books printed at the Kōfukuji temple are known as Kasuga-ban editions produced in the Heian and the Kamakura period. The replica of the handwriting sutra is so perfect that, it is easy to mistake it for a handwritten book.

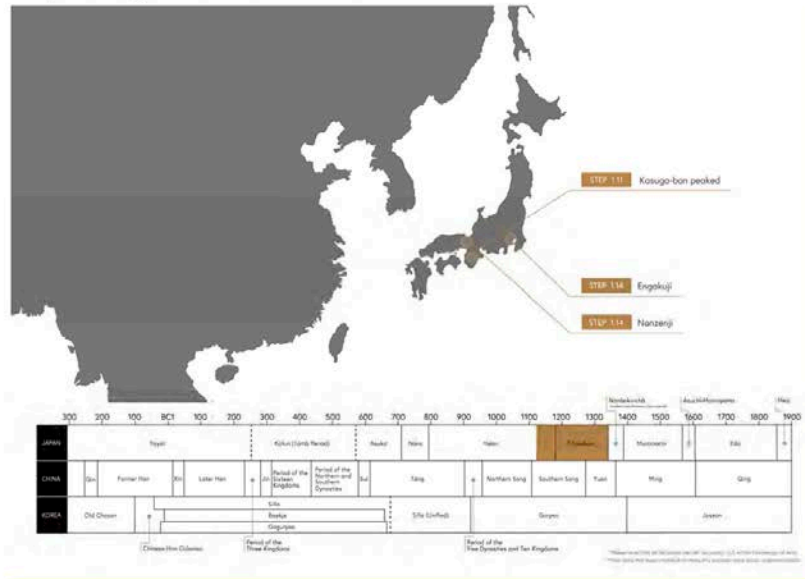


- 1.11 THE KASUGA-BAN EDITIONS VIDEO (05:09)
- 1.12 THE CONTRIBUTION OF FOREIGN CRAFTSMEN ARTICLE
- 1.13 THE KANAZAWA LIBRARY ARTICLE
-

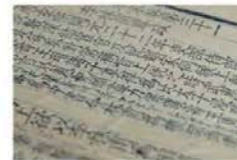
Timelines and Maps



**Week 1: Activity 5**  
**Importing Chinese Culture**



Books printed in Japanese Zen monasteries during the medieval period are known as Gozan-ban ("Five-Mountain books"). Let's see the role of Zen sect as mediators of Chinese culture.

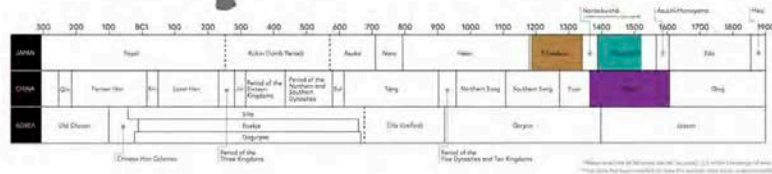
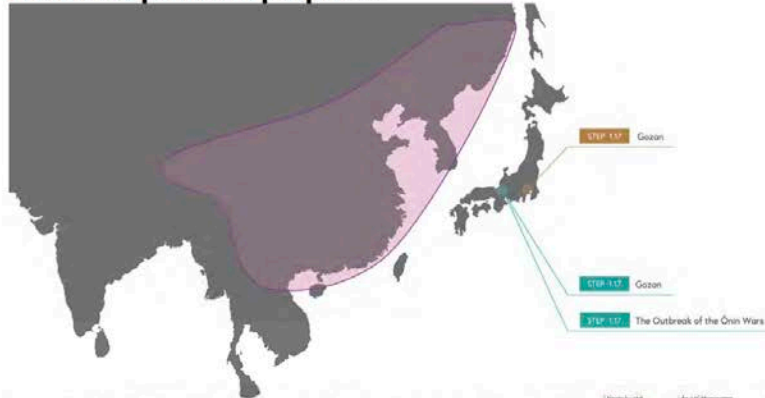


- 1.14 PUBLICATION BY ZEN MONASTERIES VIDEO (07:03)
- 1.15 THE ROLE OF IMMIGRANT PRINTERS ARTICLE
- 1.16 RELATIONSHIP BETWEEN BOOKS AND RELIGION DISCUSSION

Timelines and Maps



**Week 1: Activity 6**  
**Books for practical purposes**



Besides being active in temple settings, Gozan monks served as experts of Chinese-style learning and acted as advisers to warriors and military leaders in non-religious contexts. Publishing played an important role too.



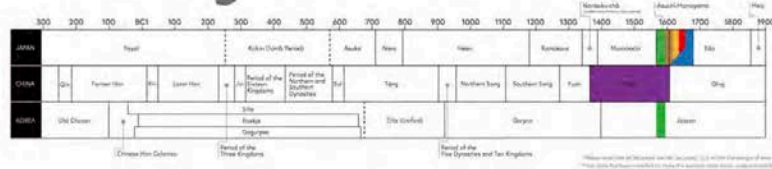
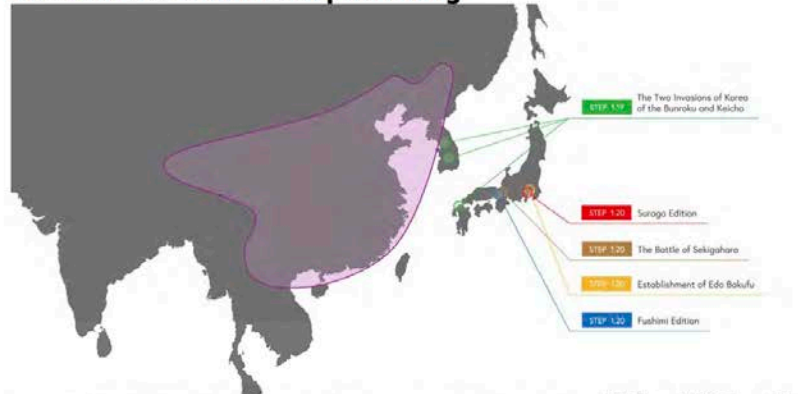
- 1.17 THE EVOLUTION OF SCHOLAR-MONKS ARTICLE
- 1.18 THE ACTIVITY OF THE LOCAL DAIMYO PRESSES VIDEO (04:49)



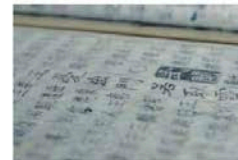
Timelines and Maps



**Week 1: Activity 7**  
**The road to commercial publishing**



Japan imported movable type printing technology from Korea right before the beginning of the Edo period. Foreign-born artisans played a vital role in the development of Japanese bookmaking and culture as a whole.

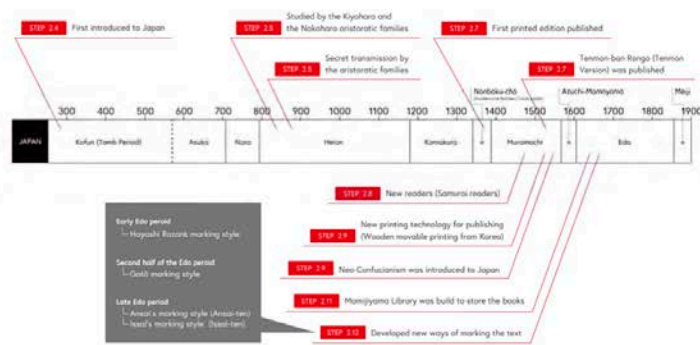


- 1.19 THE INVASIONS OF KOREA AND PRINTING TECHNOLOGY VIDEO (04:30)
- 1.20 MOVABLE TYPE PRINTING VIDEO (07:20)
- 1.21 SUMMARY OF WEEK 1 DISCUSSION

## Timelines and Maps



## Week2: The Analects of Confucius

The Analects in Japan  
AT A GLANCE**Activity 2: The Analects and Japan**

- 2.4 THE ANALECTS GET INTRODUCED TO JAPAN ARTICLE
- 2.5 SECRET TRANSMISSION WITHIN SCHOLARLY FAMILIES ARTICLE

**Activity 3: The Analects in Medieval Japan**

- 2.6 THE END OF SECRET TRANSMISSION VIDEO (02:13)
- 2.5 SECRET TRANSMISSION WITHIN SCHOLARLY FAMILIES ARTICLE
- 2.7 FROM THE HAKASE FAMILIES TO PRIEST-SCHOLARS ARTICLE
- 2.8 FROM PRIEST-SCHOLARS TO SAMURAI READERS ARTICLE
- 2.9 THE LAST PHASE OF FLOURISHING OF MEDIEVAL SCHOLARSHIP ARTICLE

**Activity 4: The Analects in the early modern period of Japan**

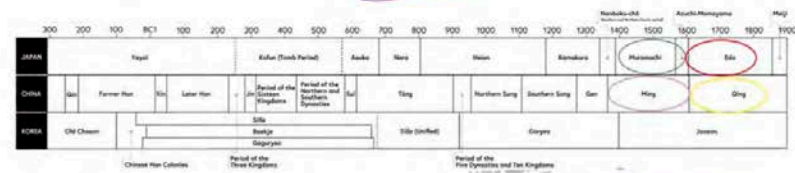
- 2.10 THE ANALECTS BECOME A BESTSELLER VIDEO (01:25)
- 2.11 THE ANALECTS AND THE EDO BAKUFU ARTICLE
- 2.12 THE ANALECTS AS A BOOK FOR THE MASSES ARTICLE
- 2.13 THE ANALECTS' POSITION WITHIN DIFFERENT ACADEMIC CURRENTS ARTICLE
- 2.14 SIX QUESTIONS ABOUT ANALECTS OF CONFUCIUS QUIZ

Timelines and Maps



**Week4: Activity 2**  
**Welcome to Week 4**

Week 4  
Welcome to Week 4



Developments in publishing between the medieval and early modern periods

4.1 FROM MONK-SCHOLARS TO KANGAKUSHA VIDEO (02:31)



**Week4: Activity 2**  
**Hayashi family of scholars (Rinke) - bridging Medieval Period to Early Modern Period -**

Understanding the role and activity of the most influential family of scholars.

4.2 HAYASHI RAZAN'S WORKS ARTICLE

4.3 HAYASHI RAZAN'S LETTERS IN THE KEIO INSTITUTE'S COLLECTION ARTICLE

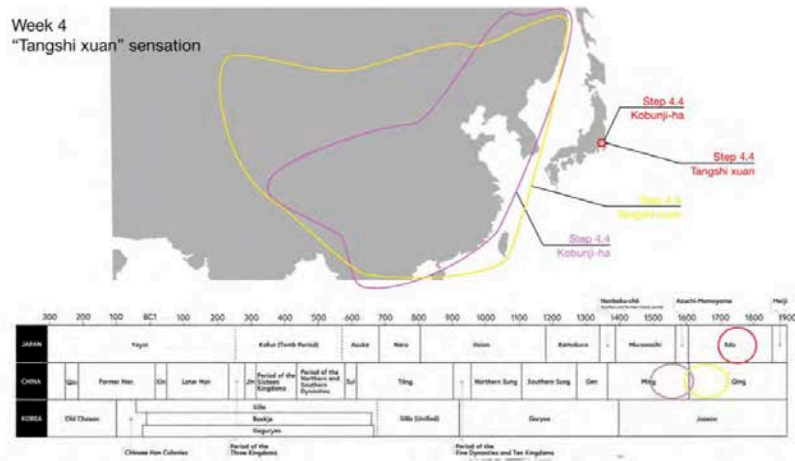


Timelines and Maps



**Week4: Activity 3**  
**"Tangshi xuan" sensation**

Week 4  
"Tangshi xuan" sensation



Exploring the Japanese scholarly transition through "Tangshi xuan".

- 4.4 FROM NEO-CONFUCIANISM TO THE KOBUNJI-HA VIDEO (03:35)
- 4.5 TEXT AND COMMENTARIES OF THE "TANGSHI XUAN" ARTICLE
- 4.6 POEMS BY THE KOBUNJI SCHOOL ARTICLE
- 4.7 PARODIES OF THE "TANGSHI XUAN" ARTICLE

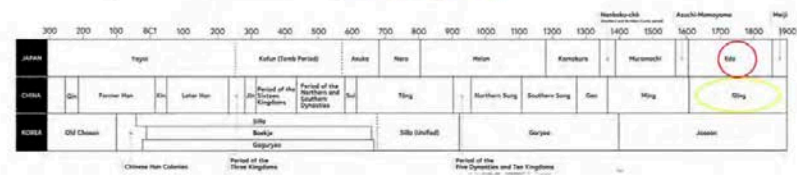
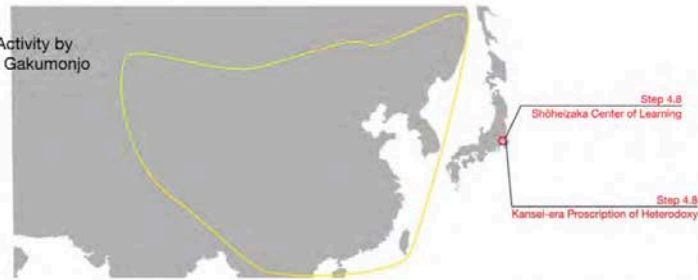


Timelines and Maps



**Week4: Activity 4**  
**Publishing Activity by Shōheizaka Gakumonjo**

Week 4  
 Publishing Activity by  
 Shōheizaka Gakumonjo



Understanding the role of the Chinese books and schools in early-modern Japanese society.

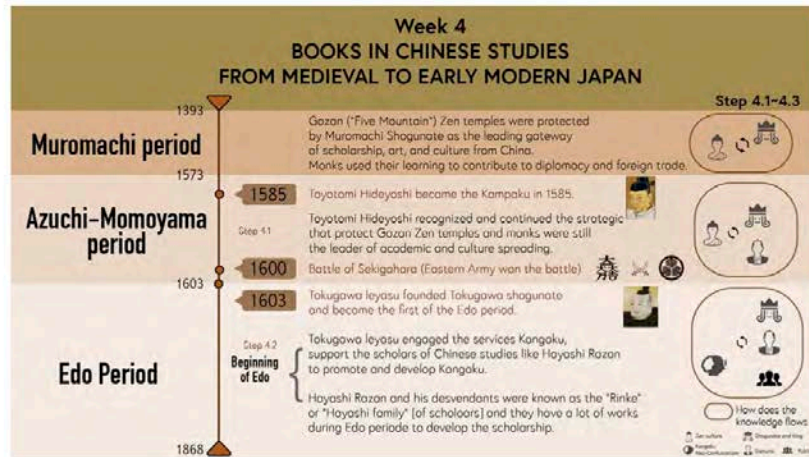
- 4.8 THE REVIVAL OF NEO-CONFUCIANISM VIDEO (02:10)
- 4.9 THE KANPAN ARTICLE
- 4.10 ICHIKAWA KANSAI'S CRITICISM OF THE "TANGSHI XUAN" ARTICLE



## Timelines and Maps



### Week4: BOOKS IN CHINESE STUDIES - FROM MEDIEVAL TO EARLY MODERN JAPAN

**Activity 1: Welcome to Week 4**

## 4.1 FROM MONK-SCHOLARS TO KANGAKUSHA VIDEO (02:31)

**Activity 2: Hayashi family of scholars (Rinke)**  
**- bridging Medieval Period to Early Modern Period -**

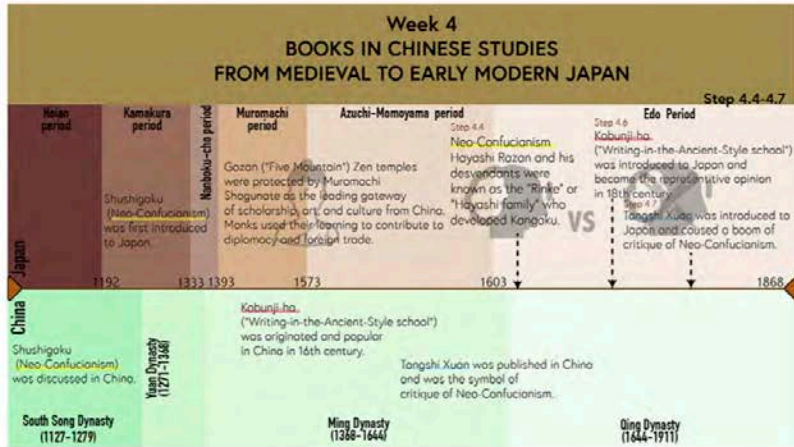
## 4.2 HAYASHI RAZAN'S WORKS ARTICLE

## 4.3 HAYASHI RAZAN'S LETTERS IN THE KEIO INSTITUTE'S COLLECTI ON ARTICLE





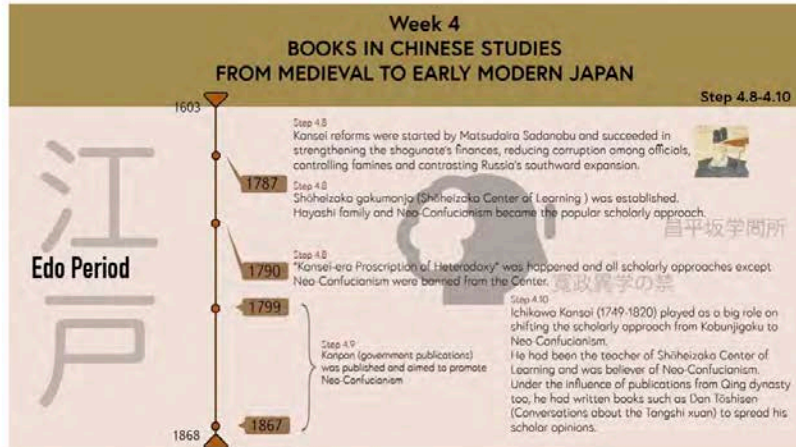
## Timelines and Maps

**Activity 3: "Tangshi xuan" sensation**

- 4.4 FROM NEO-CONFUCIANISM TO THE KOBUNJI-HA VIDEO (03:35)
- 4.5 TEXT AND COMMENTARIES OF THE "TANGSHI XUAN" ARTICLE
- 4.6 POEMS BY THE KOBUNJI SCHOOL ARTICLE
- 4.7 PARODIES OF THE "TANGSHI XUAN" ARTICLE



## Timelines and Maps

**Activity 4: Publishing Activity by Shōheizaka Gakumonjo**

- 4.8 THE REVIVAL OF NEO-CONFUCIANISM VIDEO (02:10)
- 4.9 THE KANPAN ARTICLE
- 4.10 ICHIKAWA KANSAI'S CRITICISM OF THE "TANGSHI XUAN" ARTICLE







## 5 questions on reviewing and thinking further about Books study



Following the historical timeline, here we come to the medieval to early modern Japan. By referring the knowledge learned before, let's have a quick review on some historical event or important figures to see what else can you discover from these stories.

| <b>Question 1</b>   |  |
|---|--|
| <b>Question Description</b>   |  |
| Under the following description to Gozan ("Five Mountain") Zen temples, which one is the most suitable?     |  |
| <b>Question Feedback</b>  |  |
| This question is about Gozan Zen temples appear in different time period with different historical meaning. |  |
| <i>Answer 1</i>   | Gozan Zen temples were protected by Muromachi Shogunate as the leading gateway of scholarship, art, and culture from China.  |
| <i>Evaluation and hint</i>  | <b>Correct.</b><br>This is talked in step 1.14, and you may find 4.1 From monk-scholars to kangakusha useful.  |
| <i>Answer 2</i>   | Gozan zen religious was introduced to Japan at the same time with the transmission of Analects of Confucius and spread all over Japan as the mainstream religious. |



|                            |  |
|----------------------------|--|
| <i>Evaluation and hint</i> | <b>Incorrect.</b><br>This is talked in step 1.14, and you may find 4.1 From monk-scholars to kangakusha useful.  |
| <i>Explanation</i>         | Books printed in Japanese Zen monasteries during the medieval period are known as Gozan-ban ("Five-Mountain books") which is made by Japanese instead of transmitted from China. And at the beginning, books and knowledge are not allowed to spread to public but learning within the scholar family. |
| <i>Answer 3</i>            | Gozan zen religious was introduced to Japan at the same time with the transmission of Analects of Confucius and spread all over Japan as the mainstream religious.   |
| <i>Evaluation and hint</i> | <b>Incorrect.</b><br>You may find 4.1 From monk-scholars to kangakusha useful.   |
| <i>Explanation</i>         | After Toyotomi Hideyoshi became the Kampaku in 1585, he continued recognizing Gozan Zen temples and protect temples and monks.   |
| <i>Answer 4</i>            | Gozan zen religious was introduced to Japan at the same time with the transmission of Analects of Confucius and spread all over Japan as the mainstream religious.   |
| <i>Evaluation and hint</i> | <b>Incorrect.</b><br>You may find 4.1 From monk-scholars to kangakusha useful.   |
| <i>Explanation</i>         | Continued as the previous choice, the period of Tomoyori Hideyoshi being the Kampaku is called Azuchi-Monoyama period. And because of the protection from government, can Gozan Zen temples still be the leader of academic and culture spreading.   |



| <b>Question 2</b>  |   |
|--|---|
| <b>Question Description</b>  |   |
| Under the following description to "Rinke" or "Hayashi family", which one is the most suitable?  |   |
| <b>Question Feedback</b>   |   |
| This question is about Hayashi scholar family and the historical event they get involved in. Also check the understanding on the two typical philosophy appeared across in the Edo period. |   |
| <i>Answer 1</i>  | Gozan zen religious was introduced to Japan at the same time with the transmission of Analects of Confucius and spread all over Japan as the mainstream religious.                                      |
| <i>Evaluation and hint</i>   | <b>Correct.</b><br>This belongs to video material talked in step 4.1  |
| <i>Answer 2</i>  | Tokugawa Iyasu engaged the develop of Kangaku, but did not support the scholars of Chinese studies like Hayashi Razan to promote and develop Kangaku.   |
| <i>Evaluation and hint</i>   | <b>Incorrect.</b><br>You may find 4.1 From monk-scholars to kangakusha useful.  |
| <i>Explanation</i>   | Tokugawa Iyasu was willing to develop Kangaku and Hayashi Razan is the scholar he supported to promote and do research on Chinese studies.  |
| <i>Answer 3</i>  | Hayashi Razan and other scholars in the same period are the believer of Kobunjigaku (the study of archaic words and phrases), which is a philosophical approach developed in the Song dynasty in China. |



|  |   |
|--|---|
| <i>Evaluation and hint</i>   | <b>Incorrect.</b><br>You may find Neo-Confucianism to the Kobunji-ha useful.  |
| <i>Explanation</i>   | Razan and other Confucian scholars were devotees of Neo-Confucianism, the philosophical approach developed in Song by the philosopher Zhou Xi.  |
| <i>Answer 4</i>  | Tangshi Xuan is one example of scholar philosophy promoted by Hayashi family and developed during the middle of 18 century in Japan.  |
| <i>Evaluation and hint</i>   | <b>Incorrect.</b><br>You may find 4.6 Poems by the Kobunji school useful.   |
| <i>Explanation</i>   | Hayashi family promoted Neo-Confucianism and Tangshi Xuan is the example of Kobunji-ha which is a literary movement as the represent of philosophy that opposite to Neo-Confucianism. |
| <b>Question 3</b>  |   |
| <b>Question Description</b><br>Under the following description to Neo-Confucianism and Kobunji-ha ("Writing-in-the-Ancient-Style school"), which one is the most suitable? |   |
| <b>Question Feedback</b><br>This question is about helping on clarifying the change of scholar philosophy during Edo period and the history development of each of them.   |   |
| <i>Answer 1</i>  | Neo-Confucianism is also called Shushigaku, which was firstly developed in Japan at 17th century.   |



|                            |  |
|----------------------------|--|
| <i>Evaluation and hint</i> | <b>Incorrect.</b><br>You may find 4.1 From monk-scholars to kangakusha useful.   |
| <i>Explanation</i>         | Neo-Confucianism was developed by Zhu Xi and discussed firstly in China at South Song Dynasty.   |
| <i>Answer 2</i>            | Neo-Confucianism was first introduced to Japan in Nanboku-cho period.  |
| <i>Evaluation and hint</i> | <b>Incorrect.</b><br>This is talked in step 2.9 The last phase of flourishing of medieval scholarship useful.  |
| <i>Explanation</i>         | Neo-Confucianism was first introduced to Japan in Kamakura period from Ming Dynasty in China.  |
| <i>Answer 3</i>            | Kobunji-ha was originated and popular in China in 16th century and was introduced to Japan and became the representative opinion in 17th century.  |
| <i>Evaluation and hint</i> | <b>Incorrect.</b><br>You may find 4.4 From Neo-Confucianism to the Kobunji-ha useful.  |
| <i>Explanation</i>         | Kobunji-ha was originated in China in 16th century, Ming dynasty. But was introduced to Japan and became the representative opinion in 18th century. Neo-Confucianism was the mainstream in scholar during 17th century.   |
| <i>Answer 4</i>            | Tangshi Xuan was published in China and was the symbol of critique of Neo-Confucianism. At around middle-later of 18th century, Tangshi Xuan was introduced to Japan and cased a boom of critique of Neo-Confucianism too. |





|   |  |
|---|--|
| <i>Evaluation and hint</i>  | <b>Correct.</b><br>You may find 4.7 Parodies of the "Tangshi xuan" useful.   |
| <b>Question 4</b>   |  |
| <b>Question Description</b><br>Under the following description about the process of spreading Neo-Confucianism, which one is not suitable?                        |  |
| <b>Question Feedback</b><br>This question is about helping on understanding the process and reason on spreading Neo-Confucianism during the middle of Edo period. |  |
| <i>Answer 1</i>   | Shoheizaka gakumonjo (Shoheizaka Center of Learning) was established from 1787 by Hayashi scholar family to promote education on Neo-Confucianism.                     |
| <i>Evaluation and hint</i>  | <b>This description is correct.</b><br>You may find You may find 4.8 The revival of Neo-Confucianism useful.   |
| <i>Answer 2</i>   | "Kansei-era Proscription of Heterodoxy" was happened in 1790, and all scholarly approaches except Neo-Confucianism were banned from the Shoheizaka Center of Learning. |
| <i>Evaluation and hint</i>  | <b>This description is correct.</b><br>You may find You may find 4.8 The revival of Neo-Confucianism useful.   |
| <i>Answer 3</i>   | Kansan is published by private scholar families and aimed to promote Neo-Confucianism.   |



|   |   |
|---|---|
| <i>Evaluation and hint</i>  | <p><b>This description is incorrect/ not suitable</b></p> <p>This is talked in step 4.9. You may find 4.9 The Kanpan useful.</p>  |
| <i>Explanation</i>  | <p>Kanoan is the government publications, aimed to expand the influence of Neo-Confucianism</p>   |
| <i>Answer 4</i>   | <p>Under the political reasons that Neo-Confucianism was promoted in centers of learning. Education became open to public and spread to local cities as well as formed the Education network. So that more and more people can get in touch with the education.</p> |
| <i>Evaluation and hint</i>  | <p><b>This description is correct.</b></p> <p>You may find You may find 4.8 The revival of Neo-Confucianism useful.</p>   |
| <h2>Question 5</h2>   |   |
| <p><b>Question Description</b></p> <p>This is a cloze question, please fill in the suitable words in to the blanks.</p> <p>This description is about the rough changes of the mainstream on academic scholar opinions happens in Edo period. Can you figure out the changes clearly?</p>  |   |
| <p><b>Question Feedback</b></p> <p>This is a rough summary on the changes of scholar trend happens from medieval to early modern Japan. It is acceptable if you get confused on time period or professional nouns, but don't forget to check the course content again. Supporting materials provided for week 4 has mostly of the answer summaries for you to review.</p> |   |



At beginning of Edo period, \_\_\_\_ became the main trend of Japanese scholars. The development was under the support and promotion of Hayashi family and Shogunate.

During 17th to 18th centuries, \_\_\_\_ (which is the critique of Neo-Confucianism) became the boom of Japanese scholars. But at the same time, Neo-Confucianism also developed and these two main scholars' leaded the trend by turns.

Descendant from Hayashi family become succeed in Shogunate government therefore got the chance to promote \_\_\_\_ broadly as well as under the support of political power.

|                |                  |
|----------------|------------------|
| <i>Blank 1</i> | Neo-Confucianism |
| <i>Blank 2</i> | Kobunjigaku      |
| <i>Blank 3</i> | Neo-Confucianism |