

Fostering the Ability of Foreign Language Students in Higher Education to Employ Digital Storytelling

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Abstract. Digital storytelling, which blends the art of storytelling with multimedia elements, is a novel narrative technique that facilitates the presentation of compelling stories and information diffusion. As information technology and globalization burgeon, it is vital for fostering the ability of foreign language students to employ digital storytelling. This study selected 59 students majoring in German from Xi'an Fanyi University as the research subjects. Pedagogical and hands-on activities were conducted based on project-based learning to foster digital storytelling-based creative thinking of foreign language students in higher education. The focus was on enhancing their proficiency in employing multimedia to express foreign languages, utilizing the innovative approach of digital storytelling. The study findings revealed that fostering the ability of foreign language students to employ digital storytelling helped to expand the language use scenarios and scope, and contributed positively to improving the listening, speaking, reading, and writing skills of a foreign language, digital information literacy, teamwork and autonomous learning abilities, and creativity.

Keywords: Foreign language specialty; Digital storytelling; Project-based learning; Ability cultivation

1. Introduction

Storytelling, which is an approach to dispersing knowledge, wisdom, and values, has long been extensively employed. Digital storytelling, which is a novel narrative technique developed as multimedia technologies advance, combines the art of storytelling with multimedia elements (e.g., images, audio, videos, animations, and web pages); moreover, it utilizes multimedia tools to convey concepts and involves narrating a story to demonstrate a particular subject [1]. Digital storytelling facilitates the presentation of compelling stories and information diffusion compared with traditional storytelling because it enables the presentation of visualized storylines, and fascinating story scenarios utilizing a plethora of media elements and means of expression [2].

As information technology and globalization burgeon, it is crucial for fostering the ability of foreign language students to employ digital storytelling. Foreign language students tell true life stories to and introduce fine Chinese culture to foreign audiences using digital storytelling to achieve the cross-cultural diffusion of China's stories. This contributes to improving the cultural soft power of China, the global influence of Chinese culture, and the language use ability of foreign language students [3].

When developing the ability to employ digital storytelling, foreign language students should insist on sharpening the listening, speaking, reading, and writing skills of a foreign language and accurately select appropriate words, grammatical constructions, and sentence patterns to effectively improve the accuracy and fluency of linguistic expressions [4]. As digital storytelling involves the application of multiple media elements and technologies, foreign language students should familiarize themselves with digital technologies (e.g., audio and video editing tools, and web design tools) to ameliorate their understanding of digital media and their ability to employ digital media. While exploring new expressions and storytelling know-how and processes, foreign language students can have their innovative thinking and creative skills trained by osmosis.

Based on the storytelling, foreign language ability, and cross-cultural theories as well as project-based learning, pedagogical and hands-on activities were conducted in this study to foster

the ability of foreign language students to employ foreign language-based digital storytelling, thereby exploring effective approaches to fostering the ability of foreign language students in higher education to employ digital storytelling and developing an innovative training model of foreign language professionals.

2. Method

2.1 Study subjects. In this study, 59 juniors majoring in German from two classes at Xi'an Fanyi University were selected to foster their ability to employ foreign language-based digital storytelling in two semesters. The students have essentially mastered the German language system and learned most major grammatical items; however, the fluency, accuracy, and diversity of their linguistic expressions awaited further improvement, and they possessed a low awareness of independently conducting the cross-cultural diffusion. Most students showed a high degree of class participation. Nonetheless, they carried out the activities (e.g., discussions, retelling, and report presentations) in class without utilizing digital channels. As such, they faced considerable challenges in organizing story contents and linguistic expressions and employing multimedia technologies.

2.2 Pedagogical objectives. On the knowledge level, efforts were exerted to help the students systematically understand the characteristics and pattern of digital storytelling to the narrative structure and discourse and cross-cultural awareness of storytelling, learn about everyday subjects and China's stories, and learn German expressions of Chinese culture in the multimodal context to master multimodal reading and writing skills.

On the ability level, efforts were directed to help the students to improve their digital, information, and media literacy, develop digital storytelling-based creative thinking and their ability to express German using multimedia, conduct cross-cultural diffusion and global cultural diffusion using digital platforms, and carry out communication and teamwork.

On the emotional level, efforts were undertaken to help the students to build up positive values, develop an awareness of Chinese culture as well as self-learning and lifelong learning, seek and recognize their self-identities, and appreciate innovation.

2.3 Implementation of pedagogical practices. The students were instructed to produce German-based digital storytelling creations with defined objectives and themes (e.g., promotional videos of Chinese culture, news reports, interviews, and vlogs of everyday life) using project-based learning. The students played a dominant role in various projects, where they independently planned, organized, and managed the project processes and addressed down-to-earth issues [5]. Project-based learning contributed to conducting teamwork and remarkably elevating the efficiencies of retrieving information, pooling data, and producing content [6].

2.3.1 Introduction and Preparation. In the pedagogical practices, multimedia materials (i.e., images, videos, sounds, animations, and web pages) were utilized when possible with a focus on selecting typical and characteristic China's stories to instruct the students to perform learning, analyses, and imitations. The students were encouraged to speak German, write in German, and deliver speeches in German based on pedagogical materials and their respective idea and creativity, and to analyze the typical cases, where digital storytelling was employed, to learn the application and presentation skills of various digital media tools.

The arrangement of tasks progressed from simplicity to complexity, gradually escalating in difficulty. In the routine pedagogical practices, students were encouraged to read digital texts (e.g., German blogs, and German news), and to carry out writing activities using digital media, such as publishing German blogs, making posters, and conducting image-based storytelling. For instance, image-based storytelling was pedagogically demonstrated, as it enables concise and intuitive presentations, is technically easy to employ, and can help to transcend linguistic and cultural boundaries so that audiences in different countries and regions can understand story contents; moreover, single images or a series of images accompanied by a few descriptions can be readily uploaded to social media to facilitate cultural diffusion and exchanges. Afterward, students were instructed to gradually begin filming their video stories.

2.3.2 Design foreign language-based digital storytelling projects. The teachers and students engaged in extensive communication to design foreign language-based digital storytelling projects that aligned with the students' proficiency levels.

The following aspects were considered for formulating project contents:

Design digital storytelling projects based on intensive reading course themes. Adequate intensive reading courses with a focus on facilitating an in-depth understanding of the text details as well as linguistic expressions in the texts were provided, so that the students could effectively understand the meanings of German words and cultural backgrounds to accurately express their perspectives and emotions using digital storytelling. For instance, the students were instructed to shoot a vlog entitled "One Day of Mine" to display the true everyday life of a higher education student in China when a course themed on extracurricular life was taught, shoot a vlog entitled "Good Things Recommended" to demonstrate the charm of products manufactured and made in China when a course themed on German industry was taught and to introduce Chinese literature and compare it with German literature when a course themed on German literature was taught. Most students introduced the internationally popular novels *The Three-Body Problem* and *The Wandering Earth*, representing typical China's stories, as well as the bestselling authors in China (e.g., Liu Cixin), contributing positively to cultural diffusion.

Consider cross-cultural attributes, acceptance willingness, and emotional experience of the audience during project selection. The students realized through previous learning that digital storytelling enabled the presentation of stories in an interactive and immersive way. Emotional sharing remains fundamental to provoking empathy. Based on an emotional sharing-based storytelling strategy, the characters or plot of a story may emotionally resonate with the audience [7]. Therefore, the students were instructed to go through the news released on major news sites in China and beyond in recent one month and to single out the most frequently clicked topics. The students found that topics about environmental protection, the disadvantaged, humanitarianism, and climate change were the shared concerns of people from diverse cultural backgrounds. As such, crafting stories based on the above topics was highly probable to arouse the empathy of the audience.

Consider various language proficiency levels of students during project selection. Advanced, innovative, and challenging articles were produced for students with a high language proficiency level, whereas entertaining and informative articles, facilitating the memorization of linguistic knowledge, were produced for students with a general language proficiency level. For instance, a complex article themed on "Chinese Culture", where difficult and unfamiliar words were available, and "Dig and Dig", which went viral on the Internet and could facilitate practicing pronunciation, rhythm, and memorization, were made available for students to choose from in a practice.

2.3.3 Promoting learning by competition. Promoting learning by competition can effectively stir up students' interest in learning and enhance their learning motivation. A growing number of competitions concerning foreign language-based digital storytelling have been held for higher education students, including the highly influential "Uchallenge" Short Video Competition for International Communication and "Higher Education Press Cup" "Tell China's Stories well in Foreign Languages". In the college with which the author is affiliated, two micro-video competitions entitled "Tell China's Stories well in Foreign Languages" were held. Participating in competitions can help students to improve their learning initiatives, sharpen their expertise, and develop team spirit through cooperation and innovative thinking through seeking breakthroughs. Competitions function as platforms where students can display and promote their digital storytelling creations. Once students are rewarded and recognized for demonstrating their abilities, they will be more motivated to pursue excellence [8].

2.4 Evaluation and reflection. Evaluation plays a role in guiding the cultivation of and assessing the ability to employ digital storytelling. Academics can design evaluation scales based on various evaluation indicators to objectively test and examine the mastery of given knowledge, so that students can conduct target-oriented learning. Students' self-evaluation is conducive to self-promotion and self-improvement, while peer evaluation contributes to identifying problems,

judging the degree of acceptance and resonance, and enhancing social adaptation [9].

Reflection and discussions are conducive to improving courses. Specifically, students engage in the storytelling assessment performed by themselves or other panel members to air their opinions. Feedback from students helps to improve the course quality as well as the quality and efficiency of subsequent pedagogical activities [10].

For instance, students' creations were classified into two categories during the production of videos themed on "Chinese Culture": (1) use of existing videos dubbed into German or produced by integrating materials for introduction; (2) use of independently shot videos narrating self-feelings or self-stories. The students conducted discussions in the evaluation process:

What are the differences between introducing Chinese culture using foreign languages and telling China's stories in foreign languages? How can compelling stories be crafted? How can stories be told in a way that is acceptable to foreign audiences?

The students concluded through communication and analysis that two types of writing were used for introducing Chinese culture using foreign languages and telling China's stories in foreign languages. Expository writing is used for introducing Chinese culture using foreign languages, as it is objective and seeks to factually illuminate stories, such as introducing tea culture and the Dragon Boat Festival, so that foreign audiences gain an understanding of Chinese culture. A narrative is used for telling China's stories in foreign languages, as it is conveyed by a narrator from a subjective perspective, and focuses on telling things that have happened or telling self-stories or interview stories with plenty of twists and turns, emotional resonance, and Chinese values.

Given the fact that the effects of watching movies differ in the presence of different plot arrangements, the students recognized that a compelling story could be crafted based on the plot arrangement, empathy provoked by making the audience sympathize with the protagonist of the story to generate a powerful emotional resonance, and linguistic expressions corresponding to those of the audience.

3. Effects

After two-semester cultivation and practices, the students completed digital storytelling-based tasks using various digital modal combinations. Specifically, the students produced 255 German videos and 113 image-based storytelling creations, of which 37 videos and 102 images were uploaded to various social platforms and commented on by hundreds of viewers and watchers.

In contrast to the early stages of training, the students' German-based digital storytelling creations exhibited a marked qualitative advancement. This advancement was evident not only in terms of content depth and breadth but also in the impressive strides made in overall quality. This positive trend can be attributed to the enthusiastic involvement of students in digital creation, which has emerged as a powerful vehicle for cultural dissemination.

These digital storytelling creations are presented in various forms, including illustrated blog articles and compelling videos. The creations are closely tied to everyday life, resonating more effectively with the audience. For instance, students' video creations have evolved beyond mere integration of materials and voiceovers; they have gradually begun to autonomously structure narratives, crafting plotlines that are imaginative and suspenseful. This process not only demonstrates students' adeptness in utilizing digital media tools but also underscores their comprehension of narrative artistry and innovative prowess.

As their digital production skills continue to advance, students are showing a growing eagerness to showcase their creations on social platforms, seeking to connect and engage with a wider audience. This proactive sharing underscores their belief in their creative work and their enthusiasm for digital media communication. Moreover, the feedback they receive on their creations has evolved beyond simple likes, words of encouragement, or surface-level evaluations. Instead, it now encompasses more substantive discussions about the content. This transition has led to a noticeable increase in the frequency and depth of interaction between students and their audience.

In the end, all participating students were asked to fill out a questionnaire to assess whether the activities and methods for fostering the ability to employ foreign language-based digital storytelling were effective and appropriate, respectively.

The Figures below show the analytical results of the major contents of the questionnaire.

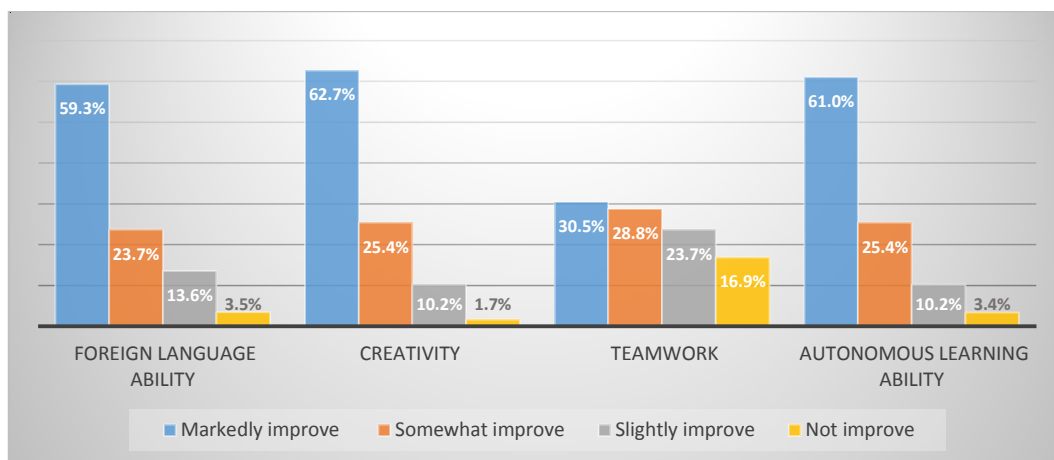


Figure 1. Survey Results: Improved Aspects

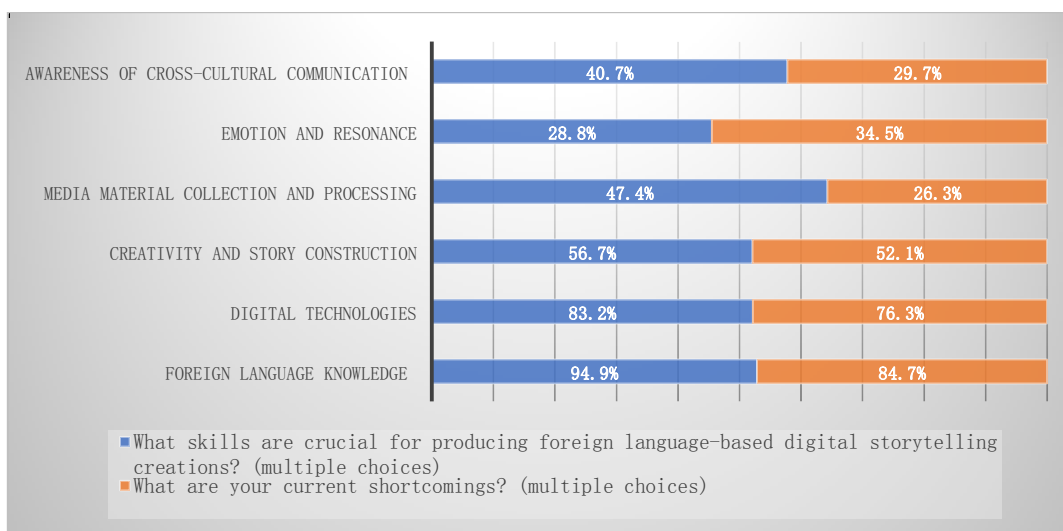


Figure 2. Identifying Areas for Future Improvement in the Fostering Process

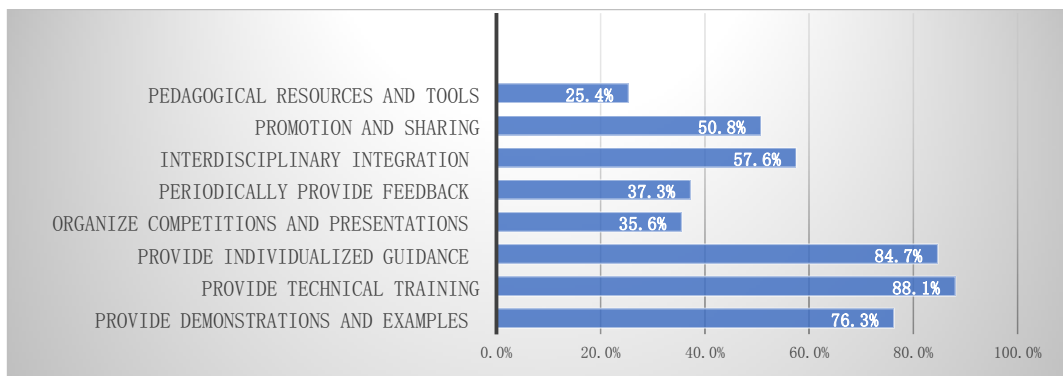


Figure 3. Ability Discrepancy Analysis

According to the students' digital storytelling creations and questionnaire results, digital storytelling contributed positively to improving the listening, speaking, reading, and writing skills

of German, autonomous learning ability, and creativity, and to fostering teamwork. The students generally acknowledged that intensified attention should be given to technical training, individualized guidance, and provision of demonstrations and examples when the ability to employ digital storytelling is fostered, and that they underperformed to application of digital technologies and German knowledge and they should improve the above shortcoming.

4. Conclusion

Fostering the ability of the students to employ foreign language-based digital storytelling helped to effectively promote their deep learning of German, improve their linguistic competence and communication effects, and expand the language use scenarios and scope. Additionally, the students' digital literacy and information literacy were markedly improved. Specifically, the students completed digital storytelling-based tasks using various digital modal combinations. Unlike traditional single reading and unilateral acceptance models for paper-based texts, the model of sharing short videos on new media platforms enabled stories to be interactive, dynamic, and participatory. Consequently, the students could proficiently exercise innovative thinking and express their ideas and creativity.

In summary, fostering the ability to employ foreign language-based digital storytelling, which is conducive to improving students' hands-on, innovation, problem-solving, and cross-cultural communication abilities, is a well explored research area for cultivating foreign language professionals.

Acknowledgments

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