

Research on Teaching Reform of Korean Translation Class in Higher Vocational Colleges under the Background of Digital Intelligence Empowerment

Ting Feng

Shandong Vocational College of Science and Technology, Weifang, Shandong, China

282299233@qq.com

Keywords: Higher Vocational Colleges; Digital Intelligence Empowerment; Teaching Reform; Korean Translation Class

Abstract: With the rapid development of digital and intelligent technology, the field of education is facing unprecedented opportunities for change. Higher Vocational Colleges (HVC) Korean translation class is a key place to cultivate students' cross-cultural communication ability, and it is urgent to adapt to this intellectual transformation. This paper analyzes the problems existing in current teaching, such as outdated teaching materials, single teaching methods and great differences among students, which restrict the improvement of teaching quality and students' ability. Therefore, a series of reform strategies are put forward, including integrating network resources, introducing intelligent tools, innovating teaching methods and constructing personalized learning paths. These strategies update teaching content by using network platform and digital resources, improve learning interest and efficiency by using AI-assisted translation software and online learning platform, and enhance interactive and autonomous learning ability by using flip classroom and mixed teaching. After the implementation, the results were evaluated by questionnaire survey and score analysis, and it was found that students' satisfaction was high, and their interest in learning, efficiency and translation ability were significantly improved. The results show that the teaching reform under the empowerment of mathematical intelligence has a positive impact on improving the teaching quality and student effectiveness of HVC Korean translation class.

1. Introduction

With the rapid development of science and technology, digital and intelligent technology has gradually penetrated into all aspects of education. Especially in higher vocational education, the application of these technologies has brought new opportunities and challenges to teaching reform. Higher Vocational Colleges (HVC) Korean translation class, as an important part of cultivating students' intercultural communication ability, needs to adapt to this change urgently in order to improve teaching quality and efficiency.

At present, the extensive application of advanced technologies such as network, big data and AI is profoundly changing the traditional teaching methods and learning modes [1]. Under the background of this intellectual empowerment, HVC Korean translation classroom teaching is facing unprecedented transformation needs. By integrating online teaching resources, introducing intelligent teaching tools and innovating teaching methods, a more efficient, interactive and personalized learning environment is constructed, thus stimulating students' interest in Korean translation and improving their learning enthusiasm and practical ability [2-3].

The purpose of this study is to explore the teaching reform of HVC Korean translation class under the background of digital intelligence empowerment, analyze its necessity and feasibility, and put forward specific reform strategies. Through this research, we can provide a useful reference for the innovative development of Korean translation teaching in HVC, so as to improve students' Korean translation ability and lay a solid foundation for their future career development.

2. An analysis of the present situation of HVC Korean translation classroom teaching

In HVC system, Korean translation course is an important link to cultivate students' language application ability and cross-cultural communication ability. From the perspective of teaching content and methods, many HVC Korean translation classes still use traditional teaching materials and teaching models [4]. The content of teaching materials is often outdated, which fails to keep up with the new trend and new usage of Korean development in time, resulting in students feeling out of touch in practical application. At the same time, the teaching methods are relatively simple, mainly based on teachers' explanations and students' exercises, lacking diversity and interactivity, which makes it difficult to stimulate students' interest and enthusiasm in learning.

In terms of students' learning state, HVC students' performance in Korean translation class shows certain differences. Some students show high learning enthusiasm and actively participate in classroom interaction; However, many students lack learning motivation and interest in Korean translation courses, which leads to poor learning results [5-6]. In addition, due to the high requirements of Korean translation course for students' language foundation, some students with weak foundation will encounter great difficulties in the learning process and need more guidance and help.

At present, there are some problems in the content, methods and students' learning status of HVC Korean translation classroom teaching. These problems not only affect the teaching quality, but also limit the improvement of students' Korean translation ability. Therefore, it is necessary to reform the teaching of HVC Korean translation class to meet the educational needs of the new era and improve students' practical application ability.

3. Teaching reform strategy under the background of digital intelligence empowerment

3.1. Integrating network teaching resources

Under the background of digital intelligence empowerment, teaching reform should make full use of network platform and digital resources to enrich the teaching content of Korean translation class. Through the internet, teachers can get the latest and most authentic Korean expressions, and integrate these vivid language materials into classroom teaching, making the teaching content closer to reality and more practical [7]. At the same time, digital resources such as multimedia materials, online dictionaries and interactive practice platforms can provide students with diverse learning materials and practical opportunities. Through the integration and utilization of these resources, Korean translation classes will become more lively and interesting, and students' learning experience will be significantly improved.

3.2. Introducing intelligent teaching tools

The rapid development of digital intelligence technology has brought new possibilities for HVC Korean translation classroom teaching. By introducing intelligent teaching tools, such as AI-assisted translation software and online learning platform, students' learning interest and efficiency are significantly improved. These tools can provide instant translation and feedback, help students understand Korean expressions more intuitively, and correct mistakes in translation in time. In addition, the online learning platform provides students with personalized learning paths and rich interactive exercises, so that students can master Korean translation skills in a relaxed and pleasant atmosphere. With the help of these intelligent teaching tools, students' interest in learning can be stimulated, their learning efficiency can be improved, and more talents with excellent Korean translation ability can be cultivated.

3.3. Innovative teaching methods

Under the background of digital intelligence empowerment, the classroom teaching reform of HVC Korean translation is imperative. The traditional teaching mode has been difficult to meet the needs of current students and the development requirements of the times [8]. Therefore, it is the key way to improve the teaching quality and effect to explore the application of new teaching modes

such as flip classroom and mixed teaching in Korean translation classroom.

Flip-over classroom mode replaces the two links of pre-class preparation and classroom teaching in traditional teaching mode. Students learn the course content in advance through the online platform, including watching video lectures and reading electronic textbooks. Class time is used to discuss, solve problems and deepen understanding. This model can effectively improve students' autonomous learning ability and classroom interaction.

Blended teaching combines the advantages of online learning and offline teaching. Online platform provides video tutorials, interactive exercises and self-test topics, while offline focuses on face-to-face guidance, discussion and practical training. This mode not only ensures the systematicness and integrity of the teaching content, but also increases the flexibility and interactivity of learning [9].

In order to improve the effect of Korean translation teaching, it is necessary to build a digital teaching resource library, which contains rich Korean translation teaching resources, such as professional vocabulary, actual translation cases and industry background knowledge. At the same time, high-quality video tutorials and interactive software can be developed or introduced to support flip classroom and mixed teaching. To optimize classroom design, teachers can prepare preview materials and tasks in advance for the flipped classroom and establish an effective pre-class assessment mechanism. Educators should balance online and offline learning content and activities for blended teaching. They can also utilize digital tools to enhance communication and interaction between teachers and students, encouraging students to ask questions and participate during class. Additionally, incorporating various forms of interaction, such as group discussions and role-playing, can further engage students and improve learning outcomes. Through these reforms, students' autonomous learning ability, critical thinking ability and practical operation ability are improved, and at the same time, the interaction and interest of teaching are also helpful to improve students' learning motivation and satisfaction.

3.4. Personalized teaching path

Under the background of digital intelligence empowerment, HVC Korean translation classroom teaching reform is facing unprecedented opportunities and challenges. The traditional teaching model often ignores the individual differences of students, while personalized teaching emphasizes making personalized learning plans according to each student's learning characteristics and needs, and providing targeted counseling and support.

Personalized teaching is the key to realize educational equity and improve teaching quality. In HVC Korean translation course, there are significant differences in students' language foundation, learning ability, interests and career planning [10]. Therefore, the adoption of personalized teaching path can ensure that each student can study at a pace and in a way that suits him/her, so as to maximize their learning effectiveness.

First of all, teachers need to understand students' learning starting point and ability level through diagnostic assessment. This can be done through online tests, interviews or study logs. Based on this information, teachers can make a personalized learning plan for each student, including specific learning objectives, learning strategies and timetables. Next, teachers need to provide corresponding counseling and support according to students' personalized learning plans. This includes one-on-one counseling, group discussion, online resource recommendation and other forms. In addition, teachers can also use AI-assisted teaching system, such as intelligent question answering and automatic correction, to further improve teaching efficiency. Under the background of digital intelligence, teachers can use various educational technologies and tools to support personalized teaching. For example, by analyzing students' learning behavior through big data, teachers can better understand students' learning patterns and needs, and then adjust teaching strategies. At the same time, using the online education platform, students can learn independently according to their own time and progress, and realize real personalized learning. Finally, in order to ensure the effectiveness of personalized teaching, teachers need to evaluate students' learning progress regularly and give timely feedback according to the evaluation results. This continuous evaluation

and feedback mechanism helps students to adjust their learning strategies in time, and at the same time enables teachers to continuously optimize personalized teaching plans.

Personalized teaching path plays a vital role in the classroom teaching reform of Korean translation in HVC. A more inclusive, efficient and dynamic learning environment can be created for students by making personalized learning plans, providing targeted counseling and support, using digital intelligence tools and technologies and continuous evaluation and feedback.

4. Implementation and effect evaluation of teaching reform

4.1. Implementation of teaching reform

Teaching reform under the background of digital intelligence empowerment in Korean translation course in an HVC college. Firstly, the goal of improving the teaching effect by introducing digital intelligence tools is established, and the course syllabus is redesigned accordingly. The course content is divided into three modules: basic Korean knowledge, translation skills and practice, and intercultural communication ability, and each module incorporates digital intelligence teaching elements. The teaching team has made a detailed teaching plan and timetable for each module, and collected the latest Korean corpus and translation examples from several Korean learning websites and databases to enrich the teaching content. The teachers will choose the 'Intelligent Translation Assistant' and the 'Korean Online Classroom' as two digital tools to assist with teaching, and they will receive a one-week training on digital teaching skills. In terms of teaching methods, a blended learning approach is adopted, with online preview and review tasks arranged twice a week, and homework and Q&A submitted through the online platform. In class, teachers use intelligent translation assistants for real-time translation demonstrations and invite students to use the tool for oral practice. Students are divided into small groups, each group chooses a Korean translation project, uses online resources to complete the task together, and presents and communicates in class.

In order to evaluate the effect of teaching reform, three methods are adopted: questionnaire survey, test score analysis and teacher observation record. A questionnaire survey with 20 questions was designed, focusing on students' acceptance of new teaching methods, learning experience and improvement of Korean translation ability. A total of 100 students were distributed, and 95 valid questionnaires were finally recovered, with a recovery rate of 95%. At the same time, a Korean translation ability test was conducted before and after the teaching reform, and the progress of students was analyzed by comparing the results of the two tests. In addition, teachers also record students' performance in class, focusing on observing students' learning attitude, participation and the effect of group cooperative learning.

4.2. Results analysis and discussion

The results of the questionnaire survey show that 85% of the students are satisfied or very satisfied with the new teaching methods, and think that the tools of digital intelligence have improved their learning interest and efficiency (Table 1). At the same time, students also put forward some suggestions for improvement, such as adding more practice in translating scenes and optimizing the interface design of online learning platform.

Table 1 Results of questionnaire survey

Survey content	option	number of people	percentage
Overall satisfaction with the new teaching method	Very satisfied	45	47.4%
	satisfied	36	37.9%
	common	10	10.5%
	Dissatisfied	4	4.2%
	Very dissatisfied	0	0%
The Influence of	Remarkable	50	52.6%

Intellectualization Tools on Learning Interest	improvement		
	Have improved	35	36.8%
	No change	8	8.4%
	reduce	2	2.1%
	Significantly reduced	0	0%
The Influence of Intelligent Tools on Learning Efficiency	Remarkable improvement	48	50.5%
	Improved	37	38.9%
	No changes	9	9.5%
	reduce	1	1.1%
	Significantly reduced	0	0%
Do you want to increase the practice of actually translating scenes?	yes	80	84.2%
	no	15	15.8%
Satisfaction degree of online learning platform interface design	Very satisfied	25	26.3%
	satisfied	45	47.4%
	commonly	20	21.1%
	dissatisfied	5	5.3%
	Very dissatisfied	0	0%
Evaluation of Group Cooperative Learning	Very effective	55	57.9%
	Effective	30	31.6%
	commonly	8	8.4%
	invalid	2	2.1%
	Very ineffective	0	0%

By comparing the results of two Korean translation proficiency tests, it is found that the average score of students has increased by 10 points (out of 100 points), especially in the practical translation application (Table 2). This shows that the application of digital intelligence tools is really helpful to improve students' Korean translation ability.

Table 2 Average scores of students' Korean translation ability test before and after teaching reform

Test time	average score	Lifting range	Actual translation application score
Before the teaching reform	80	-	65
After the teaching reform	90	+10	80

Teachers' observation records show that after the implementation of teaching reform, students' participation in class has been significantly improved, and group cooperative learning has also achieved good results. Students learn from each other and help each other in group cooperation, and jointly complete a number of Korean translation projects, showing high teamwork and practical ability.

The classroom teaching reform of HVC Korean translation under the background of digital intelligence empowerment has achieved remarkable results. However, the teachers also realize that there are still some problems and challenges in the implementation process, such as some students' poor adaptability to digital intelligence tools, and the stability of online learning platform needs to be improved. In order to solve these problems, the teaching team will further optimize the teaching reform scheme and provide more personalized guidance and support, so as to comprehensively improve the teaching quality of HVC Korean translation class.

5. Conclusion

Under the background of digital intelligence empowerment, the research on the teaching reform of HVC Korean translation classroom shows that the teaching quality and students' Korean translation ability can be significantly improved by integrating online teaching resources, introducing intelligent teaching tools and innovative teaching methods. The questionnaire survey and test results analysis show that students have a high degree of acceptance of the new teaching methods, and their interest and efficiency in learning have been improved, especially their ability in practical translation application has been significantly improved. Teachers' observation records also show that students' classroom participation and group cooperative learning are effective. However, there are also some challenges, such as some students' poor adaptability to digital intelligence tools, and the stability of online learning platform needs to be improved. In view of these problems, it is necessary to further optimize the teaching reform plan and provide more personalized counseling and support to improve the teaching quality in an all-round way.

Acknowledgements

Reform and research topics of foreign language teaching under the new standards of vocational education in 2023

References

- [1] Liang, X. , Haiping, L. , Liu, J. , & Lin, L. Reform of english interactive teaching mode based on cloud computing artificial intelligence – a practice analysis. *Journal of Intelligent and Fuzzy Systems*, 2020,40(5), 1-13.
- [2] Frisch, H. Physics education reform in lab and classroom. *Physics Today*, 2018,71(2), 13-14.
- [3] Heim, A. B. , Aldor, E. R. , & Holt, E. A. The first line of contact: how course syllabi can be used to gauge & reform learner-centeredness in a college classroom. *The American Biology Teacher*, 2019,81(6), 403-409.
- [4] Ling, Y. , Chung, S. J. , & Wang, L. Correction to: research on the reform of management system of higher vocational education in china based on personality standard. *Current Psychology*, 2021,42(2), 1238.
- [5] Hong, Y. , Wu, J. , Wu, J. , Xu, H. , Li, X. , & Lin, Z. , et al. Semi-flipped classroom-based learning interventions in a traditional curriculum of oral medicine: students' perceptions and teaching achievements. *BMC medical education*, 2023, 23(1), 44.
- [6] Jing, L. , Bo, Z. , Tian, Q. , Xu, W. , & Shi, J. Network education platform in flipped classroom based on improved cloud computing and support vector machine. *Journal of Intelligent and Fuzzy Systems*, 2020, 39(99), 1-11.
- [7] Park, S. E. , & Howell, T. H. Implementation of a flipped classroom educational model in a predoctoral dental course. *Journal of dental education*, 2015,79(5), 563-570.
- [8] Kejela, E. , Tesfaye, G. , Getachew, A. , Rose, E. S. , Winful, T. , & Eyayu, Z. , et al. Evaluation of knowledge, attitudes, and practice in an online faculty development course for anesthesia educators in east africa. *The Journal of continuing education in the health professions*, 2023,43(4), 274-278.
- [9] Youhasan, P. , Henning, M. A. , Chen, Y. , & Lyndon, M. P. Developing and evaluating an educational web-based tool for health professions education: the flipped classroom navigator. *BMC Medical Education*, 2022,22(1), 1-9.
- [10] Li, D. H. , Jiang, B. S. , Li, H. Y. , & Liu, X. P. Design of experiment course "computer-aided landscape design" based on flipped classroom. *Computer Applications in Engineering Education*, 2016, 24(2), 234-240.