

On The Information Literacy Of College Language Teachers Under Information Technology Environment

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ABSTRACT

Nowadays, teachers' information literacy has become a key factor in foreign language teaching. Information literacy of foreign language teachers includes four aspects: information awareness, information knowledge, information competence, and integration competence.

The questionnaire is designed to investigate the current situation of information literacy of foreign language teachers. It is distributed among 244 college English teachers in 16 universities in China. The findings show that on the whole, college English teachers' information literacy is at a low level. This hinders the effective use of information technology in foreign language teaching.

It is necessary for foreign language teachers to improve their information literacy under the technology-based environment of foreign language teaching. Practical suggestions are put forward from the following aspects: foreign language teachers' learning; construction of foreign language resources; preparation for courses with the help of information resources; classroom teaching practice and supervision of students' homework in autonomous learning.

Keywords: Information Technology; Information Literacy; Information Resources; Information Capability; Foreign Language Teachers

1. Introduction

21st century is the century of Information Technology; therefore Information Technology Education is the inevitable result of the development of the era. According to the documents released by the Ministry of Education, Information Technology should be a great approach that helps improve the effect of teaching, and we should make full use of teaching software and teaching resources and improve the establishment of new model of language teaching and online evaluation system.

In recent years, with the rapid development of the information technology, digital language labs have replaced the simulated ones. The equipments become more integrated and multifunctional. Besides the traditional functions, most language labs can provide various learning systems like Interactive Online Learning System, Teacher-student Communication Platform, Resource Management System, Online Testing and Evaluation Platform and so on. Furthermore, a lot of universities have begun to construct their own database for foreign language teaching. However, since most college English teachers are not informational conscious and not competent in dealing with the information resources, they can not make the best of them. Moreover, great emphasis has been put on the construction of the state-of-the-art language labs, while teachers' information literacy remains at a pretty low level.

2. Connotation of Information Literacy

College English as a compulsory course for college students has always played an important part in the college education curriculums. With the rapid development of Information Technology, great opportunities have been created for college English education. In 2004, the Ministry of Education launched a reform applying computers and internet in college English teaching. Autonomous learning has been realized since then. College English teaching has transformed from teacher-centered mode to student-centered mode. During this revolutionary transformation, the development of Information Technology is a key factor that accelerates the change. This means the college English teachers should arm themselves with modern teaching principles, the competence of using information technology, and a sense of doing research, which will help them cultivate more creative talents.

According to Aiwu Pan (2011), Information Literacy refers to the competence to recognize, obtain, evaluate, use and transfer of the information. Teachers' Information Literacy means the competence to collect, analyze,

process, and present the information in class. In addition, teachers should be familiar with information technology and be competent in solving the problems under the Informative Teaching Mode. Li Yu (2009) pointed out that English teachers of the new age should have Information Literacy which includes information awareness, information knowledge, information competence, integration competence and information ethic. We believe, compared with information ethic, the first four aspects of Information Literacy are more essential to the practice of online teaching and students' self-learning supervision. Therefore, we mainly investigated the first four aspects in this research.

Information awareness refers to the teachers' sensitivity to information technology and their recognition of its importance. Information knowledge is what teachers know about the theories and techniques of information technology. Information competence is the core of information literacy, which means teachers' capacity for receiving, analyzing, processing, evaluating, creating and transmitting information. Integration competence is what teachers' information literacy intends to achieve. Teachers can design teaching activities, fulfill teaching tasks according to teaching principles, characteristics of courses with the help of necessary multimedia, internet and so on.

3. The Research

Under the information technology environment, college English teachers have to meet the new requirements: besides the basic language competence, college English teachers of the 21st century should have a good command of information literacy. Information literacy of college English teachers should include the ability of enhancing the effect of teaching by applying the information technology to make the most of the database of foreign language teaching and multimedia teaching model. Besides, it should reflect the teachers' particular attitude towards technology, and their special needs. Hence, how to evaluate and improve college English teachers' information literacy remains a problem.

To investigate the status quo of information literacy among college English teachers, the questionnaire with questions concerning these four aspects is designed. The questionnaire consists of 25 items and all of the questions are close-ended. The questionnaire survey was first pilot studied on some college English teachers in order to see whether some items need to be deleted, added, modified, or reordered, whether the questions could reflect the real problems. Then the survey was carried out on a large scale. Altogether 244 college English teachers in 16 universities participated in the survey. The questionnaires were completed during a summer training course organized by Foreign Language Teaching Research Press. 244 pieces of questionnaire were distributed and all of them were returned. The data collected through the questionnaire were input into SPSS for analysis. During the process of input, all of the incomplete questionnaires were discarded, and finally the data from 234 questionnaires were valid and ready to be analyzed. The recovery rate is 95.9%.

Of all the 234 respondents for the valid questionnaires, 51 are male, accounting for 21.8%; and 183 are female, accounting for 78.2%. There are more female subjects than the male ones. That is because the female college English teachers outnumber the male teachers, which is in accord with the reality. About half of the teachers are in the 31-40 age bracket (54.3%); generally speaking, the majority are young teachers who are in the 21-40 age bracket (77.8%). The teachers who are in the upper age bracket (above 51) only account for a very small proportion of 3%. It reflects the age structure of college English teachers of the present day. With the educational reform, English has become a major concern in college education, more English teachers have been recruited, and most of them are young teachers who have just graduated. The majority of college English teachers are graduates (78.6%); teachers who have bachelor's degree account for 15.8%, and only a small number of them have doctor's degree (4.7%). Most of them who only have bachelor's degree are the teachers who are in the upper age bracket.

4. Status quo of College English Teachers' Information Literacy

The findings show that on the whole, college English teachers' information literacy is at a low level. This hinders the effective use of information technology in college English teaching.

Firstly, most teachers don't have a deep understanding about the concept of information technology. 71.4% respondents think that information technology refers to computer, internet, and multimedia teaching. Only 28.6% teachers include software teaching platform, self-learning system in information technology. As for the requirement for teachers in college English teaching, more than a third of the respondents (35.8%) believe that teachers only need to operate computer and internet skillfully. They think of the ability to sort out valuable information and the keen insight to make judgment as less important. Although most teachers have already realized the importance of applying information technology in teaching, they are not clear about how to use it in practice. They do not have an overall understanding of informative teaching, and they only have an obscure view of the requirements for teachers in this brand new teaching mode. To sum up, college English teachers' one-sided understanding of information technology prevents the widespread use of it in language teaching.

Secondly, college English teachers' information knowledge needs improving. Although most teachers are

thrilled with the application of information technology in college English teaching, they do not have a clear view of the principles of network teaching, not to speak of the principles of self-learning platform. Only a small proportion of teachers have a basic understanding of the network teaching process. They are quite familiar with the computer, projector, multimedia teaching software, and network courseware, but have a little knowledge of online learning management system, teaching platform, online testing and evaluation system and so on. It is not enough for teachers to know the basic computer skills; and they also need a deeper understanding of information technology and especially its application in English teaching.

Thirdly, college English teachers' information competence is at a pretty low level. College English teachers' information competence includes three aspects: basic knowledge and competence in personal computer use, multimedia application ability in modern teaching, and competence in using the internet. Basic knowledge and competence in personal computer use refers to a good command of the commonly used software such as Word, Excel, and Power Point etc. In the survey, we discovered that a great number of college English teachers are not competent in applying information technology in teaching. While the majority of teachers know how to make PPT (85.9%), how to apply excel software to create tables (71.4%), and how to use word processor to produce files (94.4%), most teachers' ability to utilize these systems stay on the lower level. As for the multimedia application ability in modern teaching, the majority of teachers claim that they do not know the techniques of incorporating sounds, moving pictures, 3D images and others into a whole file, let alone making one's own multimedia courseware. Furthermore, although almost every teacher can have access to the internet, they do not make full use of it. While the majority of respondents search for information from libraries, Baidu website, Google website and via other search tools, only a small proportion of them (26.5%) can make use of free digital libraries, language database on the internet to search for teaching materials. They think that they can't make the best of information technology in college English teaching. 76.1% of the respondents express the idea that they lack the ability to supplement their teaching with the help of audio and video resources. Meanwhile, they are not proficient in downloading and uploading audio and video resources to share with their students and colleagues. In order to promote the development of network-based language teaching and autonomous learning, college English teachers' information competence especially their multimedia application ability and competence in using the internet needs to be improved.

College English teachers' basic knowledge and competence in personal computer use

	Word Processor	Excel	Power point
Frequency	221	167	201
Cumulative percent	94.4%	71.4%	85.9%

Fourthly, most college English teachers recognize the importance of computer network technology in college English teaching. As for the question "what is the objective of applying information technology in language teaching?", 90.2% of the respondents choose such alternatives as "creating vivid teaching environment", "stimulating students' interest in learning", "optimizing the effect of teaching". Only a few of them (9.8%) include "replacing the teacher" or "coping with inspection" in their choices. That is to say, teachers are aware that information technology is essential to their teaching. However, most of them (88%) only utilize ready-made PPT teaching material, and mobile storage in their teaching. Few of them (12%) take internet and language resources as their tools in teaching, not to mention, consciously construct language resources for students and teachers.

Fifthly, college English teachers don't have enough awareness of information technology and curriculums integration. The integration of information technology and curriculums refers to a new approach of teaching that integrates information technology, information resources, human resources and the curriculums. Few teachers consider the integration as computer aided teaching or organizing teaching activities with the help of multimedia. There are various types of elements that affect the integration. In the survey, 72 teachers believe the application ability of information technology is the most influential factor, accounting for 30.8%; 52 teachers point out creating favorable teaching environment is very important, accounting for 22.2%; 63 teachers choose digital learning resources as the essential factor, accounting for 26.9%; and 47 teachers have no idea about the integration of information technology and curriculums, accounting for 20.1%. While some teachers have very positive attitudes, a large proportion of teachers were pretty passive (obey the arrangement) when asked their attitude towards the integration.

Sixthly, teachers express their wishes to improve their information literacy by means of technology training. They hope that universities can offer training courses in information technology regularly and give lectures about the latest development in information-based language teaching. Furthermore, it is fundamental for foreign language

colleges to invite experts to demonstrate the usage of some techniques in language teaching. The information technology can play the full role in aiding language teaching unless the administrators and teachers recognize its importance and make joint efforts to improve hardware, software as well as the practical skills in utilizing them.

5. Ways To Improve College English Teachers' Information Literacy

According to the survey, we can conclude that it is important for college English teachers to improve their information literacy under the technology-based environment of foreign language teaching. In order to make full use of information technology and promote college English teaching, we should cultivate the teachers' information literacy, improve their information competence. To fulfill the objective we have to organize trainings for teachers, encourage self-learning of the teachers, promote the construction of foreign language teaching database, and apply information technology in the teaching practice. Practical suggestions are put forward from following three aspects.

In the first place, universities, language labs and teachers should work together to construct user-friendly foreign language resources with large capacity and high quality. The language resources can be greatly beneficial for students to practice and teacher to teach. Teachers are the implementers of the teaching activity; therefore, they should have a deeper understanding of the process of teaching and know the needs of the students. Through collecting, evaluating and analyzing the resources, college English teacher will realize the importance of information, and their ability of processing the information will be greatly improved.

In the second place, trainings for information technology and other relevant activities should be organized, such as short-term training, teaching competition, and network courseware making competition. College English teachers' lack of information literacy will hinder the application of information technology in language teaching. Gaoda He (2002) believes that a real network English teaching expert should be an expert of network techniques and also an expert of the English language, and he should be a language expert first of all. Therefore, the essential problem for network English teaching and autonomous learning is that most English teachers are not experts of information technology. Through technical training, we may effectively improve college English teachers' information competence. The trainings may include theories of information technology, the basic application of computer network, courseware designing and making, design and implementation of teaching system, design and making of WebPages, and theory and practice of the integration of information technology and curriculums. Engineers from the companies should also be invited to show how to use the machines in language labs. In the survey, 96.2% of the teachers express their willingness to have the training of information technology. Besides, by organizing competitions, teachers are encouraged to learn more skills and practice what they have learned in the training course.

In the third place, teachers should consciously use the information technology in their teaching practice. Teachers should make good preparation for courses with the help of information resources. Teachers' conscious effort can enhance the effect of classroom teaching practice. The ultimate aim of learning information technology is to apply it in the practice of language teaching. The objective of teachers' efforts to improve their information literacy is also to solve the problems in the practice of language teaching and research. Besides, teachers' supervision of students' homework in [autonomous learning](#) is especially important. Teachers should not only pay attention to release information and homework on the learning platform, but also give timely evaluation on the effect of students' learning.

6. Conclusion

The development of computer and internet has brought about unprecedented opportunities and challenges for college English education. To seize these opportunities and comply with the development in the era of information technology, college English teachers should make great efforts to improve their information literacy and help establish the new teaching mode in this Information Age.

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