

VIETNAMESE 10TH-GRADE STUDENTS’ DIGITAL LITERACY AND COLLABORATION SKILLS IN TECHNOLOGY-SUPPORTED PROJECT-BASED LEARNING

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Introduction

In the 21st century, English, serving as a lingua franca, plays a key role in several fields from international trade, diplomacy, to scientific publications as well as publishing newspapers and books (Rao, P. S., 2019). Because of its prevalence, English proficiency is considered a prerequisite for any nation to integrate with the rest of the globe. In the context of globalization, the Vietnamese government implemented Decision No. 2371/QĐ-TTg, thereby ambitiously moving English from a foreign position towards a second-language role in schools for the period 2025-2035. Therefore, high-school learners are now expected to use English in exchange activities and experiences inside and outside school. In response to this movement, several student-centered methodologies have been widely embraced in Vietnamese classrooms, one of which is project-based language teaching, as seen in the Project sections of the Global Success textbooks. Although project-based learning is reported to enhance language use in meaningful and authentic contexts through collaborative tasks, challenges such as unequal group contributions are still present when students conduct English projects (Nhan, L. T., 2025). Meanwhile, digital literacy, a dominant skill of the 21st century, is believed to have a positive effect on students’ teamwork as those with stronger digital competences may collaborate better in academic tasks (Salazar Palomino, Sandra, et al, 2025). Therefore, this study aims to investigate the correlation between digital literacy and collaboration skills among Vietnamese 10th-grade students at Le Quy Don High School for Gifted Students in Gia Lai when they carry out technology-supported English projects.

Theoretical Framework

Digital literacy

According to UNESCO (2018), digital literacy is the ability to access, manage, understand, integrate, communicate, evaluate and create information safely and appropriately through the use of digital tools, which includes competences that are variously referred to as ICT literacy. In the current age of digital transformation and big data, digital literacy has become an essential skill for global citizens to possess in the 21st century in the creation of information media utilizing appropriate digital tools. Indeed, The World Economic Forum (2016) presented a framework of 16 essential skills of the 21st century, divided into three categories: (1) *foundational literacies* that involve the application of core skills such as scientific literacy and ICT literacy to daily tasks; (2) *competencies* such as critical thinking, creativity, and communication in approaching complex contexts; and (3) *character qualities* such as social and cultural awareness that will help learners navigate their changing surroundings. Nevertheless, it should be noted that discrepancies in digital skills among students are still present and can hinder students’ navigating new software or platforms, which, from their perspectives, can be addressed with additional support from teachers (Soufghalem, A., 2024).

Collaboration skills

Collaboration is characterised by the joint effort to accomplish a shared goal, requiring effective communication, teamwork, responsiveness or a willingness to actively participate in and contribute to the assigned responsibilities (Hamilton et al., 2021). As a result, it is evident that students can learn how to negotiate, produce feedback, assess and reflect on both themselves and others, thus enabling them to generate innovative ideas, finish assignments, and create projects when working together. Important as it is as a skillset of the 21st century, teamwork remains difficult to be consistently achieved among students in group projects due to the presence of inexperienced members, uneven contributions or team disputes (Quek, et al. 2023, Nhan, L. T., 2025). As the complexity of teamwork in a technology-driven environment increases, effective collaboration in the digital age should not be separated from adequate digital literacy skills. Several studies have been carried out to prove the correlation between digital literacy and collaboration skills. For instance, Soufghalem’s 2024 case study finds that the frequent use of digital platforms enhances students’ ability to collaborate on projects, share ideas, and provide constructive feedback, while Salazar Palomino, Sandra, et al., (2025) noted that students improve their collaborative skills with the optimization of technology.

Project-based language teaching

According to Anazifa & Djukri (2017), project-based learning (PBL) is a learning model that engages students in real-world problem-solving activities, allowing them to take ownership of their learning to create real products. In this regard, Stoller, F. L., & Myers, C. C. (2019) introduced the five-stage framework explicitly recognizing the importance of students’ language-development needs. The five stages, which help prepare teachers to plan, implement and assess projects, are preparation, information gathering, information process, information display, and reflections. Although PBL has been proved to be useful in helping students apply what they have learnt to real-world issues, assisting assimilation of knowledge, and identifying learning gap, some students still expressed their dissatisfaction with the amount of time and effort invested in project work, as well as the interpersonal conflicts in the teams (Quek, et al. 2023).

The “Global Success” textbook series, chosen as the main English textbook series under the Decision No. 3588/QĐ-BGDĐT declared by MOET, aims to enhance students’ English proficiency through a balanced integration of language skills. Regarding “Tieng Anh 10 – Global Success”, the textbook concentrates on 4 main themes: “Our Life”, “Our Society”, “Our Future” and “Our Environment”, divided into 10 units and 4 reviews. Each unit includes 8 lessons, the last of which is Looking back-Project. The Project section encompasses different types of product such as research, surveys and ecotour plans, each tailored to a certain topic.

Research Questions

This study addresses the following research questions:

1. How do Vietnamese 10th-grade students describe their digital-literacy practices before and after participating in technology-supported English projects?
2. How do Vietnamese 10th-grade students describe their collaboration skills before and after participating in technology-supported English projects?
3. What opportunities and challenges do the students experience when using digital tools to collaborate and complete their projects?
4. Is there a correlation between students’ self-assessed digital literacy and their self-assessed collaboration skills in the context of technology-supported English projects?

Methodology

To achieve the research objectives, a mixed-method approach is employed, combining the collection and analysis of both quantitative and qualitative data. First of all, after the first English project, a semi-structured questionnaire was utilized to examine the students’ self-assessed digital and collaboration skills, the digital tools they used and the challenges they encountered during the project. Based on the collected data, the teacher then introduced and guided students on how to use certain digital tools essential for their projects. At the end of the school year, a semi-structured questionnaire and focus groups were employed to further investigate the students’ self-assessed digital and collaboration skills. Regarding the participants, both semi-structured surveys were distributed to 65 tenth graders at Le Quy Don High School for Gifted Students in Gia Lai, with 16 of them selected for the focus groups. It should also be noted that, due to the time constraints and assignments from the other school subjects, only four out of ten projects in the textbook were assigned to the students. The projects were from Unit 3 - Music; Unit 5 - Inventions; Unit 8 - New ways to learn; and Unit 10 - Ecotourism.

Key Findings and Implications

Digital literacy and collaboration skills

Subskills	Pre-survey		Post-survey	
	Mean	SD	Mean	SD
1. Searching information online	2.461	1.336	3.586	1.198
2. Evaluating information reliability	2.415	1.088	3.077	1.108
3. Designing slides	3.554	1.238	4.062	0.899
4. Creating videos	3.338	1.215	3.862	0.964
5. Sharing files and collaborating online	3.062	1.059	3.615	0.947
6. Communicating with team members	2.508	1.187	3.062	1.043
7. Assigning roles	2.831	1.387	3.138	1.298

Before the intervention, students were not confident in their ability to search and evaluate material, as well as how they interacted with other team members and allocated tasks. However, there was a positive change in students' self-assessed digital competencies and collaboration skills following the intervention, with clear improvements in searching and evaluating information, online collaboration and communication. Furthermore, participants of focus groups reported that there were more interactions with team members when they became more adept at using collaborative platforms. They also learned how to share responsibilities based on each member’s strengths and solve disagreements calmly to achieve common goals.

Digital tools

In both surveys, Canva was the most popular tool the students opt for designing their projects, while Zalo was favourably used by the groups to discuss their projects outside the classroom. Although Microsoft Word was still appreciated, Google Docs’s popularity increased after the introduction, with participants stating that the platform helped them share their ideas simultaneously in real time. The qualitative responses also indicate that working on English projects provided students with opportunities to discover and experiment with a variety of digital tools. Specifically, they reported using AI-based tools such as ChatGPT, Gemini and Quillbot primarily for brainstorming ideas, searching for information, and improving their English writing, while CapCut were used to create and edit videos.

Nonetheless, challenges such as information overload and unfamiliarity with certain digital tools persisted during their English projects, leading the students to recommend that the teacher provide detailed tutorials or examples of how to use digital tools effectively before beginning projects.

These findings suggest that technology-supported English projects can strengthen Vietnamese 10th-grade students’ digital literacy, thereby increasing their collaboration skills. Moreover, English teachers should provide step-by-step tutorials and detailed examples on how to use certain collaborative platforms and AI tools before students begin their projects. In this way, teachers can implement effective project-based language teaching in the Global Success program, helping students develop the digital and collaborative competencies required for real-world communication.

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