Experiential learning using short-term global virtual team projects

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Abstract

Institutions of higher education are facing new challenges when preparing their graduates for today's global workplace. Digital communication and project management skills as well as intercultural competence are imperative in light of the transitions to remote and virtual teamwork. Global virtual team (GVT) projects provide students with experiential learning opportunities, increasing their chances at employability and professional success. This qualitative study involves a client-based GVT project conducted over the course of four semesters and engaging approximately 400 students enrolled at universities in Germany and the United States. Responses regarding students' perceptions of the project's value for self-efficacy and employability confirm the importance of incorporating short-term GVT projects in university curricula in order to offer students opportunities for professional development.

Keywords: Global virtual team projects; digital communication competence; employability; experiential learning in higher education; interdisciplinary project work.

1. Introduction

More now than ever, business schools are facing the pressure of adequately preparing graduates for the contemporary global workplace. In the post COVID-19 pandemic era, the focus for higher education has turned to imparting skills and abilities conducive to remote work. The skills fundamental for post-pandemic employment include digital fluency, virtual project management skills, as well as intercultural communication competence (Crawford, 2021; Elliot, 2021; Engler, 2020).

An effective method for developing these valuable skills in students involves engaging them in short-term, global virtual team (GVT) projects (Burleson & Peters, 2021; Swartz & Shrivastava, 2021). Over a designated period, students work on projects with their peers in other countries using digital communication channels. Ideally, these projects are embedded in the syllabi, and instructors share similar learning outcomes and assessment criteria. The students as well as the focus of the projects may involve similar disciplines or be of cross-disciplinary nature.

Short-term GVT projects belong to a growing movement of incorporating Virtual Exchange (VE) at institutions of higher learning, also known as Collaborative Online International Learning or COIL.1 COIL projects offer students the opportunity to gain valuable international experience (Barbosa, et al., 2019; Starke-Meyerring, 2010; Swartz & Shrivastava, 2021). VE has been especially valuable in providing students, who would otherwise not be able to take advantage of study abroad programs, experiential learning opportunities for intercultural exchange. During the pandemic, when students were unable to participate in study or internship abroad opportunities, GVT projects filled the void (Logemann et al., 2022).

This study investigates the value of short-term GVT projects for developing business students' skills and thus increasing graduates' employability. The GVT projects under investigation were carried out several times over the course of several semesters between 2020 and 2022. The projects involved approximately 400 students enrolled in an undergraduate business administration program at a German university of applied sciences. These students collaborated with peers from a partner university in the United States of America over the course of six weeks on a project involving the design of an app. Randomly chosen and heterogeneous teams of five to six students communicated through the collaborative platform SLACK, ZOOM and other digital communication channels in order to create a collaborative virtual presentation. After the project, the German students submitted reflective papers in which they answered questions regarding the relevance of such projects.

¹ Collaborative Online International Learning (COIL) is a pedagogical approach, which includes projects involving participants in different countries utilizing digital communication channels (https://coil.suny.edu/).

The study involves a qualitative investigation of students' responses to questions about their project experiences and the project's significance for preparing them for future employment. The findings underline the importance of digital and intercultural competence for the post-pandemic global workplace, as well as illustrate how experiential learning through GVT projects can contribute to students' development of this skill set. Finally, the results encourage higher education instructors across all disciplines to incorporate COIL projects into their curricula.

2. Background

GVTs refer to geographically and culturally diverse teams that have minimal face-to-face contact, and communicate primarily through digital channels, utilizing collaborative platforms such as MS Teams or SLACK (Chudoba & Maznevski, 2000).2 Their team members represent a wide diversity of backgrounds, national and management cultures, global variations of English and professional jargons (Neely, 2013).

Although virtual team projects can have a long duration, there has been a growing tendency towards short-term, temporary projects, requiring team members to change their constellation often as projects end and new ones begin (Hollema, 2020). As a result, team members must continually adapt to new teammates with different cultures, personalities and priorities (Edmonson, 2012; Gupta, 2018; Hollema, 2020).

GVTs face many challenges, which include working across diverse time zones, overcoming cultural barriers while communicating exclusively through digital communication channels. The lack of non-verbal cues creates further obstacles to working across cultural differences and building rapport. Furthermore, the short duration of the projects requires that team members develop "swift trust" (Crisp & Jarvenpaa, 2013).

In order to overcome these challenges, a specific set of skills, including digital communication and intercultural competence, is required (Makarius & Larson, 2017). Underlying these attributes is team members' self-efficacy in dealing successfully with digitally and culturally diverse environments (Hollema, 2020). GVT projects embedded in the curricula of higher education institutions ensure that graduates bring the skillset required for today's global workplace (Crawford, 2021; Brewer et al., 2015; Leask & Bridge, 2013; Starke-Meyerring, 2010).

² Microsoft Teams and SLACK are software solutions, which allow for the forming of teams according to projects, as well as the sharing of files, messaging and video conferencing among team members.

3. Methodology

3.1 The Project

Over the course of six weeks, teams of German and American students worked on a client-based project for a leading global tech company. The students collaborated across a six-hour time difference using digital communication and collaborative platforms (ZOOM, SLACK, and WhatsApp). The project involved creating an app, which was meant to solve an issue such as parking on campus, incorporating sustainability efforts at their universities or finding study buddies. In order to support them in the conception of the app, the students took part in virtual software workshops carried out by the tech company. The apps were presented in the form of a virtual pitch.

The learning objectives of the GVT project included developing students' project management and digital communication skills, as well as honing their intercultural competencies. The instructors communicated regularly before, during and after the project; they synchronized the tasks, the deadlines and the expectations. The projects were embedded in the respective course modules, and the deliverables constituted at least one third of the students' final grades.

The pitches were evaluated with a grading roster using the same criteria. These involved the approach to solving the issue, user-friendliness, as well as features and creativity. The top three pitches were presented to a jury of experts from the tech company and external professionals for the final ranking, who provided in-depth feedback on the finalists' concept and presentation. All students received a certificate as well as a digital badge, which could be posted to social media platforms such as LinkedIn, upon completion of the project.

3.2 Research Method

In order to assess the success of the project in achieving the learning outcomes, students from the German university were asked to submit a debriefing on their project experience upon completion of the project. This debriefing, also referred to as reflective paper, involved two main questions:

- 1. What impact do you think these types of projects have on your ability to communicate effectively in an online environment and to lead virtual teams?
- 2. How do you foresee employers valuing the intercultural communication skills developed in projects such as this in your case and in general?

4. Results

4.1 The Impact on Communicating in an Online Environment

The respondents overwhelmingly agreed that GVT projects developed their online communication skills. In addition to an improvement in their English language, students noted their experience in overcoming communication barriers. This was especially true concerning non-verbal communication across digital channels. Although these students belonged foremost to the digital native and social media generation, the majority pointed out the benefits of working online with people they did not know and were different from themselves.

I learned to be more open and direct in my communication, because everything took place online, and you often couldn't recognize and interpret the direct reactions of the team members. It also helped me to be more open with people I don't know or don't know personally.

Furthermore, students acknowledged that participating in GVT projects offered them the opportunity to recognize challenges they may face working remotely in future and to develop strategies for dealing with those challenges.

Through this project I had the opportunity, for the first time in my life, to work in a completely online environment with people outside of my country. Thanks to this experience I now have a number of difficulties in my head that may occur in such a digital environment and various tried and tested strategies for overcoming them.

In general, students concurred that engaging in the GVT project developed their self-confidence and helped them discover abilities that they were previously unaware existed in themselves.

... in the course of this project, I completely led a team for the first time. This experience is very valuable for me, as I have realized that I am better at this, than expected. As a result, I can trust myself more in the future and lead the group work with more self-confidence.

Almost all students appreciated the opportunity to have taken part in a GVT project during their studies, and felt that such projects should be an integral part of their studies in order to develop the skills they would need later on in their careers. Some students recognized also the gains they had made on a personal level.

An environment in which mistakes are allowed and people meet at eye level without hierarchies is a valuable platform for experiencing everyday life in international projects. The basics of communication, the use of different communication media as well as structured problem solving, are taught in projects of this type using real

situations. The ability and competence to communicate effectively in an online environment and to lead virtual teams can be learned in this way very effectively.

Another student valued the social aspect of the project:

For me personally this experience is priceless! I am really grateful for the given opportunity to be a part of this international project and to work with people, who I would have otherwise had no chance of meeting! And last but not least, I am thankful for the new friendships, that we managed to build!

4.2 Student Perceptions on the Value of GVT Projects for Employers

The majority of student responses agreed that future employers value the skills they have acquired through having participated in such projects.

Considering that one day I would like to work as a tax consultant or an auditor in a big company, with offices all around the world, communicating with people from many different cultures will be an integral part of my everyday work. Participating in such a project has given me a glimpse at what my future work life might look like. I learned a lot about how to overcome different barriers, such as different time zones, how Americans deal with different complications and how they search for their solutions. Having this project on my resume may, in fact, one day be a decisive factor if I will get the job that I want or not.

The fact that participation in a GVT project during their studies could provide them with a competitive advantage when applying for a position at both national as well as multinational companies was pointed out continually in the responses.

As companies are placing more and more emphasis on these kinds of skills, I consider these skills to be very well recognized. This is mainly due to the fact that an increasing number of companies have a lot of contacts abroad, especially due to globalization. This type of project shows the company, that you can also be deployed internationally and keep a cool head in special circumstances.

All in all, students' responses emphasized the value of GVT projects for exposing them to the challenges of working in a global environment and developing the skills necessary for success in their future careers, thus increasing their prospective employability and chances of success. As one student described it:

This group work could have been a pioneer what we will have later in our professional life. The world is growing together. The world of work has also become more international. This makes intercultural competence more important in order to be successful in a global working environment.

5. Discussion

Research conducted on students engaging in GVT projects has found that GVT projects are conducive to developing students' skills in digital communication, virtual project management skills and intercultural competence, thus preparing them for the global work environment (Crawford, 2021; Swartz, et al., 2021; Hackett, et al., 2023). This study's qualitative responses further substantiate these findings. Furthermore, this study shows that students recognize the potential of GVT projects for acquiring these skills and increasing their chances of employability and success at the workplace. Thus, this study underlines the need for incorporating GVT projects into university curricula.

Additional research into the subjects' career trajectories would provide valuable insight into determining the impact of GVT projects on developing students' skill set and improving their employability as well as job performance. Until now, follow-up studies have not been carried out on GVT project participants. The extent to which interdisciplinary GVT projects benefit students is another area for future research. Further studies may guide instructors on the kinds of GVT projects suitable for various learning outcomes.

6. Conclusion

For instructors and students, GVT projects can be both rewarding and time-consuming. Instructors must work closely together to coordinate the assignments, monitor progress and evaluate the learning outcomes. At the same time, students face multiple challenges of finding meeting times, working together on collaborative digital platforms, and bridging language and cultural barriers. However, student responses have shown that the rewards are greater than the challenges. Embedding even short-term GVT projects in university curricula would offer students the opportunity to acquire the skills necessary to overcome those challenges, thus better preparing them for the global work environment.

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