The Construction and Innovation of the Intelligent Curriculum of "Practical Course for Tour Guide" in the Era of Big Data

Qinying Yuan

School of International Education & Tourism, Hainan College of Software Technology, 128 Fuhai Qionghai City, Hainan, China
yingzi924717@163.com

Abstract: *The construction of the intelligent curriculum of "Practical Course for Tour Guide" is a new requirement for tourism talents put forward by the tourism industry in the era of big data, and it is also an inevitable trend of teaching reform. This intelligent curriculum integrates teaching resources, optimizes the curriculum form, and realizes the integration of traditional and modern learning, online and offline learning, on-campus and off-campus learning, theoretical and practical learning, and formal and informal learning. With the help of "Internet plus", it creates a new form of evaluation to better promote the comprehensive, distinctive, individual and innovative development of learners. Under this teaching model, by combining with the problems encountered and perceptions got in the learning process, students can understand and master the knowledge more intuitively, quickly, accurately and effectively. We believe that under the background of Hainan FTZ (FTP) Construction, the research and practice of this intelligent curriculum is worthy of attention and reference. At the same time, considering that the construction of the intelligent curriculum has the characteristics of complexity, contemporaneity, progressivity and sustainability, this article also puts forward the limitations of the current research, as well as suggestions for continuing research in the future.*

Keywords: *Intelligent curriculum, Practical Course for Tour Guide; teaching reform, Big data*

1. Introduction

The "Implementation Plan for Accelerating Education Modernization (2018-2022)" [1] and "China's Education Modernization 2035" [2] issued by the Central Committee of the Communist Party of China and the State Council put forward the task of accelerating educational reform in the information age and vigorously promoting education informatization. It is required to promote the deep integration of information technology and education, support schools to make full use of information technology to carry out the reform of talent training models and teaching methods, promote the use of artificial intelligence, big data and the internet to serve the whole process of education, accelerate the innovation and development of wisdom education and set up a "Wisdom Education Demonstration Zone."

Under the current background, wisdom education is vigorously promoted. The development of curriculum will also move towards wisdom, and wisdom curriculum will conform to the trend of the times and become an inevitable product of the rapid development of education informatization. Wisdom curriculum is a deep and effective integration of classroom teaching and emerging intelligent education technologies such as big data and Internet of Things. It takes the advantages of micro-classes, flipped classrooms, MOOCs and other online courses, and then integrates and innovates on this basis. Wisdom curriculums use the smart education platform to realize immediate evaluation feedback, data-based teaching decision- making, intelligent resource push, three-dimensional communication and interaction, cloud data sharing and online and offline integration, so as to form a new mode of education and teaching under information environment. [3]

The "Practical Course for Tour Guide" is one of the required and core courses for tourism management majors. At the same time, it is also one of the compulsory subjects for tourism management students to participate in the theory and oral examination of national tour guide qualification certificate. This course is generally set in the second semester, which is of great significance to the students, teachers and also the construction of tourism disciplines. From the

perspective of students, "Practical Course for Tour Guide" is a comprehensive introductory course to learn the operational skills of tour guides. It is a supporting course to improve students' professional ability and employment competitiveness. It plays a major role in the cultivation of students' tour guide skills. This course is also of great significance to the cultivation of students' interest in learning, and to a large extent determines the students' understanding of the tour guide profession and their attitudes towards subsequent professional courses. From the perspective of teachers, "Practical Course for Tour Guide" has a positive effect on the improvement of teaching ability and scientific literacy of teaching staff. This course covers a wide range of content and many knowledge points. What's more, the related concepts will continue to be extended and updated with the development of the tourism industry. Therefore, the teaching staff must keep pace with the times and always pay attention to industry trends and hot issues, and grasp the knowledge of all fields covered by the course.

In a word, based on the reform of "Practical Course for Tour Guide", this thesis intends to construct a wise curriculum teaching model to cultivate students' autonomous learning ability, so that they can learn from all aspects, improve learning interest and professional identity, cultivate ability to solve problems, and improve professional skills. This is the starting point for the intelligent curriculum reform and teaching mode construction of "Practical Course for Tour Guide" in the era of big data.

2. Overal Design

2.1 Docking with new Professional Positions and Restructuring the Curriculum System

In order to meet the new standards and requirements of the industry, the curriculum group conducted in-depth research on tourism companies to know the latest abilities and qualities requirements for the tour guides in the tourism market in the new era. By breaking the traditional knowledge structure of disciplines, and in accordance with the principles of "industry needs, job practicality, consistent with certificates" and "action-oriented learning", the teaching contents are redesigned based on the work process of tour guides. It incorporates a lot of things into the teaching content, like a large number of real cases, simulated and real working situations, the knowledge of tourist attractions in Hainan Province, and new knowledge, new skills, new processes of tourism industry. Therefore, the teaching content of "Practical Course for Tour Guide" is truly close to the actual work of tour guides, close to the professional requirements for modern tour guides by the tourism industry, and also meets the needs of students' sustainable development ability training.

2.2 Docking with Industry Requirements and Resetting Teaching Objectives

The objectives of intelligent curriculum are no longer to cultivate "intellectual people", but to cultivate "wise people", focusing on cultivating students' advanced thinking ability and creative ability. According to the latest needs of the industry, the teaching objectives of this course are reset based on the national guide professional teaching standards, the school's tourism management professional talents' training plan, curriculum standards and academic analysis.

Table 1: Teaching objectives

Quality objectives:	Knowledge objectives:	Ability objectives:
1. gain professional ethics and legal awareness; 2. gain careful, thorough and enthusiastic service consciousness; 3. gain sense of cooperation; 4. gain professional sense of flexibility, restraint, and integrity; 5. establish correct values; 6. improve the spirit of patriotism.	1. know the services and the knowledge of tour guides; 2. master the standardized reception and service process of scenic spots guides, local guides, national guides, and tour leader; 3. master the quality standards of tour guide service; 4. be familiar with the guide service policies and regulations.	1. gain the ability to execute plans; 2. gain the ability to introduce the scenic spots; 3. gain the ability to coordinate and communicate; 4. gain the ability to analyze, solve problems, and deal with accidents; 5. gain the ability to collect information online and create guide words; 6. gain the ability to use big data to analyze tourism market; 7. gain the ability to innovate and create.

2.3 Taking Students' Academic Conditions into Consideration and Formulating Teaching Strategies

The students are short of the ability to introduce scenic spots. Their communication skills and knowledge of scenic spots are also insufficient. Limited classroom teaching is far from enough.

Therefore, it is very important to improve students' independent learning ability by optimizing teaching resources and methods.

Based on the theory of constructivism and driven by the task of tour guides, the teaching content is reconstructed according to the work process. In view of the lack of experience, service awareness and service standards, students are divided into different study groups according to the needs of teaching activities in different situations. For example, according to the type of reception group, they are divided into groups for senior people trips, parent-child trips, research and study trips, and government affairs trips. By using case-study method, task-driven method, and role-playing method, teaching activities are carried out in smart classrooms, simulated tour guide training rooms, language and cultural exchange centers, and school-enterprise cooperation scenic spots, so as to create a practical atmosphere and enhance students' tour guide skills and active their service awareness.

According to different needs of different classes, a variety of teaching resources and methods are flexibly selected, as well as various competition resources, such as "High Vocational Tour Guide Service Skills Competition", "Route Design Competition", "Red Attractions Explanation Competition" and so on, to assist classroom teaching and improve students' self-learning ability and professional quality. In addition, with the help of the "Learning Platform", the learning space is extended, and students' autonomous learning behaviors and data are recorded throughout the process. It helps teachers to monitor students' self-learning in real time and adjust teaching strategies in time.

2.4 Linking up with the Standards of Competition and Certificate, Designing Evaluation Standards

By incorporating the standards of the provincial vocational college tour guide skill competition and the national tour guide qualification certificate oral examination into teaching, the teaching objectives are closely integrated with professional norms and standards, and the students' awareness of professional norms are cultivated.

2.5 Integrating Ideological and Political Education into the Course

It is necessary to promote students' spiritual growth as well as enrich their professional skills. Through the integration of core socialist values such as love for work, dedication to work, civilization and harmony, guest-oriented and sincere service in the tourism industry, we subtly cultivate the professional qualities of students and enhance their sense of professional honor of tour guides. Through the introduction of Chinese World Heritage, Chinese stories, and Chinese culture, students' cultural confidence, national pride and patriotism are enhanced.

3. Implementation of the Intelligent Curriculum "Practical Course for Tour Guide"

3.1 "Learning Platform" Building

In 2012, with the rise of network platform s such as Coursera, Udacity, edX, etc., various online learning platforms, such as Love Courses, School Online, Chuanke.com, UOOC Union, etc. have also continued to emerge. The Ministry of Education proposes to strengthen the development and application of high-quality digital education resources in higher education, build high-quality online open courses, and establish a group of influential and distinctive college network platforms and courses to realize resource sharing. [4] The author's college actively responded to the call and proposed to accelerate the establishment of a group of "Internet plus" courses with school-based characteristics that can provide students with independent learning. These courses can support the using of flipped classrooms, or online and offline blended teaching, and meet the expansion of higher vocational education. To this end, the author's curriculum group uses the "Learning Platform" to build an online course of "Practical Course for Tour Guide", set up a network resource database, and construct an online and offline integrated learning model.

3.2 Course Content Reorganization

In order to meet the new norms and requirements of the industry, on one hand, the curriculum group conducts investigations into tourism companies to know the latest job requirements for the abilities and qualities of tour guides in the tourism market in the new era; on the other hand, the internship and employment situation of students are investigated so as to know the application of the knowledge

learned in the school in the work environment. Based on the investigation, the curriculum group focused on different jobs related with tour guide, added the content of the national tour guide qualification examination to the knowledge structure, and integrated the tourist attractions explanation and tour route design capabilities into the teaching content to build a project-based curriculum system. The whole course was set into six learning projects: tour guide work cognition, scenic spot guide service, local guide service, national guide service, team leader service, and individual tourist guide service. Learning projects were set up according to the positions of the tour guides. Learning contents were carried out by implementing the real work tasks. Students were divided into different study groups according to the needs of teaching activities in different situations. Through the use of case-study method, task-driven method, activity teaching method, and role-playing method, teaching activities are carried out in multimedia classrooms, simulated tour guide training rooms, campuses, and school-enterprise cooperation scenic spots, so as to create a practical atmosphere and improve students' tour guide skills and active their services awareness. A variety of learning activities can be carried out among groups, which were helpful for students' in-depth collaborative learning.

3.3 Teaching Model Reform

Before class, based on the "Learning Platform", online course is established through the demonstration of teaching packages. Students finished the online self-learning tasks on the platform. Teachers flexibly used the platform to conduct questionnaire surveys, selected candidates, added points, did evaluations and other activities during the teaching process. What's more, they published pre-class, in-class and after-class tasks, and checked all the tasks in time, adjusted the learning progress accordingly, and recorded the students' autonomous learning behavior and data throughout the process. The teaching scene was more flexible and the teaching feedback was timelier. At the same time, various competition resources were used to assist classroom teaching and improve students' independent learning ability and professional quality. Flipped classrooms, micro-resources, and ubiquitous learning opportunities effectively helped students develop blended learning, and helped teachers achieve hierarchical and personalized teaching ultimately.

3.4 Intelligent Management And Evaluation

By using the "Learning Platform", all the data in the learning process was collected and instant evaluation could be realized. The evaluation criteria were based on the interview evaluation criteria of the National Tour Guide Qualification Certificate Examination and the Tour Guide Vocational Skills Competition.

Table 2: Teaching evaluation design

Evaluation Composition	Evaluation Elements	Evaluation Subject	Evaluation Standard
Pre-class (20%)	Questionnaire, test (10%)	"Learning Platform", teachers	Systematic evaluation (objective questions), teacher evaluation (subjective questions)
	Resource browsing (10%)	"Learning Platform"	Systematic evaluation
In-class (50%)	Class attendance (10%)	"Learning Platform"	Systematic evaluation
	Participation in classroom activities (30%) (brainstorming, role playing, discussion, group activities, answering questions, posting comments, participating in Q&A)	Student self-evaluation, mutual evaluation, teacher evaluation, and enterprise expert evaluation	According to the standards of the Tour Guide Skills Competition and the Oral Test Standards of Tour Guide Qualification Certificate
	In-class test (10%)	"Learning Platform"	Systematic evaluation
After-class (30%)	Extended tasks (20%)	Teacher evaluation, enterprise expert evaluation	According to the standards of the Tour Guide Skills Competition and the Oral Test Standards of Tour Guide Qualification Certificate
	Questionnaire (10%)	"Learning Platform"	Systematic evaluation

4. Results

4.1 Promoted the Effective Integration of Multiple Curriculum Forms

Under the background of wisdom education, the teaching of "Practical Course for Tour Guide" has realized the integration from various aspects, including the integration of traditional and modern

teaching resources, the integration of online and offline teaching modes, the integration of on-campus and off-campus learning spaces, the integration of formal and informal learning forms, the integration of learning, research and creation, and the integration of theoretical learning and practical experience. [5] The effective integration of a variety of curriculum forms is conducive to the development of all-round education practice and adapts to the needs of the construction of a learning society and an innovative country.

4.2 Achieved the Effective Integration of Multiple Curriculum Resources

Under the background of wisdom education, the "Practical Course for Tour Guide" use three-dimensional teaching resources, including textbooks, e-books, learning platforms, self-diagnosis software, assisted learning APPs and other online courses, so that students can use the most appropriate high-quality resources for learning. They can learn independently and collaboratively with the most appropriate resources. In addition, students complete various activities on the platform before, in and after class, and they build their own knowledge and ability system. At the same time, they upload homework and submit works on the platform, and this transforms them from knowledge consumers to creators. Thus, new teaching resources have been created, and the integration and evolution of teaching resources have been promoted.

4.3 Innovated Teaching Organization and Management Model

"Wisdom education" has break the traditional teaching space restrictions, and then extended it to online space. The teaching organization has been extended from the past school teachers to the online teaching platform, thus it changes the original model which regards the traditional school and the classroom as its main carrier to a more flexible teaching organization and management model. Teaching has no fixed methods and no rules. By constructing intelligent curriculum, it can adopt the most suitable way to teach specific contents with different learning objects and different learning requirements, and then achieve the goal of optimizing teaching. [6]

4.4 Innovated Teaching Evaluation Methods

The examination of "Practical Course for Tour Guide" has long adopted the traditional mode, and the evaluation mainly adopts the form of examination papers. It is an evaluation that is biased towards question-answering ability, rather than solve practical problems. It is not an innovative evaluation method and more suitable for knowledge evaluation. Through the construction of wisdom curriculum and the use of the "Learning Platform", the data collection and instant evaluation of the whole process are realized. First, online academic analysis is conducted before class, so as the completion of pre-class tasks, so that teaching strategies can be adjusted in time. Second, in-class tests are completed during class, and evaluations are conducted, and then teaching strategies can be optimized. Last, after class, students' learning satisfaction is analyzed by questionnaires. Enterprise expert are also invited to carry out evaluations. Thus, evaluations are carried out between teachers and students, students and students, and enterprise expert and students. In this way, problems can be found out in time, and teaching strategies will be optimized again. Through innovating teaching evaluation methods, teaching strategies are adjusted timely, students' shortcomings are compensated precisely. Therefore, their professional skills and overall quality are effectively improved.

4.4 Promoted the Intellectual Growth of Students

New media and new technologies are used in teaching, and massive teaching data is analyzed through data mining technology; thus, data tracking and analysis of the whole learning process can be realized. Then, the results of data analysis are fully used. Personalized teaching content can be brought to students, so as to meet the specific needs of them in real time. A contextual, intelligent, and interactive learning environment is created for students, so as to guide students to discover, think, and solve problems creatively. At the same time, in the classroom, teachers appropriately give students the necessary pressure, high-demand goals and challenging tasks, so that students have to use collective wisdom and strength to complete the tasks through unremitting efforts. Teachers make every effort to inspire, motivate, and guide students, and let them realize their infinite potential ability, so as to burst out their vitality of innovation and creativity, and ultimately promote their wisdom growth.

5. Analysis Discussion

5.1 From the Perspective of Higher Vocational Education

The construction of the intelligent curriculum of "Practical Course for Tour Guide" combines the advantages of traditional teaching with online resources, which is helpful to arouse students' subjective initiative, and promotes their deep, independent and collaborative learning. This kind of curriculum teaching mode has been fully affirmed and supported by educators and teachers, and has been understood, recognized, cooperated and participated by students. Professional teachers are actively involved in the research, investigation and formulation of this model and are familiar with its operation. The school's educational administration management department provides strong support and makes corresponding educational administration management adjustments. It has better solved some problems of the traditional teaching methods, such as the "forced feeding of knowledge" in the classroom and the insufficient creativity of students. It highlights the advantages of the use of information technology.

5.2 From the Perspective of Student

Now people born after 00s has become the main students in the university. They have been closely related to the Internet since they were young, and their knowledge acquisition methods, thinking habits, and communication methods are affected by the Internet. Relatively speaking, their thinking is more active and they are more dependent on the Internet. They are good at using the Internet, mobile phones and other information tools, and can easily acquire various knowledge through the Internet. The construction of the intelligent curriculum of "Practical Course for Tour Guide" helps students give full play to their own advantages and use fragmented time to learn. Massive online learning resources have stimulated students' interest in learning. At the same time, the learning and evaluation data on the "Learning Platform" can urge students to adjust their learning progress, check for omissions, and improve learning efficiency ultimately.

5.3 Limitations

Although the construction of the intelligent curriculum "Practical Course for Tour Guide" has been recognized by schools, students, companies, teachers, etc., some issues in the research and practice process are also worthy of our consideration.

First of all, considering that the construction of the intelligent curriculum involves resource construction, platform construction and other aspects, and it has the characteristics of complexity, contemporaneity, progressivity and sustainability, the construction of the intelligent curriculum of "Practical Course for Tour Guide" needs to be continuously improved.

Secondly, the intelligent teaching model has changed the traditional "learning" steps (preparation, attending class, completing homework). Students are required to complete preparatory and self-test tasks online before class, actively participate in collaborative tasks and communication during class, and complete extended tasks and reflection after class. The new teaching model requires students to have better autonomous learning ability, and change from passive learning to active learning. Practice has found that students with weaker self-learning ability have poorer learning effects. Therefore, when implementing the intelligent teaching model, it is necessary to strengthen the cultivation of students' autonomous learning ability.

Thirdly, carrying out the intelligent teaching model needs to adjust the traditional teaching curriculum and modify the teaching plan, which puts forward higher requirements for students and their parents to understand the characteristics of profession and higher vocational education.

6. Conclusion

Under the background of big data, the tourism industry has put forward new requirements for tourism talents. To cultivate talents in line with the development of the times, our teaching should closely follow the development of the industry, and it is necessary to build a curriculum teaching system suitable for students' professional ability training, so as to lay a good foundation for students' sustainable development. The construction of the intelligent curriculum of "Practical Course for Tour Guide" focuses on adjusting curriculum objectives, integrating and optimizing curriculum resources, providing students with a richer personalized learning resource base, using a variety of teaching

strategies, and adopting diversified teaching models to stimulate students' innovation ability and better achieve teaching objectives.

Acknowledgement

References

[1] Information on: http://www.gov.cn/xinwen/2019-02/23/content_5367988.htm

[2] Information on: http://www.gov.cn/zhengce/2019-02/23/content_5367987. htm

[3] Xu Juan, "Research on the Construction of Wisdom Curriculums of Higher Vocational colleges from the Perspective of Wisdom Education", Journal of Vocational Education, no.12, pp.52-56, December 2019.

[4] Wang Juan, "The Wisdom Course: Concept and Connotation, Structure Model and Design Process", Modern Distance Education, no.3, pp.25-33, May 2017.

[5] Chen Yaohua & Chen lin, "Research on the Characteristic Construction of Intelligent Courses", Open Education Research, no.3, pp.116-120, June 2016.

[6] Wang Hui & Huang Xiaoyuan, "The Construction and Innovation of the Intelligent Curriculum of 'The Introduction of Tourism Science'", Education Teaching Forum, no.41, pp.117-118, October 2018.