



English Translation Course Teaching Mode of SPOC Platform Under Artificial Intelligence System

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Abstract. SPOC model is the model of online course opening in the post MOOC era, which has played a good role in promoting the teaching mode reform of Contemporary Colleges and universities. In this paper, through a detailed analysis of the current situation and problems of English translation course in Colleges and universities, and based on SPOC platform, a two-way research on the teaching mode of English translation course is carried out, so as to provide more effective teaching mode improvement strategies for contemporary students' English translation teaching. The study of English translation course based on SPOC mode can solve the problems and doubts encountered by contemporary students in English translation course, so as to lay a solid foundation for improving students' English level.

Keywords: SPOC platform · English translation · Course teaching · Mode exploration

1 Introduction

Through a comparative analysis of the current situation of College Students' English translation course learning, this paper fully discusses the improvement and research of English translation course teaching mode based on SPOC mode, and puts forward some specific curriculum reform suggestions and strategies, so as to better improve the contemporary students' English translation course learning problems. This paper makes a profound research and Analysis on the current situation of English translation teaching, and finds out the causes of the problem. Then, through the new teaching mode of SPOC, it successfully promotes the transformation of College English translation classroom, and provides some suggestions for the reform of English translation course teaching in Colleges and universities.

2 Brief Introduction of SPOC Mode

SPOC is the abbreviation of small private online course, which is translated into small-scale restricted online course, also called small-scale private open class, which is the

product of the maturity of MOOC mode [1]. The model extends the advantages of small class teaching to the maximum by limiting the number of teaching and the threshold of access. The teacher can not only promote the interaction of the classroom to the greatest extent, but also stimulate the students' learning nature and instinct in time by making the course video through the content to be taught, and improve the teaching quality of the teachers while improving the learning efficiency of the students. Unlike MOOC, SPOC is a kind of auxiliary classroom learning, not an alternative classroom teaching. SPOC mode online communication learning has a significant teaching effect, not only can effectively promote students to deeply understand and interpret the curriculum, but also help students to analyze the text word by word, and through the teaching form of teacher self-made video to explain the knowledge to students. On the basis of retaining the advantages of traditional English translation classroom teaching, combining with the rich experience and excellent teaching ability of teachers, the essence and emphasis of the course content are shown to students by video. In this mode, students can relax and actively, better mobilize their learning enthusiasm and interest, and can get the answers from professional teachers whenever problems arise in the process of follow-up learning. At the same time, students can enjoy a continuous source of learning resources, which can be more quickly invested in English translation learning, and further promote the development of college teaching [2].

3 Current Situation of English Translation Teaching for Contemporary Students

3.1 Syllabus Out of Line with the Development of the Times

The common problem in many contemporary colleges and universities is that the students' overall English translation level is not improved qualitatively, the teaching process is delayed again and again, and the teaching results are also very low. In such a situation, it is inevitable that students' learning ability will be low, their enthusiasm for learning will decline, and their psychology of increasingly resisting English translation learning will appear. The primary reason for this problem is that teachers and students do not have a clear, standardized and professional syllabus, which will lead to the teachers' confusion in teaching. If the teachers are completely based on their own teaching experience, it will be possible to make the teaching direction deviate from the actual teaching goal and direction of English translation required by the country. Therefore, if we do not improve the English translation course in modern colleges and universities as soon as possible and set up a clear and clear syllabus, it will seriously hinder teachers to formulate the direction and content of teaching plans, and will indirectly affect the quality of students' learning.

3.2 The Modern Teaching Facilities are Backward

Due to the lack of adequate financial support and the situation of their own development is not optimistic, schools do not have sufficient economic strength to upgrade and improve the facilities needed for English translation classroom. In many colleges and universities,

the situation of backward modern facilities is becoming more and more serious, which makes students unable to get the influence and drive of modern teaching technology, so they can only continue to suffer under the traditional English translation teaching mode until their learning enthusiasm and motivation are exhausted. In addition, due to the lack of professional English translation courses in many colleges and universities, the teaching of this course has not been given due attention, and teaching facilities are no exception. English translation learning itself is a process of cross-cultural and multi-cultural communication. Teaching methods and concepts must keep pace with the times and need a large number of multimedia network facilities. This problem should be paid attention to by the state and the government as soon as possible, and timely funding should be provided for the modern facilities of English translation in Colleges and universities, so as to enable the school to introduce a large number of modern teaching equipment, so as to improve students' English translation learning efficiency.

(x, y) represents the position of the center of the candidate frame relative to the lattice boundary; W and H are predicted relative to the whole picture; the confidence level of conf is shown in Eq. 1:

$$Conf(Object) = Pr(Object) * IOU \tag{1}$$

In Formula 1, PR (object) indicates whether there is a target, if there is a target, the value is 1, otherwise it is 0; IOU is the intersection ratio of real value and actual value, which is calculated according to formula 2:

$$IOU = \frac{Area_{pred} \cap Area_{truth}}{Area_{pred} \cup Area_{truth}} \tag{2}$$

In order to ensure the accuracy of the model, it is particularly important to reduce the network volume and speed up the model [3]. In this paper, depth separable convolution is used to improve the convolution form and reduce the amount of computation in the convolution process. Depth separable convolution decomposes ordinary convolution into two parts: depth convolution and point by point convolution. Figure 1 is a comparison of the two forms.

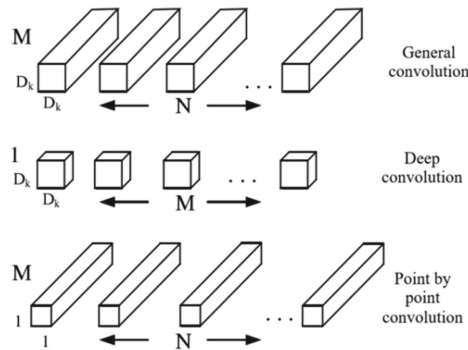


Fig. 1. Comparison of deep separable convolution and ordinary convolution

4 Specific Teaching Mode of SPOC + English Translation Course

4.1 Establishing Hardware Environment of English Translation Course

In the process of English translation teaching, we should make full use of digital multimedia teaching facilities, and the school should invest a certain amount of teaching funds to construct SPOC live teaching classroom [4]. By preparing sufficient SPOC classrooms for students, students can master their own time for autonomous learning, which not only cultivates students' ability to use time, but also provides students with an advanced atmosphere of modern multimedia learning, which makes students more interested in learning [5]. Only a good learning environment can promote the enthusiasm of students. In the modern multimedia classroom, students have been learning English translation knowledge in the traditional boring and boring education, which can arouse students' curiosity in the new mathematics field. In the process of SPOC + English translation teaching, students can choose the courses they want to learn and the teachers they like by themselves on the Internet, which can help the students to pay enough attention and enthusiasm in the early stage of learning, so as to make the follow-up learning more smoothly [6].

4.2 Training Teachers for Modern Teaching Skills

Since the application and operation of SPOC, a new teaching mode, has its own set of processes, so teachers need to learn and master it systematically [7]. We can invite the course lecturer to carry out corresponding experiential lectures, and let technical personnel of various departments explain and demonstrate the production process of SPOC, so that teachers can understand SPOC more clearly and use it skillfully. In the process of English translation teaching, SPOC belongs to an auxiliary teaching mode rather than a leading teaching mode. Therefore, teachers should reasonably plan the time arrangement for students, and when they feel that they are slightly tired in the process of daily classroom learning, they can let students choose their own time and way to learn the rest of the content on the Internet, This kind of education mode can make students better emancipate their body and mind, avoid fatigue learning, so as to reduce students' learning pressure and improve their autonomous learning ability more effectively. The simulation ranking of modern teaching skills is shown in Fig. 2.

4.3 Online Learning + Offline Consolidation

Online learning refers to the use of online course platform to build an online learning community for students. This community includes students, teachers and corresponding auxiliary teachers [8]. In this community, students can exchange their learning experience and experience to improve their English translation level. Offline consolidation refers to students' self-determination consolidation and improvement after learning relevant courses, and then through online test questions to understand their mastery of self-knowledge, and then feedback them to teachers, so that teachers can have a more in-depth understanding of students' learning situation, Therefore, it can provide guidance and suggestions for the direction and intensity of English translation in the follow-up study (Fig. 3).

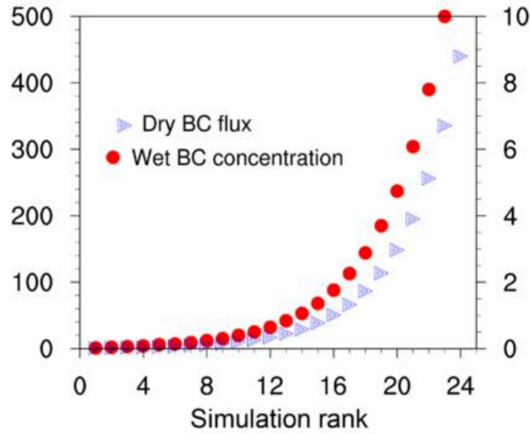


Fig. 2. Simulation rank for modern teaching skills

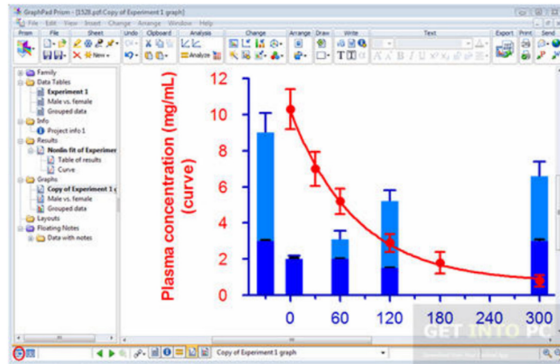


Fig. 3. Off-line education simulation

5 The Effect and Enlightenment of MOOC Translation Teaching Design Elements

The effect of MOOC translation teaching design needs to be investigated in the actual course [9]. Based on the results and discussion in Chapter 5, this chapter chooses the course of “English Chinese translation methods and techniques” on the platform of “MOOC of China University” as the research object, and takes the topic of “understanding and expressing word meaning” in this course as a case to analyze the teaching design elements, Considering the effect and deficiency of the specific design of MOOC translation teaching. On this basis, it puts forward eight suggestions to improve the teaching design of MOOC translation, which provides theoretical support for MOOC translation teaching design [10].

5.1 An Analysis of the Effect of Design Elements in MOOC Translation Teaching

Teachers are not only teaching designers, but also organizers of MOOC translation teaching. This section mainly analyzes the teaching style, external image, oral English and English teaching.

Lecturing style is a unique performance of teachers formed in the long-term teaching work. With the deepening of research, the unique role of lecture style in students' learning has also been paid attention to. The author believes that the teaching style of translation teachers in MOOC video can be mainly reflected in body language (including facial expression, head movement, arm movement, body posture), knowledge arrangement and explanation [11].

If the eye is the window of the soul, then the expression is the mirror of the soul. Psychological research shows that students' learning effect is related to learning mood, and one of the important factors affecting learning mood is teachers' facial expression. In the specific design of the topic "understanding and expression of word meaning", the main teacher's facial expression is not very rich, but it does not appear mechanical and rigid. In the introduction of each video into the theme, the teacher is smiling, full of spirit, and has a good eye, which is easy to make students expect and trust in the course learning. When explaining the examples, the teacher's expression will be a little more serious. This is because the main group of students facing the course is college students with mature cognition. These students do not pay much attention to the changes of teachers' facial expressions, but care more about the wisdom and connotation of teachers, while the lower grade students prefer teachers with rich expressions [12].

With the facial expression, the teacher's head movements, arm movements and body posture and other body language. Han Chunyan's survey results confirmed that teachers' body language had a significant priming effect on Academic Emotion, and had a significant impact on academic help seeking and self-evaluation results. In the course, the lecturer didn't show up in the whole process. In the 13 min video, it took about 3 min to show up, only in the beginning, end and a few clips in the middle [13]. The whole course of the teacher's standing posture is straight and straight, and there is no posture such as leaning forward and bowing back, which gives people a sense of full spirit. As far as the arm movement is concerned, it is relatively simple [14]. Put the arm on the waist in the whole process, and swing slightly with the lecture process. This kind of body language is in line with the teacher's temperament, natural and appropriate. In the head movement, the teacher will nod or shake his head with the emphasis on the knowledge points or considering the students' possible questions. The main teacher's body movements are in line with the teacher's personal temperament, conveying the unique elegance and wisdom of the linguistics teacher, and giving people a natural and sincere feeling [15].

5.2 The Design of Teaching Resources

Resources are the main learning objects of MOOC participants, which are convenient for students to obtain knowledge and information. The construction of teaching resources also provides conditions for MOOC translation learners' autonomous learning. In the questionnaire survey results, the average value of teaching resources is the highest, which

also highlights the importance of this element. This section mainly analyzes the learning resources, translation strategies and subtitles in the teaching design of MOOC translation [16].

Generally speaking, the teaching materials of each unit basically include the carding of the knowledge points of this unit. Although it is a highly professional course, the language in the document is easy to understand and takes care of the understanding ability of students of different levels. In addition, the learning materials also include listening recordings and listening texts, and even upload the analysis materials of listening texts. It is worth noting that the original listening text and the analysis material are two documents, which are uploaded separately. In this way, for the learners who still have doubts through reading the original listening text, they can download the text analysis materials for secondary learning; for the learners who have a good foundation in listening and translation, they can choose whether to download or not according to their own time after listening practice, which fully takes into account the students' personalized learning needs. Moreover, teachers should organize the knowledge points timely according to the feedback questions of learners, which plays an important role in solving the common problems of students systematically [17].

6 Carry Out Multiple Interaction and Cooperation to Promote Real-time Interaction

The lack of effective interaction between teachers and students is considered to be one of the reasons for the low success rate of MOOC. In view of the problem that the discussion area is dominated by the interaction between teachers and students, and the interaction between students and students is not good, the author thinks that the teacher team should pay full attention to the learners' learning state, pay attention to the changes of learners' learning emotions in the discussion area, and pay attention to the students' learning experience. In order to achieve the above goals, we need to do a good job in teaching design: in addition to the knowledge, the discussion topics issued by teachers also need to consider the situation, and the discussion needs to be directional, so that the students participating in the discussion can have a clear discussion goal and stimulate the learners' expectation of learning. In addition, teachers can also set up learning groups to encourage students to carry out cooperative learning, and conduct in-depth discussions on the knowledge in videos, exercises, or translation learning questions, so as to form a "virtual learning community".

In view of the lack of real-time interaction, instructional designers can consider the following four points:

First, because the discussion and communication tool of MOOC is limited to the discussion area, and the energy of the lecturer is limited, it is unable to answer students' questions one by one in time. Therefore, the teaching team can arrange teaching assistants to assist in answering questions, so as to maintain learners' willingness to learn translation and realize the communication between teachers and students. In addition, we can also give a small number of learners certain rights, set up "student administrator", let students help manage the discussion area, which can also improve the enthusiasm of interactive communication.

In addition to effective communication, e-mail is also an effective way to communicate. The teaching team can not only complete the investigation of learners' situation through e-mail, but also comment on the translated works and comments of learners in e-mail, and encourage students to continue to communicate and maintain a good learning state. In this regard, Harvard University's "China" course regularly sends 2–3 e-mails to the learners every week. In addition to the course arrangement, the e-mail also affirms the learners' learning status and forum comments, so as to ensure the interaction with the learners.

Third, teachers can provide common social software as online collaborative learning and communication tools, such as QQ, wechat, microblog, etc. On these social software, learners can publish learning information, participate in discussion and interaction, exchange learning insights with other learners, and upload and share learning results. Compared with the discussion area, social software is more timely. Teachers and other learners can receive information reminders in time, so as to solve problems in time and improve the enthusiasm of learners. But on the other hand, it increases the pressure of teachers to manage students' speech, which requires the correct guidance and reasonable management of teachers, so as to avoid the interference of useless information released by students to other learners.

Fourth, with the rise of the current live platform, instructional designers may consider carrying out online live discussion to focus on solving learners' confusion. This kind of interactive mode has high real-time performance, can shorten the distance between teachers and students in online learning, and plays a very important role in eliminating learners' loneliness caused by online learning and solving learning confusion. In addition, the live video can also set up a bullet screen function, which is in line with the way of young people's communication and makes the interaction more interesting. It should be noted that due to the high development cost of MOOCS translation course, a certain fee can be charged for the live Q & A course, which is called the "business operation mode" of MOOCS. Relevant studies also show that the business mode can also improve the passing rate of MOOCS.

7 Improve Learning Support Services and Improve Learning Convenience

In video learning, the author found that "MOOC" can adjust the volume, full screen mode, pause and play, resolution, speech speed, subtitle selection and other functions, and is relatively complete in the construction of basic learning support services. On this basis, it is suggested to add the "cloud notes" function, so that students can open the cloud notes for recording at any time during the learning process, and realize the synchronous update of the terminal, so as to save the trouble of students carrying paper notebooks at any time, improve the convenience of learning, and encourage students to listen and watch at the same time, and form the habit of recording learning notes.

In teaching activities, MOOCS interactive platform is limited, only provides the discussion area interactive section, and according to the author's survey, the functional division of the three interactive sections is not obvious, students may have the confusion of not knowing which section to leave a message in. Here, the author suggests: first of all, teachers need to make students clear the functions of the three sections of the discussion

area. At the same time, the MOOC platform can set up the related functions of topic paste classification in the discussion area, which can facilitate students to find related topics and avoid the trouble of Teachers to answer the same questions repeatedly. Secondly, more importantly, the MOOC platform needs to actively explore the function of real-time interaction, so that learners' questions can be solved in time and their learning willingness can be improved.

8 Conclusion

On the basis of studying the advantages and disadvantages of traditional resource database and combining with the characteristics of College Students' innovation and entrepreneurship projects, this paper designs and implements a personalized recommendation based College Students' innovation and entrepreneurship resource database system. In this system, the recommendation system successfully applied in e-commerce can improve the efficiency of resource dissemination to a certain extent. In the process of system implementation, theoretical knowledge should be applied to project practice.

References

1. Yan, Q., Hui, M., Jia, L.: Exploration and practice of college English flipped classroom under the background of SPOC. *Heilongjiang Educ.* (12), 9–12 (2017)
2. Wei, Z., Youlan, T.: Research on flipped classroom teaching based on SPOC translation course. *Foreign Lang. Audio Vis. Teach.* **39**(2), 27–32 (2017)
3. Li, H.: Research on the mixed flipped teaching mode based on SPOC. *Comp. Study Cult. Innov.* (28), 118–119 (2017)
4. Fengjia, G., Shusu, L., Xiaoqing, G.: Investigation and analysis of micro learning status. *Open Educ. Res.* **14**(3), 94–99 (2008)
5. Murray: A study of translation teaching in China, 1st edn. Shanghai Foreign Language Education Press, Shanghai, Dec 1999
6. Meifang, Z.: A study of translation textbooks in China (1949, 1998), 1st edn. Shanghai Foreign Language Education Press, Shanghai, July 2001
7. Miqing, L.: Translation teaching: practice and theory. China International Translation and Publishing Company, Beijing, Mar 2003
8. Guifen, F.: Correction of Punctuation and Collation. Zhongzhou Ancient Books Publishing House, Zheng Zhou (1998)
9. Zhengqing, F.: Cambridge Chinese Late Qing History 1800–1911, vol. II. China Social Sciences Press, Beijing (1985)
10. Zhen, S.J.: The Whole Process of Repairing and Preparing for the Affairs of Yi Was Xianfeng Dynasty. Zhonghua Book Company, Beijing (1979)
11. Tieya, W.: Collection of Chinese and Foreign Old Testament, vol. 1. Sanlian Bookstore, Beijing (1957)
12. Weixing, G.: A study on the history of English teaching in Beijing Tongwen library. *Foreign Lang. Foreign Lang. Teach.* (3), 59–69 (2004)
13. Ran, S., Hua, Z.: Translation teaching. *Foreign Lang. World*, 32–38 (1994)
14. Jinde, L.: On translation teaching. *Foreign Lang. Stud.* (1), 19–25 (1997)
15. Jun, L.: Translatology -- a special field of communication studies. *Foreign Lang.* (2), 178–189 (1997)
16. Miqing, L.: Contemporary Translation Theory. China Foreign Translation Press, Beijing (1999)
17. Funk: History of Foreign Language Education in China. Shanghai Foreign Language Education Press, Shanghai (1988)