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Design and Research of English Translation Teaching Based on Multimedia MOOC

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Abstract:

MOOC-based translation teaching research is a new teaching form to improve students' translation level in the era of web 2.0. The MOOC translation teaching research started in 2013. The domestic MOOC translation teaching research started a little later and emerged in 2014. The research in this field is still in the initial stage. At present, the development of this research field at home and abroad mainly presents the following five characteristics: First, the number of domestic and foreign research papers is on the rise. Second, research hotspots at home and abroad all focus on exploring the blended teaching form combined with flipped classroom and SPOC. The difference is that domestic research focuses on the exploration and analysis of teaching models and interpretation teaching, and is not closely integrated with modern educational technology, while foreign Research pays more attention to the application of modern educational technology to translation teaching. Third, domestic research topics are more scattered, and there is a lack of correlation between cited documents, while foreign research documents are more closely related. Fourth, both at home and abroad are mainly expository research, using the literature method to explore, but the number of foreign empirical research literature far exceeds that in China. Fifth, both domestic and foreign studies have obvious linguistic attributes. Based on existing research, combined with constructivist learning theory, blended learning theory and instructional design theory, this research aims to analyze the design elements and influencing factors of MOOC translation teaching in my country.

Keywords*: MOOC; translation teaching; design elements; influencing factors*

I INTRODUCTION

With the opening of translation majors in colleges and universities, and more and more English majors and non-foreign language majors offering translation courses, translation teaching is gradually receiving attention. However, there are still many problems in the cultivation of translation talents in colleges and universities in terms of teachers, teaching time and teaching mode. Since the 21st century, MOOCs have emerged in the era of web 2.0, which has brought inspiration to the reform of translation teaching in colleges and universities, and provided infinite possibilities for the sound and sustainable development of translation teaching. At the same time, under the background of educational informatization, students' information literacy, computer and smartphone operation ability have been continuously improved, and they have the ability to collect, process and apply information, and have become accustomed to "click-type, search-type, fragmented" All kinds of conditions have provided help for students to get rid of

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the constraints of traditional translation teaching and realize personalized MOOC translation learning [1]. It can be seen that in-depth research on MOOC-based translation teaching can promote the development of translation teaching and improve students' translation level to a certain extent. Based on the review of relevant research literature at home and abroad, this paper conducts an empirical study on the design elements and influencing factors of MOOC-based translation teaching, and discusses its significance to MOOC translation teaching research [2-5].

1.1 Research background

The author loves translation. After learning about the MOOC platform, I am eager to use my spare time to learn translation knowledge. By searching the mainstream MOOC platforms in China, the author found that there are few related translation courses, which cannot meet the needs of translation learners and enthusiasts. Not only that, after coming into contact with a large number of research literatures on MOOCs and translation teaching, the author found that there are only a handful of literatures related to MOOCs translation teaching [6]. On this basis, there are doubts: what is the development status of the MOOC translation teaching research field? To explore whether the MOOC translation teaching can promote the development of this field to a certain extent? His desire to conduct in-depth research, under the guidance of his tutor, took MOOC-based translation teaching as the research direction of his master's thesis.

Through reading the literature, we can see that the advantages of the MOOC platform and the shortcomings of translation teaching are very obvious. Therefore, the author advocates to explore the design elements and influencing factors of MOOC translation teaching in order to promote the development of this research field [7]. At present, the research on MOOC translation teaching is still in the initial stage of exploration. The relevant research results include the exploration of blended teaching mode, the theoretical discussion of translation teaching reform in the MOOC era, and the investigation of the effect of MOOC applied in translation teaching [8]. The research hotspots are based on flipped classroom; SPOC C Small Private Online Course (Small-scale Restricted Online Course) is mainly based on the mixed teaching mode. It is worth noting that there are few literatures devoted to the teaching design of MOOC translation, and the literature that explores the elements and influencing factors of MOOC translation teaching design is even more blank. The status quo of MOOC translation teaching research shows that this research field is an academic field worthy of further exploration.

1.2 Research significance

This research has both theoretical and practical significance. In terms of theoretical significance, there are three main ones:

(1) It enriches the research results in the field of MOOC translation teaching. Although there are countless research literatures on MOOCs and a large number of research literatures on translation teaching, there are relatively few literatures on MOOC translation teaching research, and the literatures with high influence are even more scarce. Based on constructivist learning theory, blended learning theory and

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instructional design principles, this paper discusses MOOC translation teaching through literature method, questionnaire method, interview method, and video analysis method, which provides new insights for research in this field. ideas.

(2) It provides an empirical basis for future research in the field of MOOC translation teaching. At present, no effective scale has been found in the field of MOOC translation teaching research. Based on the analysis of relevant research at home and abroad, this study has built the "Mooc Translation Teaching Design Elements Scale" and "The Influencing Factors of MOOC Translation Teaching Design". Table", and verified the reliability and validity of the two scales, effectively exploring the elements and influencing factors of MOOC translation teaching design.

(3) It is innovative in the research perspective. On the basis of discussing the elements and influencing factors of MOOC translation teaching design, this research creatively explores the correlation between design elements and MOOC translation learning willingness, and the influencing factors of students' gender, major and language level in MOOC translation teaching design differences in the study results and provide a reasonable explanation for the findings [9-12].

II THEORETICAL BASIC RESEARCH

Theoretical support is the basis for carrying out MOOC translation teaching research. This study selects constructivist learning theory, blended learning theory and instructional design theory represented by Gagne as the theoretical basis for MOOC translation teaching research [13]. This chapter focuses on the academic background, main content and guiding role of these three theories on MOOC translation teaching research. On this basis, the theoretical framework guiding this research is elaborated.

2.1 Constructivist Learning Theory

The development, growth and maturity of new things are inseparable from the supporting role of corresponding theoretical care. Theory can be divided into two levels of content, one is the origin theory, and the other is the derivative theory. These two theories are interdependent and mutually reinforcing, rather than exist in isolation. Origin theory is a prerequisite for the emergence of derivation theory, and derivation theory enriches and develops the connotation of origin theory [14]. As far as MOOCs are concerned, their origin theory is learning theory. Constructivist learning theory conforms to the teaching concepts of learner initiative, individualized learning, and decentralization emphasized by MOOCs, and has become one of the original theories of MOOCs. This section mainly introduces the research background of the constructivist learning theory, clarifies the important concepts and connotations of the theory, and discusses the guiding role of the theory on the MOOC translation teaching research [15].

2.1.1 The main content of constructivist learning theory

After long-term development and practice, constructivism has formed a unique view of knowledge,

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learning, students, and teaching. The main contents are as follows:

Constructivist view of knowledge. Constructivism holds that explanations or hypotheses, not the ultimate answers to questions, can be overturned and new hypotheses formed. In addition, knowledge is not an accurate representation of reality, but only a kind of hypotheses with the continuous progress of human cognition. These hypotheses cannot accurately summarize everything in the objective world, and of course they cannot provide any countermeasures applicable to any activity or problem. As far as an individual is concerned, knowledge cannot exist outside a specific individual. Learners need to construct their own knowledge according to their own experience background [17]. The knowledge acquired by learners depends on subjective activities in specific situations, and there is no one-size-fits-all approach. Knowledge, different learners will have different understandings of the same thing. Therefore, teaching is not simply imparting knowledge, but helping learners construct knowledge that they can understand based on their own experience.

The constructivist view of learning believes that although the world exists objectively, each learner has a different understanding of the world, and learners construct or interpret the real world based on their own experience. Therefore, learning is not simply a process of teachers passing knowledge to students, but a process in which students construct knowledge by themselves; learning is not a passive acceptance of stimuli by learners, but an active construction and meaning generation [18].

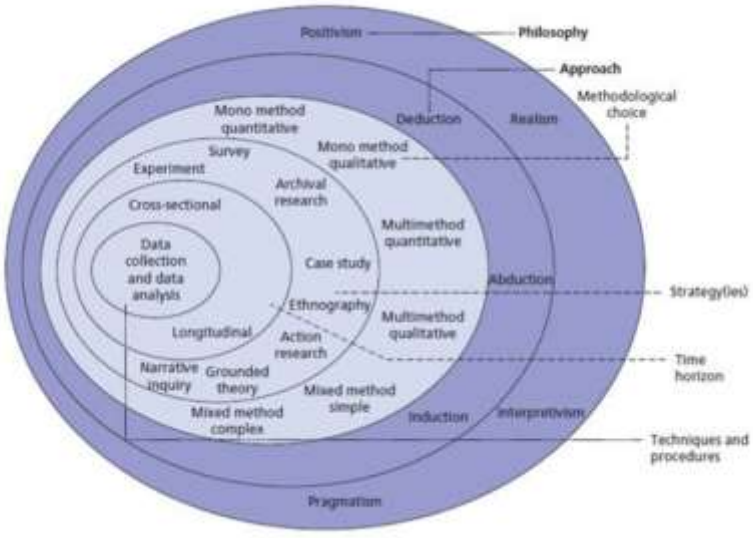

Figure 1 Schematic diagram of the categories of constructivism theory mind map

2.1.2 The guiding significance of constructivist learning theory to MOOC translation teaching

As the origin theory of MOOC teaching, constructivist learning theory has guiding significance for MOOC teachers, MOOC learners and learning environment.

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As far as teachers are concerned, teachers are the direct designers of MOOC translation teaching activities, and they are also the guides of students' learning activities. Traditionally, from design to development of teaching activities, it is only the work of a single teacher, but the teaching methods and contents taught in this way are undoubtedly limited, which affects the enthusiasm and initiative of learners. According to the guidance of Confucianism, the teaching activities in the MOOC belong to the team work of teachers, and the wisdom of hundreds of schools has been condensed from the beginning of the design [19]. The teamwork of teachers to carry out MOOCs enables teachers to have sufficient time to carry out preparatory activities such as instructional design and learner analysis, so that the curriculum can better meet the needs of students, improve learning enthusiasm, and students can actively construct knowledge [20].

For students, constructivist learning theory emphasizes student initiative. The openness of MOOCs provides powerful conditions for the practice of this view. Learners can set their own learning progress, independently choose learning materials and interaction methods, complete students' preset learning tasks, and actively build knowledge and skills[21]. This learning environment creates a relaxed and comfortable psychological learning state for students, encourages students to learn freely and actively, and build knowledge with a pleasant state of mind. Specifically in the translation course, students can master the knowledge of bilingual translation through video learning. However, the process of translation thinking conversion and knowledge internalization requires the interaction of learners in the discussion area. This interaction includes teacher-student interaction and student-student interaction. Translating exercises and commenting on students' translation work can effectively improve their enthusiasm for learning and allow students to spark new sparks in a relaxed environment. This learning environment embodies the "leading students to actively participate in learning" emphasized by the constructivist learning theory.

As for the environment, the individualized learning of MOOCs from the perspective of constructivism is inseparable from the construction of the learning environment. Therefore, in teaching design, teachers should flexibly and dynamically design a learner-centered learning environment according to teaching needs, so that students can transform from the previous one-way knowledge receivers to two-way and multi-directional knowledge transmitters. Not only that, the constructed learning environment needs to meet the needs of students' fragmented learning.

In summary constructivist learning theory has important guiding significance for MOOC translation learning. The various available learning resources and learning discussion areas in the MOOC translation study are aimed at creating an active learning environment for students, all of which are permeated with the idea of constructivist learning theory.

2.2 Blended Learning Theory

The blended learning theory not only has guiding significance for MOOC teaching, but also promotes translation teaching. This section mainly introduces the research background of blended learning theory,

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clarifies the important concepts and connotations of the theory, and discusses the guiding role of the theory on MOOC translation teaching research [22].

Figure 2 Schematic diagram of blended teaching in the context of MOOCs

2.2.1 The main content of blended learning theory

This theory mainly involves three aspects: (1) the blending of offline learning and online learning; (2) the blending of structured learning and unstructured learning; (3) the blending of various teaching resources, learning environments, and student support services.

Offline learning mixed with online learning. This is a mix at the simplest level, offline learning refers to traditional classrooms, and online learning refers to virtual classrooms, web-based courses, mobile terminals, etc. This kind of mixing not only emphasizes the role of teachers, but also provides conditions for students' autonomous learning [23]. For example, based on the blended learning theory, Xing Dahong conducted a one-semester teaching experiment on the Chinese-English translation ability of students in higher vocational colleges. The results showed that the translation performance of the students in the experimental group that combined MOOCs and traditional classrooms was significantly higher than that of students. A control group, therefore, a combination of online and offline is a proven way of teaching. Structured learning mixed with unstructured learning. Structured learning refers to learning based on the occurrence and development of the overall unit of knowledge, emphasizing continuity and relevance [24-26].

2.2.2 The guiding significance of blended learning theory to MOOC translation teaching

The traditional translation classroom takes "theory-exercise-explanation" as the main teaching mode, that is, the teacher first informs the students of the theory, then arranges translation exercises, and then explains the students' exercises or example sentences. This model emphasizes the "teacher-centered" concept, and focuses on the output of translation results and the teaching of basic translation knowledge.

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Blended learning theory can guide translation teaching, and teaching translation on a MOOC platform is transformative for teachers, students, and the environment.

As far as teachers are concerned, according to the blended learning theory, first of all, teaching needs to be student-centered, changing the translation teaching thinking of "full classroom", and becoming the guide of students' translation learning. Secondly, teachers need to change their teaching methods and combine traditional face-to-face teaching methods with MOOC teaching to form a new hybrid teaching model. Finally, teachers need to innovate teaching design. In the era of online teaching, the problems of traditional teaching design are constantly highlighted, and teaching design needs to be constantly adjusted, and finally a new teaching design that "emphasizes both learning and teaching" is formed.

2.3 Instructional Design Theory

American psychologist Gagne organically integrates information processing psychology and constructivist psychology to form a unique teaching theory and teaching design theory. This section mainly introduces the research background of instructional design theory, clarifies the important concepts and connotations of the theory, and explores the guiding significance of the theory to MOOC translation teaching research.

2.3.1 The main content of instructional design theory

Gagne's instructional design theory draws on the ideas of information processing psychology and constructivist psychology, creatively summarizes the results formed by human learning into five categories, and points out the internal and external conditions that these five types of learning results need, and believes that instructional design needs to be carried out according to these five types of results and learning conditions. This is the famous "learning outcome classification theory".

(1) Wisdom skills. This is the learner's ability to use symbols to interact with the environment, and can be divided into four interrelated subcategories, from low to high: discrimination, concrete concepts, rules, and high-level rules (problem solving). Therefore, teaching needs to provide examples that enable learners to solve problems.

(2) Cognitive strategies. This is the learner's ability to use concepts to regulate and control internally, and it belongs to a special intellectual skill. The acquisition of cognitive strategies can help learners to solve problems better. There is also a special kind of strategy in cognitive strategy, called "metacognitive strategy", its function is to control the use of other strategies.

(3) Verbal information. This is the learner's ability to express information, also known as "declarative knowledge". Gagne believes that the content of verbal information must be meaningful to the learner, and the teaching of verbal information should associate new knowledge with the learner's prior knowledge.

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(4) Action skills. This is the ability of the individual to manipulate muscle coordination, which belongs to the acquired ability. The most important learning condition is "practice", accompanied by feedback from the teacher.

2.3.2 The guiding significance of instructional design theory to MOOC translation teaching

Gagne's thought of "designing teaching for learning" runs through his theoretical system of instructional design. Although the instructional design theory only provides us with a theoretical framework to guide instructional design, rather than specific implementation rules, it still provides useful guidance for our instructional design activities[27].

First, Gagne emphasized that teaching should be systematic. When carrying out traditional teaching design, teachers often separate teaching units, which reduces the systematicness of teaching design. Second, Gagne argues that teaching must be designed for the individual learner. However, in traditional teaching, teaching design generally starts from the subjective wishes of teachers, and carries out planning based on teaching experience and subjective consciousness. In contrast, in MOOC teaching, since the teaching videos are generally produced before the official launch, and the students are informed of the course objectives, weekly class hours and other information, such teaching design has been systematically planned in the early stage of the course. In line with the systematic principles of instructional design theory[28]. Secondly, although it is not possible to know the situation of the selected students before the MOOC video is produced, teachers can collect the students' learning situation and learning needs through questionnaires, interviews, tests, etc. at the beginning of the MOOC translation teaching, during the teaching period, and at the end of the semester. As well as feedback, constantly adjust the progress of translation teaching, and integrate teaching design throughout the entire teaching, fulfilling the "learner-centered" design principle.

In short, Gagne's instructional design theory requires that teaching must be student-centered. Specifically in the MOOC translation course, because translation learning requires a combination of theory and practice, and video learning is conceptualized, appropriate teaching methods are extremely important in video teaching. Some scholars have investigated the degree of stimulation of teaching methods to learners, and found that the top three teaching methods in terms of stimulation degree are: scenario simulation, practice and self-assessment. Therefore, in the teaching design of MOOC translation, teachers need to consider the receptive ability of students, and the selected teaching methods should focus on attracting attention, informing goals, presenting stimuli, and providing feedback.

III RESEARCH DESIGN OF MOOC TRANSLATION TEACHING DESIGN ELEMENTS AND INFLUENCING FACTORS

Based on the literature review and related theoretical basis, this chapter aims to carry out the research design. On the one hand, implement questionnaire design and prediction, including constructing two

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scales, pre-investigation, and scale revision[29]. On the other hand, this chapter also focuses on describing the research question, introducing the research objects and the proposed research tools in the formal survey, and detailing the data collection and analysis.

3.1 Questionnaire Design

The questionnaire of this research follows the following design process: according to the relevant research results, the dimensions and variables of the questionnaire for MOOC translation teaching research are initially formed; the rationality of the variables is discussed with the instructor; Formal scale.

At present, in many studies at home and abroad, no questionnaires directly related to MOOC translation teaching design have been found. Therefore, this study mainly refers to the relevant research results at home and abroad, and combines its own understanding to form the initial scale of the questionnaire. Downes pointed out four key elements for successful MOOC design: Aggregatio, Remixing, Repurposing and sharing Feed Forward. Ma Xiufang believes that MOOC design includes five elements: course organizer node, learning participant node, content and resource node, Linked activities for teaching and learning and tools and media in a social networking environment. Jiang Jing et al. summed up three important elements of instructional design: intrinsic cognitive load, diversity of picture presentation and teacher characteristics. Yang Yuqin and Jiao Jianli summarized four elements of MOOC design: individualized learning of learners, interactive learning environment, technical functions, and evidence-based quality improvement[30].

Although the above specific expressions and classifications are different, they all contain the following elements, namely: teaching organizers, teaching resources, teaching activities, teaching evaluation and technical functions. These five dimensions constitute the basic elements of the "MOOC Translation Teaching Design Elements Scale", and each element forms the scale of this study with reference to the research results of different researchers.

3.2 Prediction data collection and analysis

Rong Taisheng pointed out that a high-quality questionnaire design should be predicted before the official distribution. Data Prediction Using an initial scale, the undergraduate and master students of a comprehensive university were surveyed. 500 questionnaires were distributed, 50% of which were male and female. Eliminate invalid questionnaires, such as filling in the same option, missing filling, filling in more, filling in contradictions, filling in regularity, etc., a total of 450 valid questionnaires were recovered, and the effective rate of the questionnaire was 90.00%. Data prediction will divide exploratory factor analysis (EFA) and confirmatory factor analysis (CCFA) according to the ratio of 1:3, that is, select 200 pieces of data for exploratory factor analysis, including 100 for boys and 100 for girls; The remaining 250 samples were subjected to confirmatory factor analysis, of which 125 were male and 125 were female. This study intends to use SPSS 24.0 and AMOS 17.0 to test the initial scale. The results of the predicted data are mainly divided into four dimensions: exploratory factor analysis, item analysis, confirmatory

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factor analysis and reliability analysis. According to the data prediction results, relevant variables that are not suitable for this study are deleted to optimize the questionnaire and form a formal scale. The predictive analysis process is shown in Figure 3.

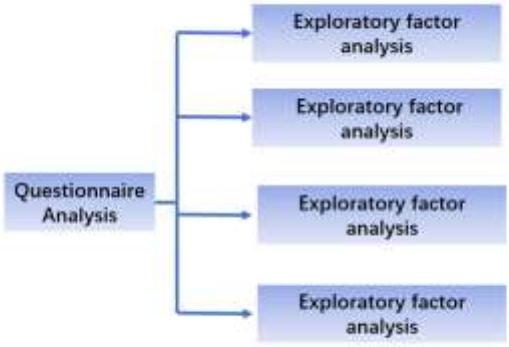

Figure 3 Predictive analysis flowchart

3.3 Prediction of MOOC Translation Instructional Design Elements Scale

This study used exploratory factor analysis to predict construct validity, tested the KMO and Bartlett sphericity of 19 variables in the scale, and examined whether the scale was suitable for factor analysis. The results show: KMO=0.786, Bartlett's sphericity test P value <0.01, according to the judgment standard given by Kaiser: KMO<0.9, very suitable for factor analysis; 0.8<KMO<0.9, suitable for factor analysis; 0.7<KMO < 0.8 is fair; 0.6 < KMO < 0.7, suitable and low; KMO < 0.5 is inappropriate. Therefore, the questionnaire is suitable for factor analysis.

The principal component factor analysis method was used to reduce the dimension, and calculate the relevant eigenvalues and the cumulative contribution rate of variance. On this basis, the factors are extracted, and finally, the Kaiser standardized orthogonal rotation method is used to rotate the factors, and then explain the meaning of the common factors.

3.4 Research tools

Questionnaire survey and semi-structured interview were the two main research tools of this study. Two scales are mainly used to conduct the questionnaire survey, namely the "MOOC Translation Teaching Design Elements Scale" and the "MOOC Translation Teaching Design Influencing Factors Scale".

The "MOOC Translation Teaching Design Elements Scale" consists of three parts: the first part is the demographic information of the research object, including school, major, grade, gender, and language level; the second part is a survey on the willingness to use MOOCs for translation learning The third part is the investigation of MOOC translation teaching design elements, which is divided into five elements:

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teaching organizer, teaching resources, teaching activities, teaching evaluation and technical functions. Among them, variables A1, A4, A8, and A13 examine the importance of teaching organizers in MOOC translation teaching design; variables A5, A9, and A14 examine the role of teaching resources in design elements; variables A6, A10, and A15 It aims to explore the importance of teaching activities as an element of MOOC translation instructional design; variables A2, A7, and All mainly explore the role of teaching evaluation in design elements; variables A3, A12, and A16 aim to explore the role of technical functions as design elements. Importance, the scale has a total of 27 items. The "Scale of Influencing Factors of MOOC Translation Teaching Design" also consists of three parts: demographic information, survey of translation learning willingness, and survey of influencing factors of MOOC translation teaching design, which are divided into three influencing factors: teachers, students and environment. Among them, variables B1, B4, B6, B9, B11, B14 are teachers' influencing factors, variables B2, B5, B7, B10, B12, B15, B17 are students' influencing factors, and variables B3, B8, B13, B16 are environmental influencing factors , the scale has a total of 28 items. The questionnaire indicated that the respondents should choose the corresponding scale according to their actual situation.

Reliability and Validity Analysis: Unlike the prediction part, the reliability analysis uses a w test to analyze rater reliability. For the validity test, KMO and Bartlett sphericity test are also used to verify whether the scale data is suitable for factor analysis, so the factor analysis method is used to explore the "MOOC Translation Instructional Design Scale" and "MOOC Translation Instructional Design Scale". The weights between the dimensions of the "Influence Factor Scale" are sorted by importance.

IV RESULTS AND DISCUSSION

This chapter discusses the findings of the empirical investigation. It mainly analyzes the relationship between the elements of translation instructional design under the MOOC platform and its relationship with students' willingness to participate in MOOC translation learning; at the same time, it also explores the factors that affect translation instructional design under the MOOC platform, including teachers, students and the environment; These factors vary by gender, major, and language level of students.

4.1 Research results

The conclusions of the questionnaire used in this study were analyzed by SPSS 24.0, and the interview results were derived from Nvivo 110

First of all, for the questionnaire results, this research mainly includes the elements of MOOC translation teaching design and the influencing factors of MOOC translation teaching design. In terms of research on teaching design elements of MOOC translation, there are five main teaching design elements, and the average value from high to low is: "teaching resources", "teaching activities", "teaching evaluation", "technical function" and "teaching organizer" . The research results show: "In the MOOC translation teaching design, the design of resources is the most important link. Among them, A9 has the highest average value of "providing reference translations and translation strategies for different example

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sentences can deepen my understanding of knowledge points". This shows that when designing teaching resources, teachers should consider the diversity of translation and translation strategies, and provide students with a variety of translation ideas. In the investigation and research on the correlation and difference between MOOC translation teaching design elements and learning willingness, the author found that, First, the students' willingness to learn translation in MOOCs is generally not high. The reason may be that there are relatively few such MOOCs, and most students have not tried this translation learning method and maintain a neutral attitude toward it. Second, Except for the "teaching organizer", students with high, medium and low willingness to learn have significant differences in the four elements of "teaching activities", "teaching resources", "technical functions" and "teaching evaluation", and they show a significant positive The relevant relationship is as follows: the more prominent the design effect of "teaching activities", "teaching resources", "technical functions" and "teaching evaluation" in MOOC translation teaching, the higher the students' willingness to learn MOOC translation.

4.2 Differences and importance of MOOC translation instructional design elements

This subsection aims to explore the differences and importance of the five design elements of MOOC translation teaching. Firstly, the reliability of the formal questionnaire was analyzed using the Kendall harmony coefficient test. The Kendall Harmony Coefficient is a way to calculate the degree of correlation of multiple rank variables, and is used to test the suitability of the questionnaire objects. The test results are shown in Table 1.

TABLE 1. Rater reliability analysis of "MOOC Translation Instructional Design Elements Scale"

project	Numerical value
N	685
Kendall's W	0.432
Chi-Square	3588.125
Df	686
Sig	0.000

It can be seen from Table 1 that the Kendall harmony coefficient is 0.432, the chi-square value is 3588.125, the degree of freedom is 684, and the asymptotically significant P value is 0.000<0.05, which indicates that there is a significant correlation between the 685 data, that is, the investigated There is a significant consistency in the attitudes of the participants towards the five elements of MOOC translation instructional design. Therefore, the reliability of the questionnaire is good and the questionnaire is valid[30].

Through the above analysis, the differences between the five elements are drawn. Based on this, the weight analysis method is used to rank the five elements according to their importance. The weight analysis method can judge the relative importance of these five types of elements in the scale. There are seven methods for determining the weight, and three commonly used methods are: expert scoring method, questionnaire analysis method, and factor analysis method. Here, the author chooses the factor analysis

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method to explore the weight between each element. The construct validity test showed that KMO=0.850, indicating that the sample size is suitable for factor analysis. Based on this, factor analysis-principal component analysis-select five factors-variance maximum rotation.

V RESEARCH CONCLUSION AND PROSPECT

This chapter mainly summarizes the paper and summarizes the main findings of this research. On this basis, according to the research findings, the general situation of MOOC-based translation teaching research and its enlightenment to MOOC translation teaching design are summarized. At the same time, the shortcomings of this research are pointed out, and the development direction of future research is prospected.

5.1 Discovery of design elements of MOOC translation teaching

Research shows that, first of all, students' willingness to participate in MOOC translation learning is generally not high. Secondly, there is a significant positive correlation between some design elements and MOOC translation learning willingness, that is, in addition to the teaching organizer element, there is a correlation between teaching resources, teaching activities, learning evaluation and technical functions and learning willingness. The order of correlation is: teaching activities, teaching resources, technical functions, and teaching evaluation. At the same time, there are significant differences between high, medium and low willingness in these four factors. However, there is no statistically significant correlation between teaching organizers and MOOC translation learning willingness.

The teaching design of MOOC translation is influenced by three factors: teachers, students and the environment. Sorted by the mean, the impact from high to low is teachers, students, and the environment. Through the weight method analysis, it can be seen that the influence degree of teachers and students is the same, and the environment has the least influence on the teaching design of MOOC translation. Specifically, among the influencing factors of teachers, the order of influence from large to small is design skills, subject knowledge, teaching philosophy, teaching attitude, teaching methods and teaching evaluation. Among the influencing factors of students, the degree of influence is learning attitude, curriculum identification, foreign language level, translation level, learning effectiveness, learning motivation and personality characteristics. Environmental factors are divided into educational environment (curriculum syllabus), technical environment (MOOC platform, big data), and social environment (social demand), the degree of influence is as follows: social demand, big data support, course syllabus and MOOC platform.

5.2 Deficiencies and Prospects

Due to the limitation of practical conditions, this study only discusses the MOOC theoretically based on the research results.

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Concepts of translation instructional design. However, whether the author's research results and suggestions are applicable to the actual MOOC translation teaching has not yet been known. Since the conclusions on MOOC translation instructional design in this study have not been applied to actual teaching, the applicability of these research conclusions and suggestions remains to be considered.

Finally, the research method of this study is relatively simple. The use of sPPs for mean analysis, weight analysis, independent sample t-test, variance analysis, and Spearman correlation analysis is a drop in the bucket for survey research. Statistical methods are used to verify the research data, and they are combined with qualitative research methods such as discourse analysis to bring breakthroughs in related research on MOOC translation teaching.

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