

Current Status and Enhancement Strategies of Information Literacy for Foreign Language Teachers in Higher Education in the Digital Era

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Abstract: *In the digital era, improving information literacy (IL) among foreign language teachers in higher education is crucial for keeping pace with technological advancements. However, challenges persist regarding their IL, including limited proficiency in using information technology (IT) for language instruction, inadequate updates on educational technology, and insufficient institutional support for evaluation and incentives. To address these issues, this study conducted a survey of 286 university teachers in Wenzhou, Zhejiang Province, including 155 foreign language teachers. The findings indicate: (1) Foreign language teachers' overall IL tends to be moderately below average, with lower mean scores across all IL dimensions compared to all university teachers. Specifically, the level of information knowledge is the lowest, while information awareness and competence are relatively higher; (2) Compared with non-foreign language teachers, foreign language teachers exhibit lower IL levels, notably with significantly lower levels of information knowledge as well as information ethics and security. Based on these results, we recommend strategies for enhancing IL among foreign language teachers, including updating educational concept to enhance the self-learning awareness of IL, implementing systematic and professional training, as well as establishing tailored evaluation criteria and incentive systems. These strategies aim to serve as valuable guidelines for the overall enhancement of IL among foreign language teachers in higher education.*

Keywords: *information literacy; enhancement strategies; foreign language teachers; higher education; information technology*

1. Introduction

The advent of new digital technologies has ushered in unprecedented opportunities and challenges in the realm of education. Recognizing the pivotal role of information technology (IT) in educational reform and development, the Chinese government has prioritized the modernization of education. Particularly, there is a strong emphasis on advancing "Internet + Education" to seamlessly integrate IT with educational practices. In line with this vision and to foster high-quality education, the Ministry of Education of China issued the *Norms for the Construction of Digital Campuses in Higher Education Institutions (Trial)* in 2021, which delineates explicit requirements for the integration of IT in higher education institutions and specify guidelines for enhancing teachers' information literacy (IL)^[1].

Akin to other disciplines, the digital era provides new teaching and learning methods, as well as unprecedented rich resources for foreign language teaching ^[2], and places new demands on the IL of foreign language teachers in higher education. Concurrently, it imposes fresh challenges on the IL of foreign language teachers, who shoulder the crucial responsibility of nurturing proficient individuals with global outlooks. Their proficiency in IL profoundly impacts the integration of foreign language education with IT, subsequently influencing the holistic enhancement of students' language proficiency, intercultural communication competencies, and international perspectives.

Although in recent years, teachers' IL training has received attention from education departments worldwide, the IL of foreign language teachers in higher education has not been widely addressed ^[3]. Currently, issues still exist regarding the IL of foreign language teachers in higher education, such as a low level of IT proficiency related to foreign language teaching, failure to keep up with the latest developments in educational technology related to language teaching, and insufficient support from

universities for foreign language disciplines ^{[4][5]}. Therefore, this study will empirically investigate the IL status of foreign language teachers in higher education, conduct comparative analyses of the IL of foreign language teachers and non-foreign language teachers, clarify the existing problems, and propose strategies for enhancing the IL of foreign language teachers in higher education, with the aim of promoting their professional development and educational effectiveness.

2. Theoretical Basis

2.1 Concept of Information Literacy

Since the concept of IL was first proposed in 1974, its concept has continuously evolved with the updating of IT and societal demands. Research on the concept of IL at home and abroad has gradually expanded from the acquisition of information to the application, management, evaluation, and information ethics. Zurkowski (1974) defined IL as being a set of learned techniques and skills for utilising the wide range of information tools as well as primary sources in molding information solutions to their problems ^[6]. The ALA defined it to be a set of integrated abilities encompassing the reflective discovery of information, the understanding of how information is produced and valued and the use of information in creating new knowledge and participating ethically in communities of learning ^[7]. Meanwhile, the UNESCO Alexandria Proclamation viewed IL as something that empowers people in all walks of life' to achieve their live goals and that it 'underpins lifelong learning ^[8]. Chartered Institute of Library and Information Professionals (CILIP) defined IL as the ability to think critically and make balanced judgments about any information we find and use. It empowers us as citizens to reach and express informed views and to engage fully with society ^[9]. Some other scholars have conceptualized definitions of IL in terms of categories. Addison and Meyers grouped IL definitions into three categories: 1) a set of skills, 2) a way of thinking, or 3) a social phenomenon or practice ^[10].

In 2021, the Ministry of Education of China introduced the *Norms*, which emphasizes that IL refers to an individual's aptitude in appropriately utilizing IT to acquire, integrate, manage, and evaluate information, as well as to comprehend, construct, and generate new knowledge, and to cultivate awareness, abilities, thinking, and cultivation in discovering, analyzing, and solving problems. Its constituent elements include information awareness, information knowledge, information competence, and information ethics and security. Overall, these studies suggest that IL is a multifaceted and dynamic concept, constituting a comprehensive competency that evolves with the development of the information society which involves the ability to access, evaluate, and use information effectively and ethically in various contexts.

2.2 Concept of Teaching Information Literacy

As the definition of IL continues to evolve, so does the development of teaching IL in the digital age. Both domestically and internationally, research on the concept of teaching IL primarily elucidates the IL that teachers should possess through the formulation of teacher evaluation criteria. In 2017, the International Society for Technology in Education (ISTE) released the *ISTE Standards: For Educators*, which stipulate that educators continually improve their practice that leverage technology to boost student learning, inspire students to positively contribute to and responsibly participate in the digital world and facilitate learning with technology to support student achievement ^[11]. In 2018, the United Nations Educational, Scientific and Cultural Organization (UNESCO) released *UNESCO ICT Competency Framework for Teacher*. The six aspects of a teacher's professional practice addressed are: understanding ICT in education policy, curriculum and assessment, pedagogy, application of digital skills, organization and administration as well as teacher professional learning ^[12]. The framework emphasizes that teachers who have competencies to use ICT in their professional practice will deliver quality education and ultimately be able to effectively guide the development of students' ICT competencies. In 2017, the European Commission issued *European Framework for the Digital Competence of Educators (DigCompEdu)*. The six DigCompEdu areas focus on different aspects of educators' professional activities, that is, professional engagement, digital resources, teaching and learning, assessment, empowering learners and facilitating learners' digital competence ^[13]. The DigCompEdu points out that teachers need to acquire IL to enhance their professional abilities, and then apply this IL to the teaching process in order to achieve the goal of improving teaching quality and promoting student growth.

Domestic scholars mostly define teachers' IL from four dimensions: information knowledge, information awareness, information skills, and information ethics ^{[14][15]}, which broadly cover various dimensions of teachers' IL. Combining existing research and the *Norms* issued by the Ministry of Education, this study suggests that the IL of university teachers can be defined as follows: in the context of educational digitization, university teachers continuously develop basic information skills, acquire, analyze, organize, evaluate, and utilize information to achieve their professional development, improve teaching quality, and promote student growth. It can be divided into four dimensions: information awareness, information knowledge, information competence, and information ethics and security.

3. Methods

3.1 Participants

This study primarily focuses on 286 college teachers as subjects in the Wenzhou, Zhejiang Province. The gender distribution of the participants is 25.9% male and 74.1% female. The age distribution is as follows: 6.3% are under 30 years old, 27.6% are aged 31-40, 54.9% are aged 41-50, and 11.2% are over 50. Regarding educational background, 6.3% have bachelor's degree, 58% have master's degree, and 35.7% have doctoral degree. In terms of teaching experience, 18.2% have less than 5 years, 23.1% have 6-15 years, 46.9% have 16-25 years, and 11.9% have over 26 years. The distribution of professional titles is as follows: 6.6% are assistant professors, 50% are lecturers, 32.9% are associate professors, and 10.5% are professors. The distribution of majors is 54.2% in foreign languages and 45.8% in non-foreign languages (including 20.6% in management and economics, 12.2% in medicine, 4.5% in science and engineering, 3.5% in psychology, and 4.9% in other fields).

Among them, there are 155 college foreign language teachers, with a gender distribution of 16.8% male and 83.2% female. The age distribution is as follows: 1.9% are below 30 years old, 20.6% are between 31-40 years old, 63.2% are between 41-50 years old, and 14.2% are above 50 years old. Regarding educational background, 7.1% have a bachelor's degree, 65.2% have a master's degree, and 27.7% hold a doctoral degree. In terms of teaching experience, 7.1% have less than 5 years of experience, 21.3% have 6-15 years of experience, 57.4% have 16-25 years of experience, and 14.2% have more than 26 years of experience. The distribution of professional titles is as follows: 4.5% are assistant professors, 51.6% are lecturers, 34.8% are associate professors, and 9% are professors.

3.2 Instruments and Procedures

This study utilized the online survey platform "Wenjuanxing" to collect a total of 309 questionnaires. After excluding 23 invalid questionnaires that exhibited clear patterns in responses or had completion times less than 46 seconds (the questionnaire consisted of 23 test questions, and although there may be differences in individual reading levels, the theoretical minimum time for each question should not be less than 2 seconds on average), 286 valid questionnaires were obtained, resulting in an effective rate of 92.56%. The questionnaire was developed based on previous studies, primarily referencing the *Norms* issued by the Chinese Ministry of Education and the questionnaire on university teachers' IL developed by Miao Yanan ^[15]. Each question was measured using a Likert 5-point scale, and data analysis was conducted. The survey questionnaire consisted of two parts: 1) basic information survey of university teachers, including six questions on gender, teaching experience, education level, age, professional title, and major; 2) survey on the current status of university teachers' IL, including four dimensions: information awareness, information knowledge, information competence, and information ethics and security, comprising a total of 23 questions. Internal consistency reliability and validity tests were conducted on the collected questionnaires. The Cronbach's α coefficient for the second part of the questionnaire was 0.95. With the questionnaire's Cronbach's α coefficient exceeding 0.7, it indicates good consistency and high reliability of the data collected through the questionnaire.

3.3 Data Analysis

This study employed IBM SPSS Amos 24.0 to conduct confirmatory factor analysis on the questionnaire to test its structural validity. Subsequently, SPSS 24.0 software was used to analyze and process all questionnaire data. Firstly, descriptive statistical analysis was conducted on the IL of foreign language teachers in universities, including the mean and standard deviation analysis of the overall IL

and its four dimensions, along with an analysis of the personal information survey of teachers. Then, differential analysis was performed, including independent sample t-tests on the overall IL and its four dimensions between foreign language teachers and non-foreign language teachers, to examine the significance of the analyzed data.

4. Results

4.1 The Overall Level of IL among Foreign Language Teachers in Higher Education

The overall levels of IL among all university teachers (N=286) are as follows: the mean score for information awareness is 3.90 (SD=0.72), for information knowledge is 3.38 (SD=0.76), for information competence is 3.67 (SD=0.63), for information ethics and security is 3.63 (SD=0.71), and the total mean score for IL is 3.65 (SD=0.59). Meanwhile, the overall level of IL and the analysis of the four dimensions of information awareness, information knowledge, information application ability, and information ethics and security among foreign language teachers in higher education institutions (N=155) are shown in Table 1.

Table 1 IL Levels of Foreign Language Teachers in Higher Education

Dimensions	N	M	SD
IA	155	3.87	0.76
IK	155	3.27	0.78
IC	155	3.62	0.64
IES	155	3.53	0.72
Total IL Score	155	3.58	0.62

Note: IL= information literacy; IA= information awareness; IK= information knowledge; IC=information competence; IES= information ethics and security; the same as follows.

In Table 1, the mean score for information awareness among foreign language teachers is the highest, while the mean score for information knowledge is the lowest. Compared to all university teachers' levels of IL, it is evident that the information awareness, information knowledge, information competence, and information ethics and security of foreign language teachers in this survey are all at a moderately low level, indicating a need for further enhancement.

4.2 Various Dimensions of IL among Foreign Language Teachers in Higher Education

4.2.1 Information Awareness

The survey indicates (see Figure 1) that among all options, "Agree" is the most chosen, followed by "Strongly agree," with the combined percentage of these two options exceeding 60%. This suggests that more than half of the foreign language teachers in higher education institutions possess a good awareness of information, actively paying attention to information related to IT teaching, consciously considering the application of IT in instructional design, and showing a willingness to actively learn new information technologies to enhance their own information awareness. However, some foreign language teachers still have relatively weak information awareness, indicating a need for further improvement.

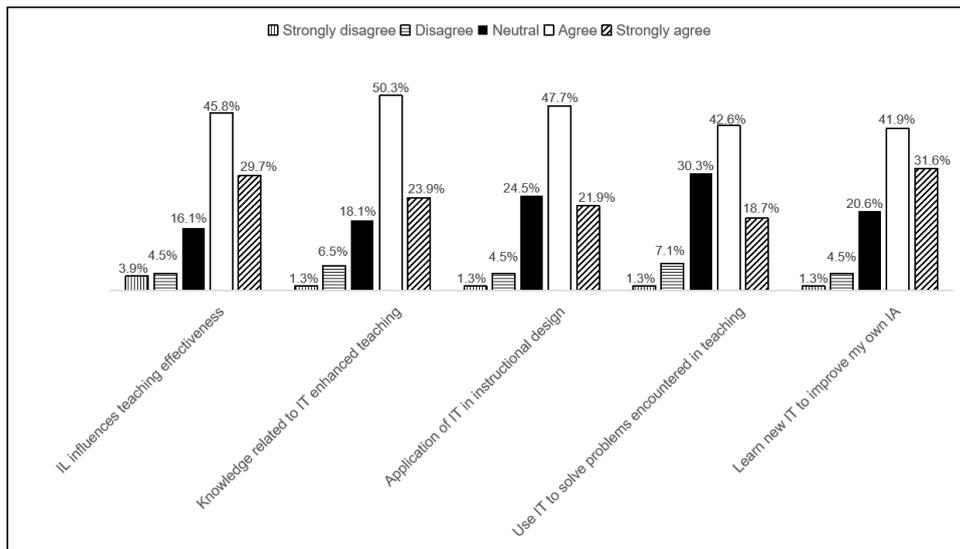


Figure 1 Results of Information Awareness

Note: IT= information technology; the same as follows.

4.2.2 Information Knowledge

The survey reveals (see Figure 2) that among all options, "Neutral" is the most chosen, followed by "Agree", with the combined percentage of these two options exceeding 64%. Compared to the dimension of information awareness, the rate of choosing "Strongly agree" is significantly lower, and the proportion of those choosing "Disagree" is notably higher. This indicates that the overall level of information knowledge among foreign language teachers is lower than that of information awareness, lacking comprehensive knowledge of information and IT, as well as information ethics and security knowledge. There is also insufficient understanding of relevant laws, regulations, and ethical knowledge related to information, as well as a lack of a good grasp of the current development process, teaching application status, and trends of IT.

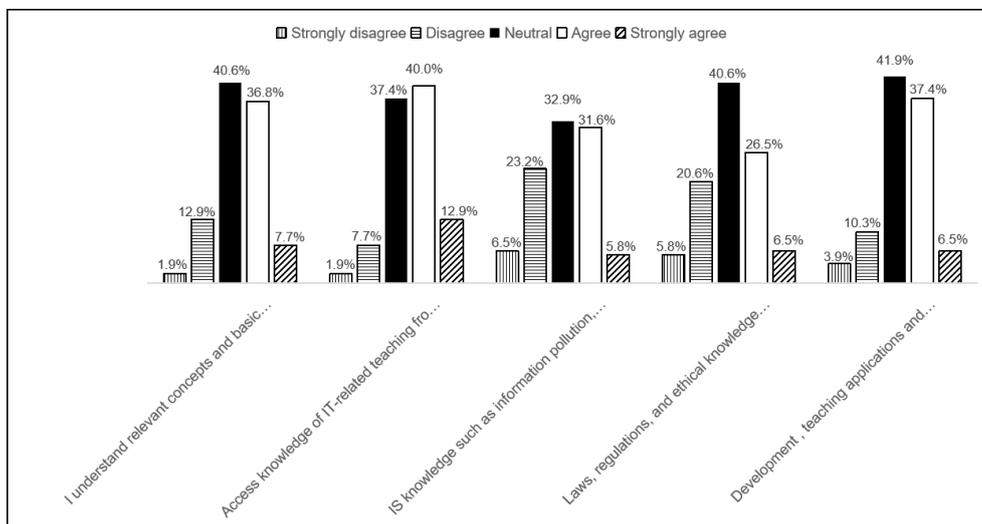


Figure 2 Results of Information Knowledge

Note: IS= information security; the same as follows.

4.2.3 Information Competence

The results of information competence among foreign language teachers are shown in Figure 3, with the majority of respondents' choices falling between "Agree" and "Neutral." For the options "the online teaching effect this semester is very ideal" and "utilizing IT to record students' learning trajectories and conduct summary analysis," most respondents chose "Neutral," while the proportion of those choosing "Disagree" is notably high. For the option "interacting with students through IT as well as conduct efficient and timely teaching evaluation," nearly 10% of teachers chose "Disagree".

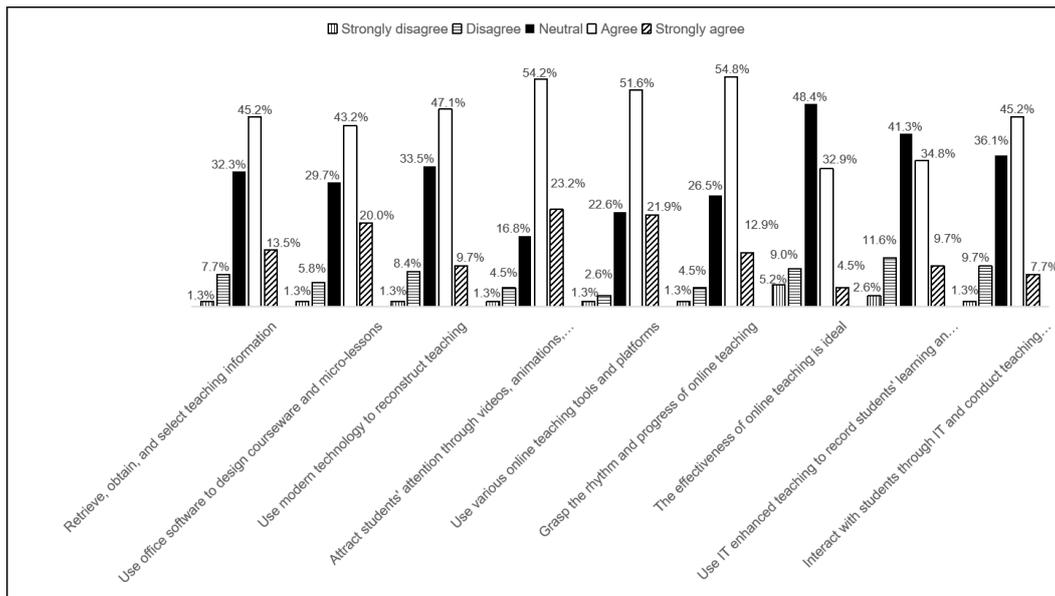


Figure 3 Results of Information Competence

4.2.4 Information Ethics and Security

From the results (see Figure 4), nearly half of the teachers are able to "respect and protect others' academic achievements, comply with academic norms, correctly cite sources", and "protect personal and others' privacy information". Teachers who chose "Agree" for these two items account for 51% and 48.4%, respectively. However, for the items "exposing and stopping the dissemination of harmful or false information by others" and "mastering information security skills to prevent computer virus and hacker attacks", less than 40% of teachers chose "Neutral" and the proportion of those choosing "Disagree" is notably high.

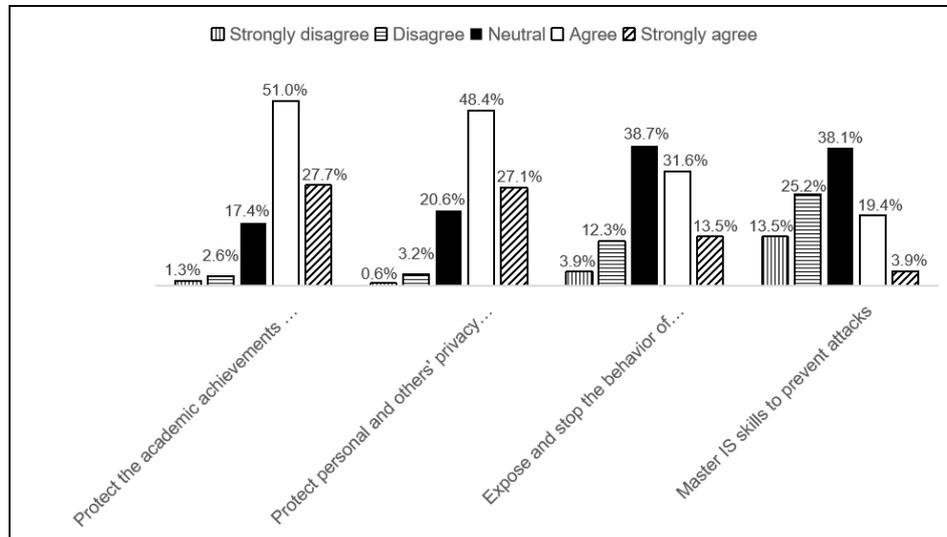


Figure 4 Results of Information Ethics and Security

4.3 Differences in IL between Foreign Language Teachers and Non-Foreign Language Teachers in Higher Education

The results in Table 2 indicate that the mean score for the total IL of foreign language teachers in higher education is 3.58 (SD=0.62), while the mean score for non-foreign language teachers is 3.73 (SD=0.55). The results of the independent samples t-test show $t(284) = -2.07, p=0.04 < 0.05$, indicating that the total IL score of foreign language teachers is significantly lower than that of non-foreign language teachers. The 95% confidence interval is 0.01-0.28.

Specifically, (1) the mean score for information awareness among foreign language teachers is 3.87

(SD=0.76), while for non-foreign language teachers, it is 3.94 (SD=0.66). The results of the independent samples t-test show $t(284) = -0.85, p=0.40 > 0.05$, indicating no significant difference in information awareness scores between foreign language teachers and non-foreign language teachers. (2) The mean score for information knowledge among foreign language teachers is 3.27 (SD=0.78), while for non-foreign language teachers, it is 3.50 (SD=0.71). The results of the independent samples t-test show $t(284) = -2.54, p=0.01 < 0.05$, indicating that the information knowledge score of foreign language teachers is significantly lower than that of non-foreign language teachers. The 95% confidence interval is 0.05-0.4. (3) The mean score for information competence among foreign language teachers is 3.62 (SD=0.64), while for non-foreign language teachers, it is 3.72 (SD=0.62). The results of the independent samples t-test show $t(284) = -1.38, p=0.17 > 0.05$, indicating no significant difference in information competence scores between foreign language teachers and non-foreign language teachers. (4) The mean score for information ethics and security among foreign language teachers is 3.53 (SD=0.72), while for non-foreign language teachers, it is 3.76 (SD=0.68). The results of the independent samples t-test show $t(284) = -2.69, p=0.008 < 0.01$, indicating that the information ethics and security score of foreign language teachers is extremely significantly lower than that of non-foreign language teachers. The 95% confidence interval is 0.06-0.39.

Table 2 Independent Samples t-test of Major Categories

Dimensions	Major	N	M	SD	t	p
IA	FL	155	3.87	0.76	-0.85	0.40
	NFL	131	3.94	0.66		
IK	FL	155	3.27	0.78	-2.54*	0.01
	NFL	131	3.50	0.71		
IC	FL	155	3.62	0.64	-1.38	0.17
	NFL	131	3.72	0.62		
IES	FL	155	3.53	0.72	-2.69**	0.008
	NFL	131	3.76	0.68		
Total IL Score	FL	155	3.58	0.62	-2.07*	0.04
	NFL	131	3.73	0.55		

Note: FL=foreign language; NFL=non-foreign language; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

5. Discussion

5.1 Inadequate Overall IL Level of Foreign Language Teachers

From an overall perspective, the current IL level of foreign language teachers in universities is below-average level. The improvement of IL among these teachers is influenced by various factors, necessitating both the stimulation of teachers' intrinsic autonomy and the provision of external support and incentives [16][17]. However, some foreign language teachers lack awareness of self-learning of IL, failing to embrace advanced teaching concepts in the digital age and lacking sufficient proactive integration of emerging information technologies into their teaching practices. Furthermore, universities' support for the cultivation of IL among foreign language teachers is insufficient, primarily manifested in the lack of systematic and professional training and effective assessment and incentive mechanisms.

5.2 Uneven Development of IL among Foreign Language Teachers across Various Dimensions

5.2.1 Relatively Strong Information Awareness

Information awareness is considered to be the most important aspect of IL as it guides individual's understanding of knowledge, ideas, and needs to engage in the information activities [18]. The information awareness of foreign language teachers in higher education is influenced by various factors. Firstly, there is a lack of insight and sensitivity to information and IT. Some foreign language teachers simply equate IL with the use of advanced teaching equipment and software in multimedia and digital language laboratories, lacking the proactive awareness to explore the deep integration of IT with teaching, leading to low utilization of teaching resources. Secondly, there is a lack of awareness of active enhancement of IL. In the training of IT teaching and various IT teaching competitions conducted in universities, many teachers do not participate actively, resulting in ineffective training

outcomes for IL.

5.2.2 Limited Mastery of Information Knowledge

Information knowledge refers to the theories, knowledge and methods related to IT used by teachers to access, evaluate, and use IT in teaching ^{[19][20][21]}. However, the majority of teachers, due to their limited time and energy caused by heavy teaching and research tasks, lack the time and energy to undergo systematic training in educational technology. This deficiency in specialized guidance results in a lack of cognitive understanding and practical experience among teachers regarding information theory and technology, which in turn leads to insufficient application of IT in the teaching process. Additionally, besides university training, there are not adequate dissemination and popularization of knowledge about laws and regulations of education informatization as well as information ethics.

5.2.3 Unsatisfactory Information Competence

Overall, the information competency of teachers is relatively acceptable, indicating that schools have achieved some success in teacher training in IT. However, some language-teaching faculty needs to improve their information competence, especially in the integration of IT and foreign language teaching practice ^{[22][23]}, such as the limited utilization of classroom interaction, learning assessment, and teacher feedback. Information competence stands as a central manifestation of IL. Information competence is defined as a diverse set of tools and technology resources, used to exchange, create, disseminate, store and manage information ^[24]. However, some foreign language teachers lack awareness and practical experience in information theory and IT, leading to insufficient application of information in the teaching process. They are unable to proficiently master IT such as designing information-based teaching, using teaching software, and integrating platform resources.

5.2.4 Insufficient Information Ethics and Security

Generally, university foreign language teachers have relatively good awareness of information ethics and security. However, there is still considerable room for improvement in information security skills and prevention capabilities. Information ethics and security involve theoretical issues affecting property, privacy, anonymity, and security, including intellectual property, privacy, and computer security ^[25]. In recent years, due to the reinforcement of academic and professional ethical standards management in higher education, the majority of foreign language teachers conscientiously adhere to academic norms and protect the privacy of others during the processes of education, teaching, and academic research. However, compared with other dimensions of IL, information ethics and security, have not received much attention ^[26], particularly concerning information security protection and the defense against information risks.

5.3 Foreign Language Teachers' IL Needs Improvement Compared with Non-foreign Language Teachers

According to the survey, compared with non-foreign language teachers, the overall IL level of foreign language teachers is relatively low, especially in terms of information knowledge as well as ethics and security. There are several reasons for the relatively low IL level of foreign language teachers. Firstly, the professional background of foreign language teachers mainly focuses on linguistics, literature, and education, resulting in a weak foundation in IL, while non-foreign language teachers may have more professional backgrounds related to IL. Secondly, the teaching focus of foreign language teachers is usually on language learning and cultural dissemination, leading to a relatively low emphasis on IL, while non-foreign language teachers' teaching tasks focus more on students' research abilities, such as medical and management majors. Finally, due to the specificity of foreign language disciplines, foreign language teachers may lack systematic and specialized opportunities for IL training and learning.

6. Strategies for Enhancing the IL of Foreign Language Teachers in Higher Education

6.1 Enhancing the Self-learning Awareness of IL

In the digital age, foreign language teachers need to constantly update their own IL and apply modern educational technology to foreign language teaching. However, IL needs to be developed and improved through active recognition and practice. Teachers' awareness of self-learning is an important way to comprehensively improve teachers' IL ^[27]. Firstly, teachers need to update their educational

philosophy and enhance their information awareness. Foreign language teachers should proactively learn and understand the concept of IL in constant evolution. Based on the mastery of the concept of IL, they should employ advanced teaching concepts to integrate IT with the curriculum at a deeper level. Secondly, teachers should actively engage in learning and expanding their information knowledge as well as information ethics and security through multiple channels to meet the needs of teaching and their own professional development. For example, teachers can utilize specialized websites and platforms to autonomously study courses related to foreign language teaching and information knowledge, thus adapting to the integration of IT in foreign language teaching with more solid professional and information knowledge. Finally, teachers should strengthen the integration of IT and foreign language teaching to enhance their information competence. Foreign language teaching should make reasonable use of digital environments such as digital language laboratories and smart classrooms to integrate language teaching such as listening, speaking, reading, and writing with IT, ensuring the continuous application of IT throughout the classroom. This enriches learning content and learning media, not only cultivating students' comprehensive language application abilities but also effectively enhancing foreign language teachers' IL.

6.2 Implementing Systematic and Professional Training

Systematic and professional training is a key measure to improve the IL of foreign language teachers [28]. Firstly, universities should adhere to systematic and targeted training methods based on the training needs and disciplinary specificity of foreign language teachers. Training on teachers' IL should be updated and expanded promptly according to their current levels of IL. This involves not only strengthening the learning and practical application of fundamental information knowledge but also focusing on integrating technological and subject teaching knowledge in training [29], thus promoting the deep integration of IT and foreign language teaching. Secondly, apart from centralized training and online workshops, fostering the initiative of foreign language teachers in IL development through practical applications is essential. This can be achieved through activities such as regular IT teaching contests, exchange meetings, and establishing communities for enhancing teachers' IL. These activities facilitate discussions, strengthen communication and cooperation among teachers, and collectively enhance their proficiency. Thirdly, universities can establish long-term partnerships with excellent IT enterprises and foreign language training companies to conduct various forms of training regularly, for instance, inviting industry experts to give lectures and conducting platform usage training to help teachers understand the latest teaching applications and development trends in IL, thus keeping pace with the educational changes in the digital era.

6.3 Establishing Tailored Evaluation Criteria and Incentive Systems

A well-suited evaluation criteria for the IL of university foreign language teachers and effective incentive systems play a crucial role in improving teachers' IL. Firstly, it's essential to draw from domestic and international standards of teachers' IL, IT proficiency, and digital competence. Combine these with the characteristics of foreign language teaching in the digital age and the demand for international talent cultivation. Committees appointed by higher education institutions should develop evaluation criteria for IL adapted to foreign language teachers. This ensures an objective and scientific evaluation of their IL and provides data references for relevant departments to continually adjust enhancement programs. Additionally, universities should establish effective incentive systems in accordance with national policies regarding the integration of IT and education to encourage and guide them to continuously enhance their IL. For instance, schools can formulate norms related to IL assessment, providing financial support and workload recognition to teachers who participate in IL training and obtain certificates or win various IT teaching competitions.

7. Conclusion

The improvement of IL among foreign language teachers in higher education is not only a necessity in the digital age but also an important task for the modernization of education in China. This study empirically examines the current status of IL among university foreign language teachers, compares it with non-foreign language teachers, identifies issues in foreign language teachers' IL, and proposes strategies for enhancing it. The study concludes: (1) Foreign language teachers' overall IL tends to be moderately below average, with lower mean scores across all IL dimensions compared to all university teachers. Specifically, the level of information knowledge is the lowest, while information awareness

and competence are relatively higher; (2) Compared with non-foreign language teachers, foreign language teachers exhibit lower IL levels, notably with significantly lower levels of information knowledge as well as information ethics and security.

However, this study has limitations. Future research on the IL of university foreign language teachers can be improved in two aspects: firstly, by increasing the sample size to make the study more representative. Although the participants of this study are distributed nationwide, primarily from Wenzhou, Zhejiang Province, the sample size is small and the distribution of samples across regions is uneven. Secondly, by further subdividing the dimensions and indicators of foreign language teachers' IL and delving into the related influencing factors to enhance the quality of IT teaching among teachers and promote the development of education modernization in China.

Conflict of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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