

Research on Blended Teaching in Translation Courses Based on “Rain Classroom”

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Abstract: Blended teaching combines traditional teaching with online learning, which is of great significance in improving students' autonomy and innovation in learning, and is an educational concept widely advocated in the field of higher education at present. To address the many problems in the integration of blended teaching and traditional teaching in translation courses, a blended teaching model based on Rainy Classroom is constructed from three aspects: teaching background analysis, teaching resources design and teaching evaluation design. The blended teaching process is specifically developed from the aspects of pre-class preparation and online pre-study, class examination, lecture and discussion, and post-class to guide students to actively participate in the teaching process. Through teaching experiments, questionnaires and random interviews, the article analyses the impact of the model on students' multiple translation skills and students' attitudes towards the model, and concludes that the hybrid teaching model based on Rainy Classroom is effective in improving students' multiple translation skills and is accepted by most students. The article also explains the advantages of this model in developing students' multiple translation skills. It is hoped that this study can provide a reference for translation teaching, the development of students' translation skills and the application and promotion of advanced educational technology in foreign language teaching.

Keywords: rain classroom; blended learning; translation courses; multiple translation competencies

Introduction

The development of information technology promotes continuous innovation and progress in teaching methods, teaching approaches, teaching concepts and teaching models, thus more effectively promoting the cultivation of students' creative thinking skills and personalized development. With the flourishing development of mobile Internet technology, the use of online resources can fully mobilize students' motivation. The integration of information-based teaching models with traditional classroom teaching has given rise to the concept of blended learning. The concept of "blended learning" was proposed by He Keqiang, who believes that blended learning can strengthen students' initiative in learning while actively playing a leading role as a teacher. In 2018, the Ministry of Education promulgated the National Standard for Teaching Quality in Foreign Languages and Literature, which states that in addition to the ability to use foreign languages, foreign language majors should also develop students' ability to appreciate literature, intercultural communication, critical thinking, as well as certain research skills, innovation, information technology. (Liu Lei, 2018) The objectives of the teaching and learning of translation courses must also be to develop the students' ability to appreciate literature, intercultural communication, critical thinking, research, innovation, information technology, independent learning and practice. The teaching objectives of translation courses must also be raised from mere

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knowledge learning and skills training to the cultivation of students' translation competence.

1. Teaching in the Rain Classroom

Rain Classroom is a classroom interaction tool developed by Tsinghua University, which integrates teacher-student interaction into the teaching process through the WeChat public platform, providing intelligent and data-based technical support services for teaching. Relying on the WeChat public platform, Rain Classroom is personalised, convenient, interactive and shareable. (Xian Dandan, Huang Guan, 2019) Rain Classroom combines the advantages of traditional teaching and online teaching, and actively explores and solves the integration problem between online learning and classroom learning, which not only stimulates students' interest and active participation in learning, but also broadens students' innovative and dynamic thinking, enhances students' resilience, analysis and problem-solving abilities, and Rain Classroom has become a trend in university teaching reform.

Since April 2016, Rain Classroom has been used by teachers and students in over 10,000 schools worldwide. Research has found that Rain Classroom technology interventions have a positive motivational effect on the learning process and have a positive impact on syllabus design, learning behaviour and teaching decisions. (Li Xiangming, 2018) In the field of foreign language teaching in higher education, some scholars have studied the application of Rain Classroom in university English, professional English reading, business English translation and postgraduate English courses and found that Rain Classroom not only helps to increase students' engagement in learning, develop students' interest in learning English, improve their learning efficiency and enhance teacher-student interaction, but also helps teachers to understand students' learning behaviour to improve the quality of teaching. (Wu Lingjuan, Zhang Delu, 2019) It also helps teachers to understand students' learning behaviour to improve the quality of teaching.

2. Blended learning based on the rain classroom

Blended teaching is not only a simple mix of online and offline learning modes, but also a combination of many factors such as teaching philosophy, teaching resources, teaching environment and teaching style. Blended teaching is designed at both teacher and student levels using the methodology of systems analysis. (Wang Shuaigu, 2017) According to this theory, blended teaching design is divided into three modules, namely: teaching context analysis, teaching resources design and teaching evaluation design. The teaching context analysis is to analyse the characteristics of the target audience (students), the training objectives and the teaching content in order to fully understand the target audience, and to set the detailed teaching content according to the teaching objectives, so as to provide a basis for the design of the teaching process. The design of the teaching process consists of the design of the online course, the deployment of offline classes and the development of after-school tutorial resources. The design of the teaching evaluation mainly includes the assessment of the learning process, the assessment of the knowledge system and the evaluation of the organization of teaching interaction to evaluate the teaching effect.

In June 2021, three national ministries and commissions jointly issued a document on strengthening the cultivation of translation talents, requiring the construction of a team of translation talents to be comprehensively strengthened, and cultivating a group of high-end translation talents who are "with the motherland in mind, politically firm, exquisite in business, well versed in Chinese and foreign languages, and willing to devote themselves to translation". Therefore, translation courses in universities play an important role in the training of translation talents. The Thirteenth Five-Year Plan for the Development of National Education Career clearly points out the need to encourage the in-depth integration of information technology and education

teaching, and to promote the development of the new industry of "Internet+" education. At present, the main problems of teaching translation courses are: firstly, the teaching content covers a wide range of subjects and the knowledge system is so complicated that it is not enough to rely on classroom time alone. Secondly, the teaching mode is outdated and inefficient, and the teaching methods are of different quality. At present, the translation course mainly focuses on the teacher, taking translation materials as examples, teaching relevant translation methods and techniques, then assigning exercises, and the teacher reviews students' translation results and gives feedback, lacking interactivity. Thirdly, the assessment system is static and closed. It is difficult for the traditional classroom teacher to make comprehensive evaluation feedback on students' various performances, and it is also difficult to record the usual grades for comprehensive and detailed management, and the workload of assigning homework and correcting homework is heavy, and the feedback is not timely, etc. all affect the process assessment.

2.1 Analysis of the teaching context

2.1.1 Analysis of the participants

The learning ability, knowledge and willingness to learn of the participants will influence the final learning effect. In the same class of the same major, in addition to the objective learning ability gap, the willingness to learn largely determines the learning effect. By analysing the characteristics of the teaching participants, it is crucial to arrange the teaching contents and methods for different will love occasional objects. The problem encountered in the teaching process of the current online translation course is that teachers have difficulty in grasping the degree of students' learning in real time in the classroom, failing to identify students' problems in a timely manner, unable to stop students' inattention, and lacking effective control especially for students with poor self-restraint. Due to the lack of on-site guidance from teachers, students are prone to slack learning, knowledge omission and even poor post-class feedback, making it difficult for teachers to make timely adjustments to the teaching mode in line with students' learning progress.

2.1.2 Analysis of teaching objectives

Teaching objectives are divided into competence objectives, knowledge objectives and quality objectives. The overall teaching direction is set according to the objectives to provide a reliable basis for the preparation of teaching resources, the arrangement of teaching activities and the evaluation of teaching effectiveness.

2.1.2 Teaching content analysis

The content analysis is the most important part of the teaching design. By analysing the main knowledge points and their position in the knowledge system and their interconnection, the teaching process is carried out according to the degree of difficulty and importance of the learning content. The content analysis should start from the whole knowledge system and sort out the hierarchical structure between the contents.

2.2 Teaching and learning process design

2.2.1 Online course design

After the teaching context analysis, teachers use some online resources such as MOOC and NetEase cloud class to guide students in pre-study and self-study according to the existing knowledge background of the teaching targets. Teachers need to fully understand the mastery level of most students, so that they can adjust the depth and breadth of the lectures in time.

2.2.2 Arrangement of offline classes

The blended teaching offline class is different from the traditional teaching mode of teachers lecturing and students listening. Using the multiple functions of the rain classroom, the classroom tests, teachers' analysis of key points, teacher-student interaction and group discussions, the rain classroom can provide timely feedback to teachers on students' learning status and effectiveness.

2.2.3 After-school resource development

The learning activities, such as homework push, question and answer sessions and discussion forums, are arranged according to the requirements of the teaching objectives and the level of students' knowledge in the lesson.

2.3 Teaching and learning assessment design

The design of teaching evaluation mainly includes assessment of the learning process, assessment of the knowledge system and evaluation of the organisation of teaching activities. The blended teaching mode requires comprehensive assessment of self-study in online courses and offline classroom lectures, including examination of classroom effects, group reporting, unit assessment and mid-term and final grades, in order to guide and encourage students' learning and provide guidance and basis for students to adjust their learning status and learning methods.

3. Implementation of a blended teaching model based on the rain classroom in a translation course

The world is changing and education needs to be reformed in a new form of education that emphasizes the human dimension of technology.(Xie Danyan, Qian Jin, Dong Xuesen, 2019) Translation courses should strive to develop a better hybrid teaching model based on the "rain classroom", so as to develop personalized and flexible translation teaching, break down the time and space barriers of traditional classroom teaching, establish an outreach relationship, and mobilize and enhance students' independent learning ability and motivation.

The translation programme uses Rain Classroom to deliver a hybrid online and offline curriculum. As a new type of intelligent teaching tool, Rain Classroom is an intelligent terminal that connects teachers and students, giving a new experience to every step of the process from before - during - after class, and quickly The "Rain Classroom" is a smart terminal that connects teachers and students, giving them a new experience in every step of the process from before to during and after class, and quickly realising smart teaching in the era of big data, including multiple real-time interactions between teachers and students and data analysis of the whole teaching cycle. The Rain Classroom integrates PPT courseware, WeChat and Mootools into one, providing the technical possibility for blended teaching. Based on the above analysis, this course will continue to improve and optimise the blended teaching mode of the translation theory and practice course based on "Rain Classroom" to improve the teaching efficiency of the translation course and stimulate students' learning autonomy.

By using the "Rain Classroom" intelligent teaching platform to conduct hybrid teaching in translation courses, teachers break through the traditional teaching mode and become more innovative. The blended teaching mode of the translation course based on "Rain Classroom" is a kind of "Internet + classroom + intelligent terminal" teaching, which requires teachers' ability to integrate multimedia courseware, micro-lessons, WeChat and other information technology into information-based teaching. This information-based teaching helps teachers to use information technology to develop personalised and flexible teaching. Students participate in classroom activities through mobile phones, which increases classroom interactivity and student participation,

effectively improving classroom teaching efficiency. The multimedia courseware under the "Rain Classroom" smart teaching platform is easy to use, interactive and stable, and provides teachers with the practicality to optimise effective teaching methods. Teachers can easily switch between the traditional classroom and the interactive classroom, quickly grasp students' learning feedback, carry out timely classroom discussions, make students the main body of the teaching process, and realise student-centred teaching. By adopting "dual-channel teaching" in the context of the mobile Internet - through information technology means to establish "synchronous" and "asynchronous" two channels of communication between teachers and students in the teaching process. The two channels of communication between teachers and students are "synchronous" and "asynchronous" through the use of information technology, thus realising Internet+, smart terminals and catechism resources of famous schools. Especially at this particular time of the epidemic, it is timely to discuss the blended teaching of translation courses based on the smart learning app Rain Classroom.

In practice, there are three main stages in the design of a translation course based on the 'Rain Classroom': before, during and after the class.

3.1 Pre-course preparation and online pre-learning

The pre-lesson stage includes teacher preparation, student pre-learning and student-teacher interaction. Firstly, the teacher prepares the lesson. The teacher prepares a PPT based on the questions for the students' pre-study, as well as the key points and extension materials of the course, and releases the content for self-study and pre-study through Rain Classroom. Secondly, students pre-study. Students are required to complete the self-study assignments set by the teacher during class time, including the study of the book and the relevant videos in the MOOC and the tests in the MOOC. Third, teacher-student interaction. Students can discuss and share their questions and problems in the pre-study through message boards and chat groups. Teachers can fine-tune the content of classroom lectures and help students to solve their problems through feedback in the forum before class.

Teachers can monitor students' pre-learning in real time by pushing resources such as relevant translation materials or videos to enable pre-lesson interaction. As for the pushed materials or videos, the teacher can create a rain lesson or insert a catechism or web video according to the teaching content, while adding exercises to test the students' pre-study. Students can pre-study and complete the practice questions set by the teacher in advance in the pre-study courseware at any time via their mobile phones. The teacher can also monitor the students' pre-study in real time and select difficult points for intensive teaching in class according to the students' mastery.

3.2 In-class examinations, lectures and discussions

During the lesson: the teacher's lesson can be synchronised to the students' mobile phones, where they can mark the "Don't understand" or "Bookmark" buttons to facilitate the teacher's on-the-spot adjustment of the teaching content. As the students have already understood the main points of each lesson through the pre-lesson, the classroom is mainly dedicated to question and answer sessions, which provide guidance, refinement and deeper learning enhancement of key points, thus consolidating the students' learning effect and expanding their learning ideas. In the translation teaching classroom, translation projects are always used to improve students' practical translation skills, and the rain classroom can fully meet the various needs of students to discuss and co-operate with each other as a group. Students' comments and questions can be cast through the "pop-up" screen, so that the teacher can easily interact with the group class discussion and liven up the class atmosphere. At the same time, the translation project reports of each group in class can be screened, so that students can evaluate them from various angles, such as language, translation skills and standardisation, and the students

being evaluated can be affirmed by their peers, which will greatly enhance their interest in learning. At the same time, with Rain Classroom, real-time interactive group reports will become more vivid and pre-class push will make all groups come prepared. Excellent translation projects can likewise be showcased on the Rain Classroom platform, increasing students' motivation to learn. In addition, the teacher can also send out translations of current affairs and political articles from China Daily and the English version of the Xinhua News Agency at regular intervals for students to learn and appreciate. For example, in March 2022, the Chinese side used the old saying "a slap on the wrist won't make a sound" when talking about the situation in Ukraine in the text of the high-level talks between the US and China. This old saying received widespread attention in the Chinese and foreign media. The same classic metaphor is also found in *Dream of the Red Chamber*, where a comparison of two classic English translations of *Dream of the Red Chamber* leads to two different translation strategies by the Yang Xiangyi couple and the Hawks. However, in the case of a serious current affairs text such as the Sino-US dollar dialogue, the official Chinese translators did not adopt the above two translation strategies in view of China's position and the current public opinion pattern, but used the direct translation method to translate it. Students are motivated to learn about translation by using the latest examples of translation through online resources. Of course, the Rain Classroom is not simply a "question-and-answer" or "pop-up" function, but rather one that connects classroom activities with extra-curricular learning through these specific functions, ultimately transforming the full cycle of teaching and learning data into a basis for decision-making for further improvement. This will transform teaching and learning from experience-driven to data-driven, unleashing the vitality of teaching and learning.

3.3 After-school phase

At the post-class stage, students are guided to review and summarise the online and offline content through homework assignments, and a test is added to each chapter to monitor students' post-lesson revision and provide timely feedback to the teacher. The discussion board of Rain Classroom is used to post some discussion topics and encourage students to participate in the discussion. Through the teacher's answers and students answering each other's questions, the classroom time and space is expanded and the learning content is further consolidated. Rain Classroom provides timely feedback to teachers on students' post-class assignments by linking teachers' and students' smart terminals, while teachers can assess students' mastery of new knowledge based on their performance on assignments so that they can adjust their teaching focus in a timely manner. Teacher pushed assignments can also receive audio of the interpretation for the convenience of students and teachers through the function of speaking tests in the subjective questions, in addition to the translation. Rain Classroom can automatically capture all the learning behaviours generated by students during use. This data is integrated and analysed, which will help teachers to quantify the effectiveness of their students' learning, thus allowing them to better evaluate their teaching process and adjust the arrangement of teaching content appropriately, thus improving the effectiveness of teaching. At the same time, a large amount of learning data is saved during the teaching and learning process, which can be used as a basis for process assessment by comprehensively assessing students' learning performance and learning outcomes at the pre-, in- and post-lesson stages.

4. An empirical study of a blended teaching model based on the rain classroom

This study uses a combination of empirical research, questionnaires and random interviews to explore the impact of the Rain Classroom-based blended teaching model on students' multiple translation competence and the attitudes students hold towards the new learning model. Translation Competence (TC) has always been the

focus of attention in the field of translation education, but there is no consensus in the translation community on the definition of translation competence. However, there is no consensus on the definition of translation competence. According to Xiao Weiqing (2012), translation competence can be decomposed. Translation competence is an abstract, self-contained It consists of a series of relatively independent sub-competencies. In recent years, the most authoritative research on the construction of TC Model is the multi-element translation competence model proposed by the PACTE team from Barcelona, Spain. (Yuan Bo, Zhao Haimei, Zhang Chengping, 2018) They define translation competence as a system of knowledge and skills that translators must have in order to carry out translation, and propose a translation competence model consisting of the following six components.

Bilingual Sub-competence (BSL). It consists of knowledge of the pragmatics, sociolinguistics, text, grammar and vocabulary of both languages.

Extra-linguistic Sub-competence. This is mainly expressive knowledge, including knowledge of both cultures, encyclopedic knowledge and knowledge of the subject matter of the translated material.

Knowledge about Translation Sub-competence. This is mainly expressive knowledge, including knowledge of the operation of translation: types of translation units, translation processes, methods and procedures, strategies and techniques, types of translation problems that arise and knowledge of the translation profession.

Instrumental Sub-competence. This is primarily a knowledge of translation operations and how to use translation tools, information and communication technologies and resources to solve translation problems and improve the efficiency and quality of translations.

Strategic Sub-competence. It is the operational knowledge that ensures the efficiency of the translation process and the resolution of problems that arise. Strategic competence is essential to control the translation process, to influence other translation competencies, to coordinate between them, to compensate for their deficiencies, and to identify and solve translation problems.

Psycho-physiological Components. Psycho-physiological Components are the components of various types of cognitive mechanisms and cognitive abilities, including memory, perception, attention, emotion, creativity, logical analysis, etc. It works mainly through psycho-physiological mechanisms.

These six components constitute the overall competencies required for translation, and the lack of any one of them will inevitably affect the effectiveness of the translation task. Although all six sub-competencies are essential for translation activities, it does not mean that they are all equally important for translation activities. Some sub-competencies, such as translation knowledge, are more closely related to the nature of the translation activity and are specific to the translator: others, such as bilingualism, extra-linguistic competence and psychophysiological factors, are also required by those involved in other language activities and are less relevant to the translation activity.

4.1 Experimental research

4.1.1. Experimental subjects:

This study took the third-year English majors of Zhejiang University of Finance and Economics Dongfang College as the research subjects, and divided them into an experimental class (45 students) adopting the hybrid teaching mode of the rain classroom and a control class (48 students) adopting the traditional teaching mode.

4.1.2 Experimental question:

Is the experimental class higher than the control class in terms of multiple translation skills? Is the blended teaching model based on the rain classroom more conducive to developing students' multiple translation skills?

4.1.3 Experimental arrangements.

In the first week, students in both classes completed Test 1 (pre-test) with a score of 100, which was designed to test their multiple translation skills. From the second week to the fifteenth week, the experimental class was taught in a blended mode based on the Rain Classroom, while the control class was taught in the traditional learning mode (introduction - explanation of the material - completion of exercises). In the sixteenth week, students in both classes took Test 2 (post-test), which was the same format, difficulty and score as Test 1.

4.2 Questionnaires and random interviews

At the end of the experiment, a questionnaire was administered to students in the experimental class to explore their attitudes towards the blended teaching model based on the rain classroom in five dimensions: learning experience, classroom learning efficiency, translation practice, overall learning effectiveness and willingness to learn. The questionnaire was scored using a five-point Likert scale: 1=strongly disagree, 2=disagree, 3=uncertain, 4=agree and 5=strongly agree. In addition, random interviews were conducted in the experimental class to gain insight into the specific feelings of the students in the class about the blended teaching model based on the rain classroom.

4.3 Research findings

4.3.1 The blended teaching model based on the rain classroom helps to enhance students' multiple translation skills

The differences between the pre- and post-test scores of the two classes are shown in Table 1. It can be seen that: at the beginning of the semester, there was no significant difference between the scores of the two classes on the multiple translation skills ($T=-0.61$, $D.F.=93$, $P=0.57>0.05$); however, at the end of the semester, the scores of the experimental class on the multiple translation skills were higher than those of the control class ($M.D.=2.63$), and the difference was significant ($T=2.52$, $D.F.=93$, $p=0.03<0.05$).

Table 1 Differences in pre- and post-test scores between the experimental (N=45) and control classes (N=48)

Projects	Group	M.	S.D.	M.D.	T	D.F.	P
Pre-test	Experimental Classes	7.53	5.23	-0.81	-0.61	93	0.57
	Control Classes	78.34	6.35				
Post-test	Experimental Classes	84.41	3.78	2.63	2.52	93	0.03
	Control Classes	80.19	5.62				

Note: M.=Mean, meaning mean score; S.D.=Standard Deviation, meaning standard deviation; M.D.=Mean Difference, meaning mean difference; D.F.=Degrees of Freedom. Same as below.

Table 2 Progress of multiple translation scores in the experimental (N=45) and control classes (N=48)

Projects	Group	M.	S.D.	M.D.	T	D.F.	P
Pre-test	Experimental Classes	77.53	5.23	-5.45	-6.72	45	0.00
	Control Classes	83.45	3.78				
Post-test	Experimental Classes	78.21	6.54	-2.40	-2.45	48	0.05
	Control Classes	80.19	5.62				

The progress of the multiple translation performance of the two classes is shown in Table 2. It can be seen that after one semester of learning in the blended teaching mode based on the rain classroom, the multiple translation ability of the experimental class has improved significantly (M.D.=-5.45, T=-6.72, D.F.=45, P=0.00<0.05); while the multiple translation performance of the control class has also improved significantly (T= -2.45, D.F.=48, P=0.05), but the improvement was not as great (M.D.=-2.40) as in the experimental class. This shows that the blended teaching model based on the rain classroom can effectively improve students' multiple translation skills.

4.3.2 The blended teaching model based on Rainy Classroom was well received by students

In this study, frequency statistics were conducted using SPSS 19.0 on the data from 45 valid questionnaires returned from the experimental classes, and the results are shown in Table 3. Table 3 shows that the majority of students (82.6%) were satisfied with the learning outcomes of the blended mode (mean score of 4.1) and 85.1% of them considered it necessary to adopt this mode for future teaching (mean score as high as 4.31). Specifically, 82.8% of students thought that the sub-model facilitated their independent pre-reading and revision outside of class (mean score of 3.98); 79.8% said that the model helped improve the efficiency of classroom learning (mean score of 4.13); and 88.6% said that the model gave them more opportunities to practise translation (mean score of nearly 4.35). In addition, students also expressed their approval of the blended model based on the Rain Classroom in their interviews, saying that it both enlivened the classroom atmosphere and increased teacher-student interaction, and increased their motivation and classroom participation, as well as making them truly central to their learning.

Table 3 Results of the questionnaire on attitudes towards learning in the experimental class

Title Description	Average score	Standard deviation	S.D. (%)	D. (%)	N.S. (%)	A. (%)	S.A. (%)
Facilitates independent pre-reading and revision outside of class	3.98	0.83	1.2	6.4	8.7	63.2	20.5
Helps to enhance learning in the classroom	4.13	0.84	0	8.3	8.3	59.3	24.1
Gave me more opportunities to practice translation	4.35	0.79	0	5.6	6.7	53.2	34.5
Overall this mode of learning is more effective	4.1	0.75	1.2	4.2	12.5	68.1	14
There is a need to adopt this model for future learning	4.31	0.77	0	5.9	9.3	63.1	21.7

Note: S.D.=Strongly Disagree, indicating strong disagreement; D.=Disagree, indicating disagreement; N.S.=Not Sure, indicating uncertainty; A=Agree, indicating agreement; S.A.=Strongly Agree, indicating strong agreement.

5. The advantages of a blended teaching model based on the rain classroom in developing diverse translation skills

Why is the blended teaching model based on Rainy Classroom effective in enhancing students' multiple translation skills and has been accepted by most students? What are the advantages of this model in developing students' multiple translation skills? The following conclusions were drawn from the experimental analysis of this study.

5.1 Improving learning efficiency and increasing the experience

The blended teaching model based on Rain Classroom improves learning efficiency. Outside the classroom, Rain Classroom expands the learning time and space for students to pre-study and review their language knowledge in the textbook. For example, students can pre-study the language knowledge of the text through the Rain Classroom PPT before class, while after class they can view the teacher's notes, answers to exercises and other learning materials in Rain Classroom so that they can consolidate and consolidate their language knowledge in class. During the lesson, with the support of Rain Classroom, students do not have to take notes or photos, but can concentrate on theoretical concepts, functional analysis and critical analysis of the text. This combination of "before - during - after" learning allows students to develop their learning skills effectively.

5.2 Exercising students' practical translation skills

With the support of the Rain Classroom, students have more opportunities to experience and apply their knowledge first-hand. In the practical application of translation, students are driven to learn in small groups and are motivated to learn. The latest translation project texts are not available on the Internet and students have to translate them on their own, thus mobilising and enhancing students' independent learning, translation practice and teamwork skills. The translation practice project requires students to present their translation practice projects in the form of a reply post, which not only allows students to appreciate each other's translations, but also enriches the presentation of the discussion forum, enlivens the atmosphere of the discussion forum and motivates students to participate. At the same time, the presentation of projects can improve the completion and quality of students' assignments after class.

5.3 Increased effectiveness and quality of online teaching and learning

Through the reform of the blended teaching mode based on Rain Classroom, the "learning-centred" concept is implemented, and the teaching content, teaching cases and translation practice projects are selected to keep abreast of the times, effectively integrating high-quality resources on multiple platforms to form a comprehensive online course system. The teaching content is designed through "question-guided + translation case analysis", while "task-driven + PBL project-driven" mobilises students' learning enthusiasm. Through the design and arrangement of various online classroom activities, such as time-limited tests, online quizzes, example demonstrations, live Q&A and project presentations, the online teaching effect will definitely be greatly improved and the quality of online teaching of translation courses will be enhanced.

5.4 Students' information-based learning literacy has increased significantly

Through the reform of the blended teaching model based on the Rain Classroom, the design and arrangement of both teaching content and classroom activities, the multi-faceted spiral cultivation of students' learning power improves students' learning conditions and attitudes, and can significantly improve students'

information-based learning literacy, independent learning literacy and comprehensive foreign language literacy, promoting the improvement of students' learning literacy.

In the Rain Classroom-based blended learning model, students need to be proficient in the basic use and operation of Rain Classroom as a smart teaching tool, especially in joining Rain Classroom classes, completing time-limited quizzes, sending pop-ups, and submitting written and audio assignments, which places demands on their technical literacy skills. In addition, in the process of creating the PPT required for the translation project report, students learn to use internet technology to obtain relevant information from multiple sources, read, filter and integrate relevant materials, and learn to reasonably select and arrange various symbolic resources such as text, images, video, audio, font, font size, colour and layout to express meaning in the PPT, which also effectively develops their technical literacy skills.

6. Summary

The Rain Classroom is used to provide interactive teaching in translation courses, to improve students' translation practice and to improve the efficiency of teaching in translation courses. It includes the release of Rain Classroom for students' pre-course study, i.e. a PPT containing the knowledge points and translation practice questions of the module is delivered before class, and the teacher gives the necessary audio explanation. For each chapter, corresponding classroom test questions are selected according to students' pre-class feedback and unit content characteristics, and interactive classroom sessions are organised according to teaching requirements, such as "rain courseware" synchronisation, screen casting, pop-ups, quizzes, etc. At the same time, the "project-based" translation exercises outside the classroom are supplemented according to the difficulty of the theoretical knowledge of the translation course and students' individual needs, so as to integrate theory and practice and improve students' translation practice ability. The translation course makes full use of the "Rain Classroom" platform to enhance students' enthusiasm and autonomy in learning before, during and after class, and to improve the timeliness of teaching in the translation course. With the help of the intelligent teaching tool "Rain Classroom", we can realise hybrid teaching in translation courses, diversify teaching methods and achieve efficient classroom interaction, fully improve the multimedia teaching design of translation courses, collate and analyse students' learning results, optimise the teaching process, and enhance students' participation and learning effect in class. The translation course makes full use of the advantages of "Rain Classroom", builds a real-time interactive teaching environment supported by technology, provides and solves students' personalised learning needs and problems, and establishes a hybrid teaching model of "pre-class rain preview + classroom contribution, comprehensive interaction and instant testing + post-class review and extension" for the translation course. "A blended teaching model. Through the Internet and mobile phones, it connects in-class and out-of-class, teachers and students, and uses the large amount of data saved during the teaching process as the basis for process teaching evaluation.

This paper builds a hybrid teaching based on rain classroom in the translation course to solve the integration problem between online teaching and traditional teaching, providing a new way of thinking to maximise students' independent learning, self-management and innovation ability, and has achieved certain results in the implementation process. The richness and diversity of resources accumulated in the online teaching of translation courses are conducive to students' personalised learning and development, as well as to their self-management and the cultivation of their learning power. The blended teaching mode based on the rain classroom is of great value in transforming teaching methods and improving teaching quality. It is hoped that the new form of teaching model will provide a case study for similar course reform in other institutions. The exploration of new forms of teaching models is not only in the temporary response to the challenges of the

current epidemic, but also in the future society, in the context of the new liberal arts, where information technology will be deeply integrated into the field of education.

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