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## **Assignment 2 for ECDE 7016**

**Writing a Critical Literature Review in Education**

**An Exploration of Digital Literacy Training for Translation Students in  
China Literature Review**

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## **An Exploration of Digital Literacy Training for Translation Students in China Literature Review**

**Abstract:** This literature review examines the development of digital literacy training in translation education. The study analyzed 14 journal articles published between January of 2010 and December of 2023 from Google Scholar and China National Knowledge Infrastructure (CNKI) databases to answer two research questions. The results reveal that while many scholars research digital literacy, the digital literacy training in this specific field, translation education, is quite limited, and the majority of the studies relevant to digital literacy in translation education focus on translation technologies. In this literature review, the factors that hinder the development of digital literacy training for translation students are identified, including weak awareness among students, absence of relevant courses in the curriculum, and inadequate teaching resources. Although the digital literacy training for translation students has begun to receive attention, it is far from sufficient. It still presents challenges that need to be addressed to determine the core skills, knowledge, and competencies needed by translation students in China and to continuously update and optimize digital literacy training for them in the face of a constantly evolving digital world. The study provides useful insights in to the present status of digital literacy training in translation education, laying a foundation for scholars and educators to conduct further research in this sector.

**Subjects:** Education Technology; Translation Education

**Keywords:** digital literacy; translation education

### **1. Introduction**

This section will offer a comprehensive overview of the background, rationale, key terms, review processes, research aims, and initial research questions related to the topic under investigation.

#### **1.1 Research context & background and rationale**

The widespread application of translation technology has greatly changed the pattern of translation profession, translation industry, and human cross-cultural communication (Feng, 2020), introducing new challenges and opportunities for translation students in the rapidly

evolving digital era. While traditional translation skills remain crucial, the demand for digital literacy is also gradually increasing (Kornacki, Pietrzak, 2021). This shift necessitates a re-evaluation of translation education, particularly in China, where the translation industry is experiencing rapid growth (Mu, Liang, and Liu, 2023).

Currently, there is a gap regarding the specific digital literacy translation students need to effectively navigate the contemporary digital landscape. Previous studies about digital literacy in the university setting have generally focused on digital literacy in university students (Gutiérrez-Ángel, et al., 2022), which typically focuses on digital literacy among students as a general population, rather than examining its importance within specific academic fields, such as translation. Little attention has been paid to exploring what kind of digital literacy training translation students require or how it should be tailored to their unique needs. The researcher, as a teacher of translation courses at a university in China, has a comprehensive understanding of translation students needs and current learning situations, being aware of the skills and knowledge they require in the digital era and their existing levels and potential for improvement in this regard. Therefore, by reviewing the existing literature, the researcher presents a comprehensive overview of the current landscape, acquires deeper insight into the challenges and opportunities faced by translation students in the constantly evolving digital age, and identifies areas where further research is needed. This literature review aims to explore and analyze current research status regarding digital literacy training for translation students in China, laying a foundation for scholars to conduct further research.

## **1.2 Key terms and review processes**

In this section, two key terms, digital literacy and translation education, will be given, along with a detailed introduction to the review processes.

### **1.2.1 Key terms**

Digital literacy: The concept of digital literacy appears for the first time in the works of Zurkowski (1974, quoted in Gutiérrez-Ángel, et al., 2022), for whom it is an ability to identify, locate, and examine information. However, despite its novelty, the conceptions it encompasses have been changing (Lim and Newby, 2021). Proof of this are the contributions of Gilster (1997,

p. 1) who combines the idea that digital literacy refers to the ability to understand and use information in multiple formats from a wide variety of sources when it is presented via computers and, particularly, through the medium of the internet. However, the definition has been evolving because of the evolving digital world. Many scholars agree that digital literacy has enjoyed a broad range of uses in the literature, from reference to technical aspects (e.g., Bruce & Peyton, 1999; Davies, Szabo, & Montgomerie, 2002; Swan et al., 2002, quoted in Eshet, 2004), to cognitive, psychological, or sociological meanings (Gilster, 1997; Papert, 1996; Tapscott, 1998, quoted in Eshet, 2004). Different scholars gave different definitions with their own emphasis. Li (2012) defines digital literacy as the use of digital technology in the digital environment to recognize the content and operating rules of digital text, media, and its relationship with social politics, economy, etc. Blau and Shamir-Inbal & Avdiel (2020) stated that digital literacy, which is one of the challenges of integration of technology in academic courses, has been defined in the current literature as the competencies and skills required for navigating a fragmented and complex information ecosystem. According to Vanek (2010), digital literacy is often referred to as one monolithic construct, but it is really one that encompasses several groups of competencies.

Although abundant definitions of digital literacy are given, scholars have also recognized the limitations of these definitions. According to Heitin (2016), although the extant literature on digital literacy, skills and competencies is rich in definitions and classifications, there is still no consensus on the larger themes and subsumed themes categories. This argumentation is supported by Wang. Wang (2023) stated that the conceptual system needs to be clarified urgently, and the concepts of information literacy, data literacy, digital literacy, computer literacy and so on haven't been clearly distinguished.

As Heitin (2016) states different contexts have different educational, technological and political histories that influence the uptake and use of digital technologies, as well as how digital literacy is conceptualised. Digital literacy encompasses a vast array of elements, and different industries have their own unique requirements.

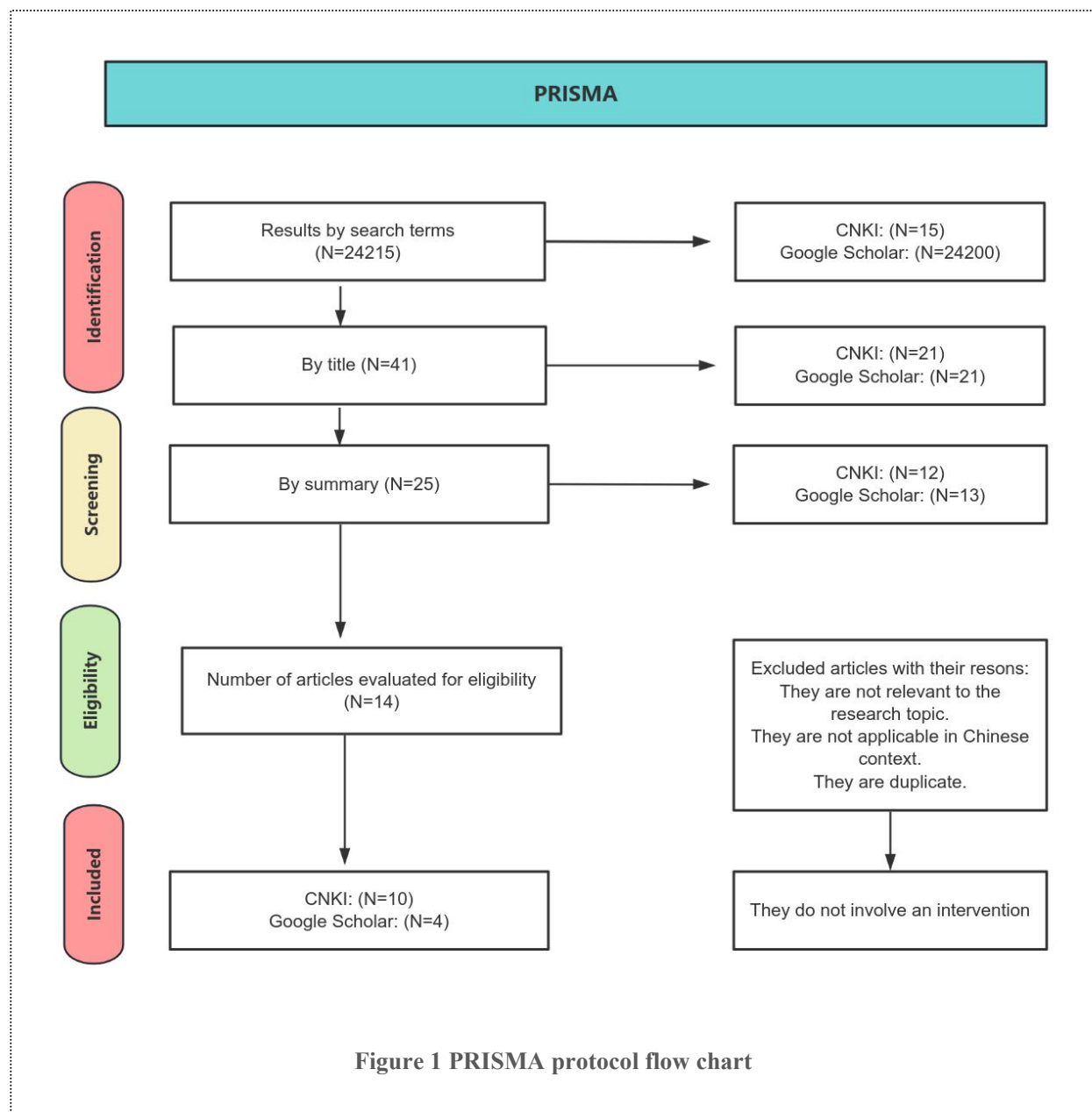
In translation industry, Wang (2023) defines the the concept of digital literacy as the collective competency of an individual translator to efficiently assist the translation process, achieve self-worth and pursuit through digital technology in a digital environment. This competency set includes understanding, mastering, and effectively utilizing digital technology, processing, analyzing, and judging data reasonably, and utilizing diverse digital technologies to continuously support personal development.

While many definitions of digital literacy exist, this review adopts Wang's because: a) it is the most relevant definition with the researcher's field and b) it provides simplicity, inclusiveness, and clarity.

**Translation Education:** For the purposes of this review, translation education means contemporary translation education, which provides translators with the essential competencies, expertise, and perspective required to effectively manage the intricacies of translation in the current era (Wang, 2023). As a result of the introduction of contemporary translation education, which emphasizes the application of technology in the field of translation, students now have increased opportunities to learn and proficiently use modern technologies such as computer-aided translation (CAT) tools and machine translation. This, in turn, enhances translation efficiency and quality, enabling students to adapt to the constantly evolving digital world.

### 1.2.2 The review processes

This section describes the processes that were used to review recent research (between January 2010 and December 2023) on digital literacy training in translation education. In this study, the researcher used a modified approach, following the model of Miller et al. (2016) and Scott et al. (2018), namely PRISMA (Preferred Reporting Items for Systematic Review and Meta-Analysis), which used two popular and reliable databases (Google Scholar and CNKI) to conduct a systematic review based on some keywords ("digital literacy" and "translation education" OR "digital literacy" and "translation technology" and "literature review" ). This systematic review composed of four stages was carried out in March 2024. Figure 1 presents the flowchart of PRISMA.



In the first stage, using the predetermined keywords “digital literacy+translation education”, we obtained a total of 2940 articles from the two databases (n = 0 - CNKI; n = 2940 - Google Scholar). When searching for “digital literacy + literature review”, 3275,000 related articles appeared (n = 5 - CNKI; n = 3270 - Google Scholar), while 18,000 articles were found for “digital literacy + translation technology + literature review” (n = 0 - CNKI; n = 18,000 - Google Scholar).

In the second stage, the 25 articles were screened based on the title and summary, (n = 12 - CNKI;

n = 13 - Google Scholar), and the excluded were based on the inclusion and exclusion criteria. The inclusion and exclusion criteria used in the review are presented in Table 1.

In the third stage, the remaining articles were carefully examined. Only 14 articles were selected for further analysis. Most of the articles were excluded for various reasons, most commonly because they were duplicates, they did not use the predefined keywords in the main body, they were not journal articles or conference proceedings, or they only used the term “digital literacy training” in the reference without any discussions.

In the last stage, we performed an analysis to answer the RQs (see Section 1.3). The 25 articles selected for the systematic review were analysed. To start the analysis, the abstract of each of the articles was read carefully to identify relevant themes or sub-themes. Afterwards, each article was thoroughly reviewed to collect appropriate additional information relevant to the research objectives.

### 1.3 Research aims and initial research questions

This literature review aims to explore, analyze, and synthesize the empirical evidence regarding digital literacy training for translation students in China. It is a systematic, comprehensive, and forward-looking exploration designed to address specific research questions. The review is guided by the following initial research questions (RQs) in its systematic analysis of relevant literature:

| Table 1.Criteria of inclusion and exclusion |                                                                  |                                                                         |
|---------------------------------------------|------------------------------------------------------------------|-------------------------------------------------------------------------|
| Criteria                                    | Inclusion                                                        | Exclusion                                                               |
| Article title and content                   | An appropriate title that complied with the study’s requirements | Did not match the requirements of the study and had an irrelevant title |
| Year of publication                         | Publications from 2010 to 2023                                   | Publications outside the range specified                                |
| Type of publication                         | Journal articles and conference proceedings                      | Reviews, editorials and non-empirical studies                           |
| Language                                    | English and Chinese                                              | Other                                                                   |
| Field of article study                      | Translation education                                            | Other                                                                   |
| Accessibility                               | Full-text articles or open access                                | Preview articles or articles requiring a payment                        |

RQ1: What level of digital literacy is essential for translation students to effectively navigate the contemporary digital landscape?

RQ2: How can translation curriculum designers adapt their digital literacy curricula to keep pace with the changing demands of the translation industry and the digital world?

## **1.4 Summary**

This section introduces the context and background of the research, highlights key terms, and outlines the review processes. The positionality of the researcher is also discussed. Key terms and concepts are defined, and the review processes is described, including the databases searched.

The foundation established in this section facilitates a comprehensive examination of the existing body of knowledge presented in section 2. By delving into key theories, themes, and arguments relevant to the research questions, the researcher aims to discern the contributions of various authors, identify agreements and disagreements, and acknowledge any limitations in the literature. This critical analysis will inform the subsequent development of refined research questions and guide the study's focus on addressing gaps in current understanding.

## **2. Literature Review**

After exploring the background of digital literacy training for translation students in China, this section delves deeper into the academic literature surrounding this topic. By analyzing the contributions of various authors, identifying points of agreement and disagreement, and discussing potential limitations, this review aims to establish a solid foundation for further research in this area.

In this review, it can be seen that current research on digital literacy in the field of translation mainly focuses on machine translation and translation technology. The impact of digital literacy on translation education has not received sufficient attention, with the emphasis placed on technological applications.

### **2.1 Introduction**

This section serves as a preview to the following comprehensive literature review, offering a broad overview of the contents and structure of the subsequent subsections. It sets the stage for a deep dive into the existing academic discourse surrounding the intersection of digital literacy training and translation education in China.

In the upcoming subsections, the focus will be on unpacking key guidelines relevant to the research topic. Guidelines from both United Nations Educational, Scientific and Cultural Organization's conference (UNESCO, 2023) and China's Central Network Security and Information Commission (CAC, 2021) have shown that enhancing digital literacy has become a focus in recent years. This involves exploring the underpinnings that have shaped the researcher's understanding of digital literacy and its application in the translation field. This analysis will provide a solid foundation for understanding the context and complexities of digital literacy training for translation students in China.

Furthermore, the literature review will delve into the key agreements and arguments that have emerged from previous research. This examination will center around two primary research questions or objectives, aiming to understand the current state and identify any gaps or limitations in the existing knowledge. By analyzing how different authors contribute to these databases and where they agree or disagree, a more nuanced understanding of the topic can be gained.

## **2.2 Key guidelines relevant to the research topic**

When delving into the research topic of digital literacy training for translation students, it is crucial to consider perspectives from both the international and national levels. This not only ensures a comprehensive understanding but also strengthens the credibility of the findings. In the following sections, we will explore two key guidelines that are directly relevant to our research: the "*Action on Assuring and Improving Quality Digital Public Learning for All*" from the United Nations' conference on transforming education (UNESCO, 2023), and the "*Outline for Improving National Digital Literacy and Skills*" issued by China's Central Network Security and Information Commission (CAC, 2021). These guidelines provide a multifaceted approach to

understanding the importance of digital literacy in the modern era, especially for translation students seeking to enhance their skills in this domain.

From the international perspective, the essence of digital literacy training for translation students in China is aligning with global frameworks and perspectives.

In the context of exploring digital literacy training for translation students in China, the “*Action on Assuring and Improving Quality Digital Public Learning for All*”, mentioned at the United Nations’ conference on transforming education, holds profound relevance to the research topic. It presents a comprehensive global perspective on the significance of digital literacy and its crucial role in public learning (UNESCO, 2023). In the documents, the significance of public digital learning as a human right and public good has been emphasized (UNESCO, 2023). The document highlights the pivotal role of digital technology in advancing education and lifelong learning (UNESCO, 2023). For translation students in China, this emphasis resonates deeply, as it aligns with the need to equip them with essential digital skills.

The three key factors identified in the document—content, capacity, and connectivity (UNESCO, 2023)—are crucial for effective digital teaching and learning. This resonates strongly with the need for digital literacy training among translation students. Capacity building for teachers and learners is essential to leverage digital tools effectively (UNESCO, 2023), which is particularly important for translation students who need to utilize technology in their field. Ensuring connectivity and access to digital resources is also vital for their learning and skills development.

The United Nations’ perspective on the necessity of digital literacy training is significant. The organization’s focus aligns with the goal of promoting inclusive and quality education. By addressing digital skills gaps, thus contributing to global educational transformation (UNESCO, 2023). Improving digital literacy among translation students not only enhances their individual skill development but also aligns with the UN’s vision of harnessing digital technology for the advancement of education worldwide.

Table 2 shows matrix representation of UNESCO’s document summary and relevance to digital literacy training in China.

TABLE 2 Matrix representation of UNESCO's document summary and relevance to digital literacy training in China

| Aspect             | Document Summary                                                                                            | Relevance to Training for Translation Students in China                                           |
|--------------------|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| <b>Emphasis</b>    | - Digital revolution for quality education as a human right                                                 | - Importance of digital literacy training for translation students                                |
|                    | - Harnessing digital technology for education as a human right                                              | - Capacity building for effective digital tool utilization                                        |
| <b>Key Factors</b> | - Content, Capacity, Connectivity<br>- Transforming education through digital technology                    | - Aligning with the need to equip translation students with essential digital skills              |
| <b>Commitments</b> | - Establishing public digital learning platforms, enhancing digital literacy, ensuring connectivity for all | - Enhancing learning outcomes through effective digital tool utilization for translation students |

In conclusion, digital literacy training for translation students in China, aligned with global frameworks and perspectives, is imperative for promoting inclusive and quality education. This training not only enhances individual skills but also contributes to the global educational transformation advocated by the United Nations.

From the national level, the issued “*Outline for Improving National Digital Literacy and Skills*” (CAC, 2021) holds profound implications for various sectors, including education and translation. This document not only serves as a national-level directive to enhance digital literacy among the general population but also aligns with the research theme of exploring digital literacy training for translation students in China.

The document outlines the importance of enhancing digital literacy and skills across the population to meet the demands of the digital age, promote national quality, and facilitate comprehensive human development (CAC, 2021).

The relevance of this document to digital literacy training for translation students in China lies in its focus on equipping individuals with essential digital competencies and fostering a society adept at digital tools and resources.

First, the research aligns with the country's strategic vision of building a strong online presence and fostering digital innovation. Secondly, exploring digital literacy training for translation students contributes to the overall goal of advancing national digital capabilities and ensuring a skilled workforce ready to meet the demands of the digital era.

The outline recognizes the significant role of digital literacy in building a skilled workforce and fostering societal development (CAC, 2021). In the context of translation, this recognition is particularly relevant. Translation students, as future professionals in the language services industry, need to be equipped with not only linguistic skills but also technological proficiency. Digital literacy, in this sense, becomes a prerequisite for effective translation practices, as it enables students to handle digital tools and technologies with ease.

Moreover, the outline lays out specific goals and measures to promote digital literacy, skills, and innovation. This provides a clear road map for educational institutions to integrate digital literacy training into their curricula. By doing so, they can ensure that students are not only well-versed in traditional translation techniques but are also able to adapt to the evolving digital landscape.

Table 3 shows matrix representation of the national document summary and relevance to digital literacy training in China.

In conclusion, the “*Outline for Improving National Digital Literacy and Skills*” issued by China's Central Network Security and Information Commission (2021) aligns closely with the research theme of exploring digital literacy training for translation students in China. Both recognize the critical role of digital literacy in building a skilled workforce and fostering societal development, and they provide a direction for enhancing digital literacy among translation students in China.

**TABLE 3 Matrix representation of national document summary and relevance to digital literacy training in China**

| Aspect             | Document Summary                                                                                                         | Relevance to Training for Translation Students in China                                           |
|--------------------|--------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| <b>Emphasis</b>    | - National directive to enhance digital literacy among the general population                                            | - Focuses on equipping translation students with essential digital competencies                   |
|                    | - Importance of enhancing digital literacy and skills across the population                                              | - Aligns with the need for translation students to handle digital tools and technologies          |
| <b>Key Factors</b> | - Recognizes the significant role of digital literacy in building a skilled workforce and fostering societal development | - Acknowledges the necessity of technological proficiency for future professionals in translation |
|                    | - Outlines specific goals and measures to promote digital literacy, skills, and innovation                               | - Provides a road map for integrating digital literacy training into translation education        |
| <b>Commitments</b> | - Alignment with the strategic vision of building a strong online presence and fostering digital innovation              | - Contribution to advancing national digital capabilities and ensuring a skilled workforce        |
|                    | - Recognition of digital literacy as a prerequisite for effective translation practices                                  | - Direction for enhancing digital literacy among translation students in China                    |

Both documents are closely aligned with the research topic, as they underscore the importance of digital literacy training in today's digital age. The United Nations' guideline highlights the global need for ensuring high-quality digital learning, while China's national guideline outlines specific measures to promote digital literacy within the country. By examining these frameworks, the present study aims to gain a comprehensive understanding of the current landscape of digital literacy training for translation students in China, identify any gaps or challenges, and lays the foundation for exploration of potential strategies to improve the quality and effectiveness of such training. When analyzing fourteen articles to identify primary themes in digital literacy concerning translation education, two distinct groups emerged: Group 1 delves into the digital literacy proficiency of translation students, group 2 explores strategies and methods for continuously updating and enhancing digital literacy training for translation students, particularly in response to the dynamic nature of the digital landscape. The result of the study could be understood under different themes relevant to the research questions.

### 2.3 Key themes relevant to the research question 1

Within the first group, digital literacy proficiency of translation students, three overarching themes emerged: digital skills, digital knowledge, and digital competence.

**Major theme 1:** Major theme 1: Regarding the first theme, digital skills, related to digital literacy, scholars unanimously agree the fact that there is a growing recognition of the importance of digital skills in the translation profession (Cui, 2020; Zhang, Yu, and Cui, 2023). This means that as technology continues to play an increasingly significant role in translation workflows, translators are required to possess not only linguistic proficiency but also technical competence in utilizing various translation tools and software. This includes proficiency in using computer-assisted translation (CAT) tools, machine translation systems, terminology management software, and other digital resources (Cui, 2020). The ability to leverage these tools effectively has become essential for translators to enhance productivity, ensure translation quality, and meet the demands of clients in an increasingly digitalized global market (Zhang, Yu, and Cui, 2023). Moreover, Cui (2020) emphasized by equipping students with the necessary digital skills can empower future translators to thrive in an ever-evolving digital landscape and remain competitive in the global marketplace. These skills are crucial for translators to meet the demands of the modern translation market, where clients expect quick turnaround times, high-quality translations, and efficient communication.

**Major theme 2:** Regarding the second theme, digital knowledge, related to digital literacy, Scholars highlighted the importance of digital knowledge within the field of translation education (Wang and Li, 2019). According to Wang and Li (2019), digital knowledge encompasses a comprehensive understanding of digital tools, technologies, and their applications in translation practice. They noted that while there is recognition of the significance of technical ability and digital competence in translation, there remains a need for translators to possess a deep understanding of the underlying principles and functionalities of digital tools. This includes knowledge of how different translation software and platforms operate, as well as awareness of emerging technologies and trends in the digital landscape. Wang (2023) agreed that enhancing translators' digital knowledge is essential for equipping them with the skills needed to navigate the evolving digital environment and leverage technology effectively to meet the demands of the

modern translation industry. These scholars' study provides an insightful analysis of the current status, challenges, and opportunities for translation technology application among translators in the era of artificial intelligence, offering practical recommendations for its advancement and integration in translation education and practice (Wang and Li, 2019).

**Major theme 3:** Regarding the third theme, digital competence, related to digital literacy, this paper highlighted the significance of understanding the broader concept of digital competence within the context of translation education. Wang (2023) emphasized that digital competence extends beyond mere technical proficiency with digital tools and platforms. Instead, it encompasses a deeper understanding of how to effectively integrate various digital tools into the translation process to achieve desired outcomes (Cui, 2020). They noted that while there is recognition of the importance of technical ability in translation, there remains a gap in understanding how translators effectively integrate technology into their workflows. This underscores the need for translators to develop digital competence alongside digital skills, enabling them to adapt to the evolving digital landscape and strategically utilize technology to enhance translation efficiency and quality. Moreover, according to Mu, Liang and Liu (2023), over reliance on traditional approaches in translation education might hinder the development of students' digital literacy and competence, advocating for a shift towards more technology-integrated pedagogies to better prepare students for the demands of the digitalized translation industry.

According to Wang and Li (2019), with the rapid development and widespread application of translation technology in industry practice, technical ability has become crucial for translators. The European Master's in Translation (EMT) (2017) identifies translation technology skills as essential for its program, while the "*Undergraduate Teaching Requirements for Translation Majors in Higher Education Institutions in China*" (2012) stresses the importance of translation tool proficiency. Furthermore, international standards like ISO17100:2015, the "*Chinese Basic Ability Requirements for Interpreters and Translators*" (T-TAC 2-2017), and the *Chinese English Proficiency Scale* (GF 0018-2018) highlight the need for translators to possess diverse information abilities and utilize various translation tools.

**Limitations:** Despite the significant emphasis placed on translation technology capabilities of digital competence in talent cultivation and industry standards, academic research in this area remains rudimentary (Wang and Li, 2019), which is also acknowledged by Wang, (2023); Wang and Qin, (2018). Cui (2020) also notes a scarcity of in-depth research on translators' application of translation technology by domestic scholars. Limitations also include insufficient integration of interview data and deficiencies in qualitative analysis. Future research could build upon questionnaire surveys and interviews, utilizing big data in teaching and learning to conduct more in-depth and accurate analysis of the issues at hand.

These findings suggest that digital literacy for translation students to navigate the modern digital landscape is multifaceted, encompassing technical proficiency and integration of translation techniques. It spans from basic computer skills to advanced utilization of digital tools, digital communication, and ethical considerations. As the digital landscape evolves, translation education must evolve concurrently, equipping students with the necessary digital literacy skills to thrive in the modern era.

## **2.4 Key themes relevant to the research question 2**

With the rapid development of translation technology in the industry, the dependence of translators on technology is constantly increasing, and technology has also put forward higher requirements for translators (Feng, 2020). Another key theme that emerge during the review process around digital literacy and translation education is the integration of technology into translation education, the need for continuous updating of curricula to meet the requirement of the evolving digital world.

**Major theme 4:** Regarding the fourth theme, the integration of technology into translation education, scholars gave their own insights.

A consensus among researchers is that as digital tools and platforms become increasingly important in the translation process, it is imperative that curriculum designers incorporate them into their teaching methods; digital literacy skills, such as proficiency in computer-assisted translation tools, data analysis, and multimedia translation, must be integrated into translation

courses (Wang and Li, 2021; Wang and Liu, 2023; Li, Yan, and Li, 2023). Additionally, they suggested that translation education programs should incorporate curriculum components focused on digital knowledge to ensure that students develop a robust understanding of digital tools and their applications in translation practice. According to Gough (2021), the translation industry, inherently, is in a constant state of flux, propelled forward by technological advancements and the digital landscape. Given this dynamic nature, it is imperative for translation curriculum designers to adjust their curricula to align with the evolving needs of the industry and prepare students for the challenges and opportunities of the modern translation landscape (Rico, 2010). According to Doherty (2016), digital fluency has become an integral part of the translator's toolbox. This assertion is echoed by many other scholars who argue that digital literacy is no longer a mere add-on but a core component of translation education (Massey, 2022; Wang and Liu, 2022).

Recognizing this evolving landscape, the Chinese Ministry of Education released the “*Teaching Guide for Undergraduate Translation Major (TGUTM)*” in 2020. This document marked a significant milestone in the development of translation education in China, as it clearly articulated the central role of “translation technology” in the translation curriculum. This clarification not only underscored the importance of technology in translation education but also signaled a new era of translation technology education in China (Wang and Li, 2021). By emphasizing the core curriculum position of translation technology, the TGUTM sent a clear message that translation education must embrace technological advancements related to digital literacy. According to (Xiao and Feng, 2019), this shift towards a more technology-oriented curriculum is necessary to ensure that translation students are equipped with the skills and knowledge they need to thrive in the modern translation industry. The recognition and emphasis on translation technology in the TGUTM represents a significant step forward in the development of translation education in China. By adapting their digital literacy curricula to align with the evolving demands of the translation industry, curriculum designers are ensuring that students are prepared to face the challenges and seize the opportunities of the modern translation landscape.

The integration of translation technology into the curriculum will not only help students develop a deeper understanding of the tools and techniques available to them, enabling them to work more efficiently and accurately, but also prepare them to adapt to the rapidly changing technological environment, enabling them to keep up with the latest trends and developments in the translation industry (Xiao and Feng, 2019). Additionally, the rapidly changing nature of the translation industry demands that curricula of translation students are continuously updated to meet the requirement of the latest trends and demands (Wang and Li 2021). This means that curriculum designers must stay abreast of industry developments and be willing to make necessary adjustments to their curricula.

However, currently, translation technology education in China faces numerous pressing challenges that demand urgent attention. One of the primary issues is the disconnect between traditional translation methods taught in educational institutions and the rapidly evolving demands of the AI era (Cui, 2020). As artificial intelligence and machine translation tools become increasingly sophisticated, the translation industry is undergoing significant transformations (Mu, Liang and Liu, 2023). However, According to Wang and Liu's (2023) research, digital literacy remains underdeveloped in translation education, manifesting in limited subject awareness, incomplete curriculum systems, and scarce teaching resources. This leads to insufficient digital application skills and knowledge management abilities among translators.

Cui (2020) emphasizes the critical need to align translation education with these technological advancements. He believes that to effectively prepare students for the job market, educational institutions must embrace change and update their curricula to reflect the latest trends and requirements in the translation industry. This includes integrating AI-based translation tools and techniques into the classroom, and teaching students how to use them effectively.

One solution proposed by Cui (2020) is the development of updated curricula that focus on digital literacy and translate technology. This involves introducing students to a range of tools and platforms that are commonly used in the translation industry, such as machine translation engines, CAT (Computer-Assisted Translation) tools, and translation management systems. Students should be trained not only on the basic functionality of these tools but also on how to

evaluate their output, understand their limitations, and use them strategically to enhance translation quality and efficiency.

Another key aspect is faculty training. As teachers are the backbone of any educational system, it's crucial that they stay up-to-date with the latest advancements in translation technology (Wang and Liu, 2023). Institutions should provide regular workshops and training sessions for faculty members to ensure they have the necessary skills and knowledge to guide students in this digital age.

Cui (2020) highlights the importance of research enhancement. By investing in research and exploring new areas of translation technology, institutions can stay ahead of the curve and continuously innovate their educational offerings. This not only benefits students but also contributes to the overall development of the translation industry in China.

Wang (2023) emphasizes the construction of translation curriculum systems. Break through the limitations of traditional educational concepts, reconstruct the curriculum system, improve teaching evaluation methods, establish digital literacy learning communities through ubiquitous networks, and construct digital literacy curriculum systems combined with translation professional literacy in different domains of literacy to comprehensively enhance the digital literacy of student translators.

**Limitations:** Research design and methods need improvement urgently. Currently, research on this topic is mostly dominated by reviews, conceptual descriptions, and qualitative analyses, with most studies failing to be based on large-scale surveys and adopting a quantitative-qualitative integrated approach.

Based on the insights of the scholars mentioned above, the integration of technology into translation education in China faces challenges in keeping pace with the demands of the evolving digital world. However, by embracing change, updating curricula, training faculty, improving teaching assessments, and enhancing research, educational institutions can prepare their students to become digitally literate translators who are well-equipped to tackle the challenges of the future.

All in all, the themes collectively provide insights into how translation curriculum designers can adapt their digital literacy curricula to keep pace with industry demands and technological advancements.

## 2.5 Summary

In this review, the researcher delved deeply into the existing literature surrounding digital literacy in translation education. The key guidelines and themes relevant to the research topic have been identified and discussed. Authors' contributions to the databases have been highlighted, along with their agreements and disagreements. Limitations in the current research have also been identified, pointing to the need for further exploration. The main contributions and limitation are as follows.

**Main Contributions:** This literature review contributes to the understanding of digital literacy training in translation education, focusing specifically on the development of digital skills among translation students in China. Firstly, it provides a comprehensive analysis of the current status of digital literacy training for translation students in China, highlighting the limited attention paid to this area of study. Secondly, it identifies key factors that hinder the development of digital literacy training, including weak awareness among students, absence of relevant courses in the curriculum, and inadequate teaching resources. Thirdly, the review underscores the importance of addressing these challenges to better equip translation students for the demands of the modern translation industry and the evolving digital landscape. Additionally, by synthesizing the findings of 36 journal articles, the review offers valuable insights into the specific areas of focus within digital literacy training in translation education, particularly the emphasis on translation technologies. Overall, this review contributes to a deeper understanding of the complexities surrounding digital literacy training in translation education and provides guidance for future research and practice in this field.

**Limitations:** One limitation of this literature review is the reliance on a relatively narrow range of sources, limited to journal articles published between 2010 and 2023 from Google Scholar and China National Knowledge Infrastructure (CNKI) databases. This may have resulted in the

exclusion of relevant literature from other databases or sources. Limitations in the current research also include a lack of consensus on the specific digital skills required by translation students and the effectiveness of different digital literacy training strategies.

The findings of this study compel us to consider the following: First, what are the core skills, knowledge, and competencies needed by translation students in China? Second, how do we continuously update and optimize digital literacy training for translation students in face of a constantly evolving digital world ? We should take into account the contributions of the results found and their consequences to formulate effective intervention designs and strategies to effectively capacitate translation students with digital literacy for their future career in this fast evolving digital world.

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