

# ***A Review of Research on the Effect of Digital Learning on Foreign Language Learning Motivation***

**Chenxuan Cao<sup>1,a,\*</sup>, Hua Song<sup>2,b</sup>, Siyuan Yang<sup>3,c</sup>**

<sup>1</sup>*School of International Studies, Hangzhou Normal University, Hangzhou, Zhejiang, 310018, China*

<sup>2</sup>*School of Ideological and Political Education, Guangdong University of Education, Guangzhou, Guangdong, 510000, China*

<sup>3</sup>*School of English Language & Culture, Xi'an Fan Yi University, Xi'an, Shaanxi, 710000, China*  
*a. sroper83446@student.napavalley.edu, b. 2964131909@qq.com, c. 545726318@qq.com*

*\*corresponding author*

**Abstract:** The influence of digital learning and motivation on foreign language learning is the focus of current research. This paper reviews the impact of digital learning on foreign language learning motivation. It defines digital language learning as language education using a technology-based platform or application. Then, it expounds the background and application of digital language learning, which uses technology to meet the diverse educational needs of society and breaks and surpasses the limitations of traditional teaching. Driven by intelligent devices, digital language learning has become an essential learning tool in the information age. This paper discusses the relationship between motivation and language learning, with emphasis on integrated motivation and instrumental motivation. Explore how digital learning can positively influence foreign language learners' learning motivation through its convenience, flexibility, diverse resources and feedback mechanisms. However, limitations and challenges such as lack of emotional engagement, distraction and reduced interaction in digital language learning are also addressed. Combining emotional factors, strengthening interaction and combining digital teaching methods with traditional teaching methods can effectively enhance the learning motivation of foreign language learners and achieve efficient language learning outcomes.

**Keywords:** digital language learning, motivation, effect

## **1. Introduction**

According to Li, P and Lan, Y.J. "digital language learning" is the practice of learning a language using a platform or application that is based on digital technology or technological enhancement [1]. Nevertheless, as a result of technological developments and gains in artificial intelligence, digital language learning is considered as the connection between language research and industry. Therefore, due to its highly interdisciplinary nature, digital language learning is a method that combines the cognitive, social, emotional, and neurological aspects of learning a second language with cutting-edge technology like virtual reality, artificial intelligence, and big data analytics [1].

Digital language learning comes into being under the background of globalization, the advancement of science and technology, the advancement of education reform and the demand for

personalized learning [2]. It provides language learners with more convenient, flexible, personalized and diversified learning methods, which helps to improve students' language level and cross-cultural communication ability.

The adoption of digital learning covers a wide range of tools and resources, including online courses, virtual classrooms, educational applications, digital textbooks, rich audio-visual materials, native-speaker interactions, and virtual language communities [2,3].

This paper aims to study the influence of digital learning on foreign language learning motivation. This study can provide guidance for teachers and educational institutions and effectively promote students' initiative in foreign language learning. Through rational use of digital learning tools and resources, stimulate students' learning interest and motivation, meet students' personalized learning needs, and improve learning results. With the popularity of digital teaching, digital learning has been widely used in foreign language education, but there are few studies on its impact on foreign language learning motivation. This paper links digital learning with foreign language learning motivation to provide relevant references for foreign language teachers and learners.

## **2. Relationship Between Motivation and Language Learning**

### **2.1. Definition of Motivation**

Gardner and Lambert initiated the research on the socio-psychological model---socio-educational model for the first time, which opened the door to the study of foreign language learning motivation [4].

As one of the pioneers, Gardner first defined language learning motivation as the extent to which an individual struggles to learn a language for eagerness and the satisfaction experienced in this activity, which can be divided into three elements: the readiness to learn a second language, the effort required, and the enjoyment one can derive from the process [5].

### **2.2. Classification of Motivation**

According to various driving factors, Gardner divides language motivation into two categories: integrative motivation and instrumental motivation [5]. Integrative motivation arises from "positive feelings toward the community that speaks that language" [5]. That is to say, integrative motivation is more social-oriented, emphasizing the importance of interpersonal relationships and cultural understanding.

The second is instrumental motivation, which is to "derive benefits of a non-interpersonal sort" [5]. It means that instrumental motivation is more self-directed and emphasizes obtaining some practical functional benefits by learning a new language, such as improved career opportunities, better jobs, promotions, etc.

### **2.3. Evidence Exploring Motivation and Language Learning**

After proposing the concept of motivation, Gardner began to think about its relationship with foreign language learning. So, he designed an attitude test group to evaluate the effect of integrative motivation and instrumental motivation on foreign language learning [6]. The experiment first refines the independent variable motivation level into three performances: the readiness to learn a second language, the effort required, and the enjoyment one can derive from the process [6]. Secondly, a survey including 104 questions is designed to measure the participants' motivation by measuring the participants' level of agreement in six degrees and 12 questions asking about the participants' feelings in seven degrees [6].

Experiments have shown that motivation is positively correlated with language proficiency, that is, those with high language learning motivation tend to have high language proficiency, and integrative motivation has a greater impact on language learning [4]. This experiment leads scholars to turn their attention to the study of language learning motivation, and how to stimulate language learning motivation to obtain better learning effects has become a question worth thinking about. Further experiments related to it continue to emerge. Due to limited space, the authors will analyze it in the next paper.

### **3. How Digital Learning Positively Affects Motivation**

#### **3.1. Convenience and Flexibility**

Digital learning makes access to learning resources more casual and convenient [7]. According to Li, the emergence of modern smart devices has broken the limitations of time and space on learning, and students can access high-quality course information on a variety of learning platforms [7]. Students can decide when and where they want to learn using digital tools. When compared to traditional teaching, digital learning provides students with easier access to resources and knowledge, and the variety of learning methods increases student motivation to study.

#### **3.2. Diversification of Learning Resources**

Among the many learning materials available for digital learning are online classrooms, e-journals, virtual labs, etc. The fact that the information content is offered in the form of multimedia inheritance and hypertext structure distinguishes the diversity of digital learning resources. A variety of digital learning resources to provide students with more accurate learning services. Students can choose more targeted resources for learning, and their learning motivation can be improved.

Meanwhile, Li proposes that digital learning enables multi-level learning of course learning content [7]. Digital learning utilizes resources that are highly diverse and shared [7]. Students can choose the level of difficulty that suits them according to their needs, interests, and ability to learning [7]. Digital learning is more in accordance with the individuality of each student, thereby avoiding the drawbacks of traditional learning brought on by individual variances, and can help students stay motivated to learn.

#### **3.3. Incentives and Feedback Mechanisms**

According to Alzahrani, there is a need to adopt digital incentives such as points, badges, grades, and leaderboards in digital platforms to increase the effectiveness of these platforms in improving learning outcomes [8].

Digital learning can provide real-time feedback on learning. Digital learning provides a more complete record of a learner's learning history [9]. The platform of digital learning can record students' learning processes in detail and comprehensively. Teachers can analyze the deficiencies in students' learning in more detail based on the data on the platform and guide students' learning [9]. Through the submission of their assignments and online tests, students can assess their learning outcomes as well. Students who participate in digital learning can receive prompt feedback on the digital platform that will help them comprehend the outcomes of their learning. As a result, they can learn more specifically, engage in instant error correction, and increase their motivation to study.

### **4. Challenges and Limitations**

Digital learning materials are now designed with a knowledge presentation focus rather than a design focus on teaching interaction and emotional input. By ignoring the emotional expression of

knowledge and the design of classroom interaction, students are exposed to learning materials that are solely concerned with knowledge, which makes it simple to make them dislike learning [10]. In comparison to traditional classroom instruction, digital learning frequently makes it challenging to offer instant feedback and assistance. Learners may not be able to receive timely encouragement and correction. Additionally, since there are fewer opportunities for social interaction and individual-centered learning in digital environments, students may feel alone, unsupported, and lacking in intrinsic drive and purpose, which may lower their learning motivation.

Digital learning is also self-directed, but students may not be, and they may need extrinsic motivation. Without this extrinsic motivation, students may be undermotivated, and Gruzd et al. argued that students will expect to get their behavior motivated by others [11]. Additionally, continuous digital learning may impair students' critical thinking and creativity, and it may also distract students, which would undermine motivation and, eventually, decrease learning results.

Many digital teaching methods focus too much on creativity and novelty in the teaching process, allowing teachers with little time to really impart knowledge to their pupils. As a result, the classroom appears to be very active but the students actually learn very little. From another perspective, students can easily become distracted by social media and other online diversions. This will only drain the students' energy and reduce students' learning motivation, which will have an impact on the learning outcome.

Digital learning has generated new requirements and challenges for contemporary learning, including learning objectives, learning styles, learning resources, and so on. The major source of learning, however, is the learner, and the effectiveness of learning is directly influenced by the student's drive to do so. In the process of digital learning, students must have the mindset and capacity for lifelong learning, which is also crucial but outside of human control and is the biggest challenge for digital learning. Since school is not the only place to study in this context, this requirement is particularly important for students.

## 5. Conclusion

This paper reviews the literature on digital learning and foreign language learning motivation. This paper argues that there is a positive correlation between motivation and language ability. The convenience and flexibility of digital learning, the diversity of learning resources and the incentive and feedback mechanism of digital learning have an effective and positive impact on foreign language learning motivation. According to the current development of digital learning, the challenges and limitations of digital learning on foreign language learning motivation are pointed out. In the process of digital learning, learners' own learning conditions, distraction and interaction of attention, and lack of emotional input may affect the motivation for foreign language learning. Therefore, this paper believes that in order to make better use of digital language learning resources and provide a good impact on foreign language learning motivation, emotional factors should be introduced into the process of digital teaching. In addition, digital teaching should create more opportunities for interaction and communication to improve learner motivation. In the process of digital learning, learners should make full and reasonable use of digital learning resources to maximize the effect of foreign language learning motivation. In addition, digital teaching and traditional teaching methods should be combined in the process of foreign language teaching to give full play to their respective teaching advantages and provide learners with a more comprehensive and effective foreign language learning experience. Based on a review of existing studies and references, this paper finds that digital learning has a positive impact on foreign language learning motivation in general. Relying on technological progress and international communication, the good development prospect of digital learning determines that future research will further study the correlation between digital learning and

foreign language learning and how to effectively play its role in language learning by avoiding the limitations of digital learning.

### Authors Contribution

All the authors contributed equally and their names were listed in alphabetical order.

### References

- [1] Li, P., & Lan, Y. J. (2022). *Digital language learning (DLL): Insights from behavior, cognition, and the brain. Bilingualism: Language and Cognition*, 25(3), 361-378.
- [2] Bidin, S., & Ziden, A. A. (2013). *Adoption and application of mobile learning in the education industry. Procedia-social and behavioral sciences*, 90, 720-729.
- [3] Xie Shuxiao, Li Zhaozhong, & Lin Xiuman. (2007). *Integration and application of digital learning resources in diversified background. Research on Electro-Chemical Education*, (5), 34-39.
- [4] Gardner, R. C., & Lambert, W. E. (1972). *Attitudes and motivation in second-language learning*.
- [5] Gardner, R. C., Lalonde, R. N., & Moorcroft, R. (1985). *The role of attitudes and motivation in second language learning: Correlational and experimental considerations. Language learning*, 35(2), 207-227.
- [6] Orío, S. F. (2013). *Motivation and second language acquisition. Universidad de La Rioja. Servicio de Publicaciones: Grado en Estudios Engleses*.
- [7] Li Kedong. (2001). *Digital Learning. Research on Electro-Chemical Education*, 8, 46-49.
- [8] Alzahrani, F. K. J., Alshammmary, F. M., & Alhalafawy, W. S. (2022). *Gamified Platforms: The Impact of Digital Incentives on Engagement in Learning During Covide-19 Pandemic. Cultural Management: Science and Education (CMSE)*, 7(2), 75-87.
- [9] Lin, M. H., Chen, H. C., & Liu, K. S. (2017). *A study of the effects of digital learning on learning motivation and learning outcome. Eurasia Journal of Mathematics, Science and Technology Education*, 13(7), 3553-3564.
- [10] Lin, XM., Xie, SX. (2005). *An Exploration of Motivation and Maintenance in Digital Learning. China Electronic Education (CEE)*, (9), 65-67.
- [11] Gruzd, A., Staves, K., & Wilk, A. (2012). *Connected Scholars: Examining the role of social media in research practices of faculty using the UTAUT model. Computers in Human Behavior*, 28(6), 2340-2350.