

ICT-Aided Education and Professional Development of Foreign Language Teachers

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Abstract

The trendy integration of educational information communication technology (ICT) with foreign language teaching and learning in China, which breeds a new ecology of foreign language education at different levels, and also calls for new professional development approaches for foreign language teachers. This paper will clarify the new connotation of foreign language teachers' professional ability, analyze the difficulties of foreign language teachers' professional development, and propose the optimal approaches of foreign language teachers' professional development from the aspects of cultivating teachers' information literacy, developing teachers' ability to acquire learning resources, improving teachers' scientific research ability, and building a good relationship between teachers and students. It aims to build a team of high-quality professional and innovative teachers and quicken the pace of educational modernization.

Keywords: ICT-aided education, professional development, foreign language teachers, approaches

1. Introduction

At present, educational information communication technology (hereinafter referred to as ICT) is accelerating its integration into foreign language teaching and learning. It is not only a technical means, but more importantly, it will change the whole ecological model of foreign language education and promote the development of foreign language teaching. ICT has become the only way to build a high-level talent training system in the new era. For foreign language teachers, ICT has undoubtedly brought unprecedented opportunities, but it also challenges the professional development of foreign language teachers. In this context, foreign language teachers should rationally analyze the current situation of professional development, clarify the new connotation of professional ability of foreign language teachers, see their own problems clearly, learn to use the favorable factors brought by ICT to develop their profession, so as to improve their professional quality and teaching skills.

2. Interpretation of Foreign Language Teachers' Professional Ability in the Context of ICT-Aided Education

2.1 Interpreting the Professional Ability of Foreign Language Teachers from the Perspective of Knowledge Structure Theory

Professor Lin Chongde and Professor Shen Jiliang have put forward a complete theory on teachers' knowledge structure. The theory holds that the knowledge structure of teachers can be divided into three aspects: ontological knowledge, conditional knowledge and practical knowledge. (Lin Chongde, Shen Jiliang, & Xin Tao, 1996) Ontological knowledge refers to the subject knowledge related to the curriculum, which is the substantive knowledge of teaching activities and one of the necessary conditions for teachers to engage in teaching. Conditional knowledge refers to teachers' knowledge and understanding of teaching process, teaching law and educational object, and also includes pedagogy, psychology and other relevant theoretical knowledge of teachers' profession. When Professor Shen Jiliang and others put forward this theory, ICT was just starting, so this

knowledge structure theory only emphasizes pedagogy, psychology and other relevant theoretical knowledge. However, with the continuous integration of ICT and teaching, ICT has become the main tool and important means of teaching, so ICT-related knowledge has become an important part of conditional knowledge. Practical knowledge refers to the classroom situation knowledge and related knowledge, which is the sum of teachers' personal experience.

The knowledge structure theory emphasizes the professional knowledge of teachers, but ignores their subjective initiative. Mr. Gu Mingyuan has reconstructed the professional ability of teachers based on this. He believes that teachers' professional ability should include scientific and cultural knowledge, knowledge level of the subject taught, teaching ability of teachers, ability to organize educational activities, and the ideological quality of teachers themselves. (Gu Mingyuan, 2004)

2.2 Interpreting the Professional Ability of Foreign Language Teachers from TPACK Theory

The theory of TPACK (Technological Pedagogical Content Knowledge), that is, the pedagogical knowledge integrating technology, was put forward by American scholars Koehler and Mishra in 2005. TPACK theory contains three core elements, namely, subject content knowledge, pedagogical knowledge and technical knowledge; The four composite elements are the pedagogical knowledge of integrating subject content, the disciplinary knowledge of integrating technology, the pedagogical knowledge of integrating technology, and the disciplinary pedagogical knowledge of integrating technology. (Huo Nan, 2023) Compared with the theory of teacher knowledge structure, TPACK theory integrates conditional knowledge and practical knowledge together, which is called pedagogical knowledge, while it lists technical knowledge separately and juxtaposes it with subject content knowledge and pedagogical knowledge, which greatly highlights the important role of teaching technology in teachers' professional ability.

With the integration of ICT and foreign language teaching, the proportion of technical knowledge in the professional ability of foreign language teachers is increasing day by day, and ICT has become an important factor affecting the professional development of foreign language teachers. TPACK theory emphasizes the importance of technical knowledge in the professional ability of foreign language teachers, which is of great significance to the professional development of foreign language teachers.

To sum up, the author believes that the professional ability of foreign language teachers in the information age should include the following aspects: (1) professional knowledge; (2) vocational skills; (3) ICT; (4) the ability of independent exploration and self-development; (5) good teacher ethics.

3. Difficulties in the Professional Development of Foreign Language Teachers in the Context of ICT-Aided Education

3.1 ICT-Aided Education Has Put Forward New Requirements for Foreign Language Teachers' Teaching

The development of ICT, the popularization of the Internet and the endless emergence of new teaching concepts have put forward new requirements for foreign language teachers. First of all, the traditional "textbook" + "chalk" + "blackboard" teaching era has gone forever. Digital learning resources such as animation, audio, video and micro-lessons are frequently used in foreign language teaching, and these digital learning resources can better present teaching content and help students understand. Secondly, online learning platforms, MOOCs and other online learning activities are widely used in mass education and school education. Therefore, every foreign language teacher needs to think deeply about how to acquire and develop digital resources that match teaching, how to properly use these resources, how to organize online learning activities, and how to coordinate the relationship between online learning and classroom teaching.

In addition, the development of ICT has brought about changes in foreign language teaching concepts and teaching models. In the information age, foreign language teachers must also focus on the following aspects, such as learner-centered approach, stimulating students' learning motivation, creating a network environment, and paying attention to students' learning style.

3.2 The New Requirements of U-Learning (Ubiquitous Learning) Mode for Foreign Language Teachers

U-learning refers to learning in which anyone can access any information they need, anywhere, at any time. The goal is to create an educational environment where students can learn at any time, anywhere, using any terminal, thus achieving "student-centered" education. This learning model is based on a highly developed level of information, that is, the use of ICT to provide students with an environment where they can learn at any time, anywhere, with the technological tools at hand. U-Learning can make learning activities not limited by time and space, and enable students to acquire knowledge from multiple channels. It can make students face the impact of knowledge with different levels and difficulties. The learning content may not be gradual, but the knowledge is based on the needs of students themselves. Therefore, learning is a self-directed process. Foreign language teachers in the U-Learning mode are faced with the following new challenges: (1) Foreign language teachers are

no longer the only knowledge holders in the foreign language classroom. Students can acquire a wealth of knowledge related to classroom knowledge through other channels. Students are no longer pure knowledge takers, but can become knowledge sharers and constructors. Foreign language teachers must adapt to this new change. (2) The foreign language teacher is no longer the teacher of the course, but has become the guide and monitor of foreign language learning. In the U-Learning environment, teachers and students realize collaborative knowledge construction through cooperation and communication, and teachers' control over learning activities is weakened. (3) In addition to consider "how to teach a lesson well", foreign language teachers in the U-learning mode need to think more about "how to organize learning resources", "how to make learning resources meet the needs of students with different cognitive styles", "how to guide students to develop learning interests" and other issues. These questions involve professional content in the fields of ICT, education, psychology, etc., which is far more difficult than traditional classrooms.

3.3 Lack of Scientific Research Ability of Foreign Language Teachers in the Context of ICT-Aided Education

Research and teaching are mutually promoting and inseparable unity. Teaching promotes research, and research feeds teaching. From the current situation of the individual development of foreign language teachers, insufficient research ability and limited research results are important factors affecting the professional development of foreign language teachers. With the integration of ICT and foreign language teaching, foreign language teaching presents a brand new ecology, the traditional teaching model has been subverted, replaced by a new teaching concept and model, a new teaching paradigm. The innovation and reform of these teaching modes also challenge the scientific research ability of foreign language teachers.

Foreign language teachers should combine teaching and research organically, based on teaching, find research projects from teaching practice, solve practical problems in foreign language teaching, and make research feed teaching, improve teaching efficiency and promote teaching quality.

3.4 The Teacher-Student Relationship Is Facing New Changes in the Context of ICT-Aided Education

Thanks to the rapid development of ICT and the popularity of U-learning mode, students' access to foreign language learning resources has been greatly increased, which has greatly improved the overall foreign language quality of students. In this case, foreign language teachers are faced with a new teacher-student relationship. First, due to the convenience of ICT and network terminals, students can acquire knowledge at any time and anywhere. Teachers are no longer the only way for students to acquire knowledge, and the authority of teachers is challenged. In this case, teachers are required to quickly adjust their roles, from the leader of the class to the organizer, guide and supervisor of the class. Second, the students in the context of ICT-aided education present new characteristics. Students have a broader vision, strong ability to obtain and exchange information, strong subject consciousness and quick thinking. However, students in the information age are also sensitive, weak in resistance to frustration, weak in self-management and time management, and not good at cooperating with others. This requires foreign language teachers to teach students according to their aptitude and meet the individual needs of different students.

4. Approaches to Professional Development of Foreign Language Teachers in the Context of ICT-Aided Education

4.1 Cultivate the Information Literacy of Foreign Language Teachers

Information literacy is an important ability for the professional development of foreign language teachers. To cultivate the information literacy of foreign language teachers, we can focus on two aspects: school and teacher. For schools, first of all, the investment in hardware and software infrastructure is an important part, such as the improvement of foreign language teaching resource platform, the upgrading of language lab, the construction of self-access center, foreign language smart classroom, ICT support, etc. Secondly, ICT training plans should be tailored and organized for foreign language teachers and systematic ICT skills training should be carried out. Schools should standardize the content of ICT teaching and training, select diversified training methods, establish an information training and tracking evaluation system, build a continuous information teaching and training model for colleges and universities to ensure teaching quality and effectively improve teachers' information literacy ability. Third, schools should introduce corresponding information-based teaching guiding policies and formulate scientific incentive mechanisms to make teachers aware of the importance of information literacy, so as to mobilize teachers' enthusiasm to improve information literacy. On the other hand, teachers should change the traditional teaching concepts, realize the importance of information literacy from the ideological perspective, strengthen the theoretical and practical exploration of foreign language teaching supported by ICT, and improve the integration ability of ICT and foreign language curriculum.

4.2 Develop Foreign Language Teachers' Ability to Acquire Learning Resources

In the information age, the ability to acquire learning resources has become a necessity for every foreign language teacher and an important part of their professional development. Foreign language teachers can obtain

learning resources in the following ways: First, directly obtain all kinds of learning resources through the Internet by means of search engines including PPT courseware, teaching videos, the latest research results at home and abroad and so on. Second, use appropriate development tools to develop learning resources. A single type of material such as pictures or audio can be processed by drawing software and audio processing software. Third, the construction of teaching website and teaching platform. Such assumptions require the help of computer and educational technology professionals to develop corresponding functional modules, repeated trials, and gradually improve to meet the needs of teachers and students. Fourth, teachers communicate with each other and exchange existing learning resources.

4.3 Improve the Research Ability of Foreign Language Teachers

The integration of ICT with foreign language teaching and learning in China provided foreign language teachers with abundant research topics. Foreign language teachers should first read some excellent empirical research papers and learn the writing requirements of academic papers, so as to improve their ability of writing research papers. At the same time, foreign language teachers must pay attention to new ideas and technologies in the field of education and teaching, arm themselves in theory, pay more attention to empirical research. By means of the advantages of big data, foreign language teachers can carry out the following scientific research: Firstly, through a large number of empirical research and massive corpus data, teachers may explore the characteristics of language use of learners; Secondly, combining questionnaire survey, interview and other methods, using big data to study and investigate learners' learning behaviors, to provide inspiration for the reform of foreign language teaching mode; Thirdly, pay attention to the needs of teachers and students under the new teaching mode, so as to formulate more scientific and reasonable educational countermeasures and teaching systems.

4.4 Build a Good Teacher-Student Relationship

Because the media excessively propagates and exaggerates the bad behaviors of a few teachers, the trust between teachers and parents and between teachers and students in the current society is low, which is not conducive to the development of healthy teacher-student relationship. Good teacher-student relationship plays an important role in the organization and development of daily teaching activities. In view of the new laws and characteristics of teacher-student relationship in the information age, the author believes that in order to build a good teacher-student relationship, foreign language teachers should pay attention to some aspects: first of all, they should improve their knowledge and professional skills, pay attention to the ethics of teachers, and be a model for others. They should not only be learned in knowledge, but also let students admire them in life and work. Secondly, teachers should respect students, treat every student fairly and justly, appreciate and affirm students' merits. Finally, properly handle the relationship of teachers, students and parents, and do not do things that damage their own image.

In short, facing the challenges brought by ICT, foreign language teachers should actively explore and innovate, actively adapt to the teaching needs of the information age, and constantly improve their professional development, introspection and innovation, so as to realize the transformation of professional development from the traditional model to the new model that meets the needs of the information age, so as to improve the level of foreign language teachers.

Fund Projects

A Study on the Path of Ideological and Political Construction of College English Curriculum Based on Blended Teaching in the Post-epidemic Period — Taking Foshan University as an Example, Guangdong Province Undergraduate Teaching Quality and Teaching Reform Construction Project in 2021, Department of Education of Guangdong Province.

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