Research on the Development and Improvement of College English Teachers’ Digital Literacy from the Perspective of the Learning Community

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Abstract

With the wide application of new technologies such as cloud computing, big data, artificial intelligence, and the Internet of Things in all walks of life, the world has entered the digital age. The digitalization of education has become more and more important for increasing the international competitiveness and soft power of a country in the digital age. As the crucial foundation for the digitalization of education, teachers’ digital literacy is of great importance and how to effectively improve teachers' digital literacy has become an urgent task. In higher education, both universities and teachers are eager to find strategies that can effectively enhance their digital literacy. However, due to their reserve of knowledge and educational background, many college English teachers may have difficulty in developing and improving their digital literacy. Learning community has been widely used in college English teachers’ professional development. A lot of research has been done to figure out how the learning community helps with teachers’ professional development. This research takes the learning community formed by 10 college English teachers from the Foreign Language Department of Sichuan University of Media and Communication who share the same goal to improve and develop their digital literacy as an example, aiming to find out whether the learning community influences the improvement of college English teachers’ digital literacy or not, and in what way learning community influences the development of college English teachers’ digital literacy.

Keywords

Digital literacy development, college English teachers, learning community

1. Introduction

With the wide application of new technologies such as cloud computing, big data, artificial intelligence, and the Internet of Things in all walks of life, the world has entered the digital age. People’s digital literacy and skills have become the key indicators of international competitiveness and soft power of a country. In order to build China into a digital power and make China invincible in the fierce international competition in the digital age, it is necessary to promote the digitalization of education and improve the digital literacy and skills of Chinese people, especially youngsters. As the crucial foundation for the digitalization of education, teachers’ digital literacy is of great importance and how to effectively improve teachers' digital literacy has become an urgent task in current education.

As the compulsory course for undergraduates majoring in non-English majors in China’s colleges and universities,
College English is one of the important ways for colleges and universities to educate students. In a sense, improving the digital literacy of college English teachers will help colleges and universities cultivate high-quality talents that meet the needs for talents in the digital era, build a high-quality higher education system, and enhance the key soft power of China's higher education.

At present, due to their reserve of knowledge and educational background, many college English teachers may not have an accurate perception of digital literacy. In their opinion, digital literacy refers to the application of multimedia courseware and the collection of teaching materials on the Internet, and few of them have a clear idea about new technologies such as big data, artificial intelligence, and virtual reality. They may introduce electronic resources to classroom teaching and online testing, but most of them seldom use digital evaluation tools to evaluate students' learning or take advantage of students' real-time classroom feedback data to modify course teaching content and teaching methods. Besides, their awareness of social responsibilities and their ability to take on these responsibilities in the digital age need to be improved as well. Therefore, both universities and teachers are eager to find strategies that can effectively enhance their digital literacy (Guo Yan & Xu Jinfen, 2015).

As a group of learners with shared learning goals who cooperate and connect with one another, the learning community has been widely used in college English teachers’ professional development. A lot of research has been done to figure out how the learning community helps with teachers’ professional development (Guo Yan & Xu Jinfen, 2015).

Taking the learning community formed by 10 college English teachers from the Foreign Language Department of Sichuan University of Media and Communication as an example, this research focuses on carrying out action research to summarize the specific effect of the learning community on the development of digital literacy of college English teachers through questionnaire surveys and in-depth interviews and put forward suggestions for promoting the development of digital literacy of college English teachers with the help of learning community.

2. Connotation of Research Key Words

2.1 Digital Literacy

On November 30, 2022, the Ministry of Education issued a “Notice of the Ministry of Education on Issuing the Education Industry Standard for Digital Literacy for Teachers (Jiao Ke Han [2022] No. 58)”. This is China's first industry standard and framework on digital literacy. The standard clearly proposes a five-dimensional three-level framework for teachers' digital literacy (Jiao Ke Han, 2022). Based on this standard, the connotation of teachers' digital literacy is composed of digital awareness, digital competence and skills, digital application, society's digital responsibility, and professional development in the digital age.

Digital awareness refers to the sense of experience and proficiency that teachers should have for the basic technology usage in the digital era to carry out classroom teaching and education. It includes three secondary dimensions: digital cognition, digital willingness, and digital willpower. Digital competence and skills include two secondary dimensions: digital technology knowledge and digital technology skills. Digital application refers to the comprehensive ability of teachers to carry out various digital teaching activities, including four secondary dimensions: digital teaching design, digital teaching implementation, digital academic evaluation, and digital collaborative education. Society digital responsibility is the basic moral quality of teachers in the digital society, including following the rules of law and ethics and the sense of digital security protection. Professional development refers to teachers' ability to promote the sustainable development of individuals and the common growth of groups with the help of digital technology and resources, including two secondary dimensions: digital learning and research, and digital teaching research and innovation (Wu Di et al., 2023).

2.2 Learning Community

Dating back to 1927, the learning community first emerged in a two-year Experimental College at the University of Wisconsin. It usually refers to a group of learners with shared learning goals who cooperate and connect with one another. As far as some scholars are concerned, a learning community is a way of learning in which learners and others interdepend, explore, communicate, and collaborate with others to complete real tasks and problems. In a learning community, learners often communicate with others in the learning process and share various learning resources. A teacher learning community refers to a team of teachers with a common vision and shared goals in an equal and democratic atmosphere, who aim to improve the quality of their education and teaching and carry out continuous learning and reflection through cooperation and sharing.
The teacher learning community in the research refers to the learning community voluntarily formed by 10 college English teachers from the Foreign Language Department of Sichuan University of Media and Communication with the shared goals to develop and improve their digital literacy in an equal and democratic atmosphere.

3. Research Design

3.1 Research Questions

The research mainly aims to find out the answers to the following two questions: 1) Does learning community influence the improvement of college English teachers’ digital literacy? 2) In what way does the learning community influence college English teachers’ digital literacy? What are the main factors that play a driving role?

3.2 Research Objects

The research objects include 10 college English teachers from the Foreign Language Department of Sichuan University of Media and Communication with a shared goal of improving their digital literacy. They are young or middle-aged teachers, all of whom have a master's degree with teaching experience spanning from 2 to 19 years. However, their digital literacy needs to be enhanced. Among them, there are three associate professors, all with more than 16 years of teaching experience, four lecturers with teaching experience ranging from 4 to 18 years, and three teaching assistants with 2 to 3 years of teaching experience.

3.3 Research Process and Data Collection

1) In September 2023, 10 college English teachers from the Foreign Language Department of Sichuan University of Media and Communication voluntarily formed a learning community at the beginning of the new semester aiming to develop and improve their digital literacy. Meanwhile, the first digital literacy self-assessment questionnaire survey was conducted to find out teachers’ digital literacy in terms of digital awareness, digital competence and skills, digital application, society's digital responsibility, and professional development in the digital age before they joined the learning community. According to the results of the first digital literacy self-assessment questionnaire, it can be concluded that all of the 10 college English teachers in the learning community were willing to apply digital tools in their teaching and education, but they lacked digital competence and skills. When they tried to apply tools in their teaching, they were able to use multiple channels such as search engines, professional databases, and knowledge communities to collect digital resources and select them to produce the required resources according to teaching needs. However, some of them couldn’t use intelligent assessment systems to comprehensively analyze students' academic performance and learning habits, nor could they use the latest technology like AI, VR, and AR to create immersive, blended learning environments for students.

2) From September 2023 to December 2023, action research was conducted for the whole semester. During this semester, a regular meeting (online or offline) was held every two weeks for the members of the learning community to frankly exchange the problems they encountered in the process of developing and improving their digital literacy as well as the solutions they found to solve these problems. In addition, teachers were asked to read relevant papers and books on digital literacy and invited to take turns to report their reflections. At the same time, two teachers with more digital application experience in the learning community were invited to conduct training on teachers' digital applications (like how to make micro-courses and how to use an intelligent assessment system to comprehensively analyze students' academic performance and learning habits).

Besides, in order to obtain in-depth theoretical guidance from external experts, teachers of the learning community were encouraged to attend the serial online training on “Artificial Intelligence and Higher Education” held by the Ministry of Education and the lectures and training given by the experts and teachers majoring in information technology both from our college and other universities and colleges.

Teachers of the learning community were also required to write reflective journals and learning logs on a regular basis that would be collected later.

3) In December 2023, the second questionnaire survey was conducted among all the teachers of the learning community, and their reflective journals and learning logs were collected. Besides, three teachers were selected to take a semi-structured interview. All of the collected data were analyzed, including the results of questionnaire surveys, reflective journals, and learning logs.
4. Research Findings

4.1 Results of Questionnaire Survey

The results of the questionnaire survey showed that 8 college English teachers who joined the learning community believed that participating in the activities of the learning community had an important role in promoting the development and improvement of their digital literacy. Another 2 teachers also thought that taking part in the activities of the learning community played a certain role in the improvement of their digital literacy.

4.2 Results of Semi-structured Interviews, Reflective Journals, and Learning Logs

The results of semi-structured Interviews, reflective journals, and learning logs are as follows:

1) Teachers of the learning community have a clearer idea about what digital literacy is. Teacher 5 said that she had heard of digital literacy before and she held the idea that digital literacy was only about digital application especially how to apply digital tools to lesson planning and implementation. It was not until she joined the learning community that she found out the exact connotation of digital literacy.

2) Their digital competence and skills have been improved. Teacher 2 mentioned in her reflected journal that as an associate professor and experienced English teacher, she always strove to apply digital tools to lesson planning and implementation. However, due to her lack of digital competence and skills, she just used normal and common digital tools in her lesson planning and implementation. After joining the learning community, she learned from peers about how to make micro-course, how to use intelligent assessment system to comprehensively analyze students’ academic performance and learning habits as well and how to integrate blended and flipped learning in her class.

3) They are more willing to apply various digital tools in their lesson planning and implementation and they have a stronger digital will power when they are confronted with problems and difficulties. Teacher 1 said that in the past she was not quite willing to apply new digital tools in her class since she met some difficulties and problems that she couldn’t be able to deal with and had no idea whom to ask for help. But after joining the learner community, since she could get help from her peers, she started to apply new digital tools in her class.

4) They have more communication and cooperation with each other. Through the regular meetings, teachers of the learning community had more opportunities to communicate with each other. They sincerely helped each other, and therefore build sincere and friendly interpersonal relationships, which led to better cooperation within the learning community. The three interviewees all agreed that after joining the learning community, they had more communication with the other members and a better interpersonal relationship in the department, which improved their self-recognition and work-related well-being.

5. Conclusions and Reflections

Based on the results and finds of the research, it can be concluded that learning community does have a positive influence on the development and improvement of college English teachers’ digital literacy. Overall, by joining a learning community teachers can get peer help, have more communication and collaboration with the other members, and get more related information and resources from the community.

There are still many imperfections in this research since it only covers one semester. It shall continue to have a further exploration. Besides, it should be pointed out that “new blood” shall be introduced into the learning community to bring new ideas and experiences to the members (Cui Di & Wang Xuesong, 2022), or else they may just fail to keep improving their digital literacy.

References


Notice of the Ministry of Education on Issuing the Education Industry Standard for Digital Literacy for Teachers (Jiao Ke Han [2022] No. 58) [EB/OL]. 2022-12-02 [2023-09-19].
