# TEACHERS' PERCEPTIONS ON INTERNATIONAL ONLINE TEAMWORK AND HOW IT CAN BE IMPROVED

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### **Abstract**

In-service and preservice teachers were invited through an online platform (VALIANT) to participate in six to seven-week free online teacher development 20-hour courses with the aim to test the feasibility of a teacher development model that not only reunites novice and experienced teachers, but also promotes peer learning among them on concrete situations that happen in their classroom and their own teaching experience. This study focuses on one such course on Diversity and Inclusion in Primary Classrooms that brought together teachers from several European countries to develop their knowledge and competence on how to deal with diversity and inclusion issues through cooperative learning. At the conclusion of the VE editions of the course, nine participating teachers volunteered to be interviewed online. The main gains pointed out by the interviewed teachers are connected to the development of intercultural competence and learning; the ability to look at their and others' classrooms and education in general from different perspectives; the perusal of digital solutions they could reuse in their classrooms; and the development of social interaction and bonding with other teachers as essential for peer learning. The main challenges experienced when working in a team online were related to distributing and keeping deadlines; equal commitment to tasks, time management; and engaging with one another effectively despite only knowing each other virtually. Interviewees suggested several strategies to cope with the challenges of online teamwork that impact course design and the facilitators' and participants' roles. The main conclusion is that increased scaffolding is needed for team leadership and shared leadership to help virtual teams collaborate more effectively and cohesively across cultures.

Keywords: Teacher development, online teamwork, virtual team, digital collaboration, shared leadership.

## 1. Introduction

VALIANT - Virtual Innovation and Support Networks for Teachers is a EU-funded policy experimentation for the period 2021-24 which aims at supporting in-service teachers, student teachers, teacher trainers and educational experts in collaborating online and networking to innovate their practices, enhance their motivation, and improve their teaching resources through facilitated Virtual Exchanges. Virtual Exchanges (VE) are defined as educational approaches to connect people from different cultural backgrounds in online collaborative learning. Helm & O'Dowd (2020) highlight them as a tool for promoting 21st century skills that are critical for the workplace, such as digital literacy and intercultural competence (Helm & O'Dowd, 2020). Sauro et al (2020, p. 4) also describe them as a "rich approach to fostering collaborative communities of practice among in-service teachers, which can support not only teachers' professional development but also their motivation and need for professional networks". As such VEs constitute a powerful tool for teacher education.

VALIANT adhered to VEs to mitigate several identified problems in initial teacher education and in-service teacher professional development in research studies and official reports by the EU (OECD 2019; European Commission 2013; 2016; 2017a; 2017b; 2017c; 2018; 2019; 2020; European Commission/EACEA/Eurydice 2015; 2021), namely isolation of teachers due to teaching in a rural isolated area where access to professional development and peer support is difficult; difficulty identified by teachers in gaining access to professional development courses that promote international collaboration with other teachers to engage their students in authentic collaborations around the world; lack of motivation and support of young teachers that shakes their intention to pursue a career in teaching; and "professional isolation caused by lack of networking and collaboration opportunities with other colleagues and experts" (Sauro et al 2021) in the framework of international and European collaboration.

As a policy experimentation, VALIANT aims to "test the efficiency of Virtual Innovation and Support Networks as an approach which will contribute to overcoming teachers' sense of isolation and low motivation in rural areas and isolated contexts and also to developing teachers' ability to operate effectively in online international networks of professional collaboration" (Sundqvist & O'Dowd 2022, p. 1). Another aim is to test "the efficiency of this form of Virtual Exchange for providing students of Initial Teacher Education with access to the realities of the teaching profession through regular interaction with in-service teachers integrated into their study programme" (ibid.). Through several rounds of 6 to 7-week long courses on several topics, VALIANT creates virtual innovation support networks of teachers in Europe and other parts of the world, who come together for approximately 20 contact hours to collaborate in international teams, learn and design educational solutions for problems they encounter in their educational contexts, which they can directly implement in their classrooms, and to develop professionally.

There are several modalities for VALIANT VE courses. Some bring together pre-service and in-service teachers who act as mentors of the former (teachers as mentors); others join in-service and pre-service teachers with expert teachers to learn about specific topics (teachers as sources of experience); still other courses congregate in-service teachers who collaboratively learn about a concrete problem from their classrooms (teachers as co-learners); or courses that guide in-service teachers on how to run international projects (teachers as international collaborators). All these modalities of virtual exchange follow a common design. They run on a virtual platform (Moodle) and they are exclusively online, with online video conferencing synchronous weekly sessions of 1-2 hours (Zoom) combined with asynchronous sessions during which participants are expected to collaborate with one another as a team using online apps and tools at their discretion. However, rather than approaching the overall results for the project objectives, this paper will specifically address teachers' perceptions on international teamwork to perform collaborative tasks. While VEs in general promote positive collegial interaction, the success of a VE seems to be ultimately dependent on effective organization of online teamwork.

This study focuses on one particular VE on the topic of *Diversity and Inclusion in Our Classrooms* that brought together teachers from several European countries to develop their competence on how to deal with diversity and inclusion issues through cooperative solution finding for concrete classroom problems. To the exception of one pre-service teacher, all participants were in-service teachers and the modality of VE used was 'teacher as co-learner'. The facilitators were several teacher educators who worked either alone or as a team. This free online VE had 4 editions: two parallel editions in the Winter semester 2021 (one for primary teachers, facilitated by 4 teacher educators, and the other for secondary teachers, facilitated by 1 teacher educator); one edition in the Spring 2022, facilitated by 4 teacher educators; and the fourth edition in the Winter semester 2022, facilitated by 2 teacher educators. The teachers enrolled in the VE through the VALIANT platform on the VALIANT webpage. Table 1 shows numbers of participants per VE edition to a total of 49 and the number of interviewees from each edition involved in the present study.

1st VE edition primary	1st VE edition secondary	2nd VE edition	3rd VE edition
18/5 interviewees	6/0 interviewees	9/2 interviewees	16/2 interviewees

Table 1. Numbers of participants and interviewees in the editions of the VALIANT VE.

## 2. Objectives and methods

During the VE, there were several activities that required team building online. During the first synchronous online session, teams were assembled according to interests manifested by participating teachers on which topic of Diversity and Inclusion they would like to collaboratively work on. The facilitators distributed themselves among the teams so as to support understanding of tasks and deadlines. In subsequent sessions over the 7 weeks, teams were gradually granted more autonomy from facilitators in synchronous sessions. In two asynchronous sessions, teams were expected to organize their work autonomously, and facilitators did not participate. In the last two synchronous sessions, participants were invited to build new teams ("interest groups") and new topics to develop collaboratively on their own.

The objectives of this study were to find out 1) what challenges VE participants experienced during their international teamwork online and 2) what improvement strategies and suggestions they propose. Altogether nine interviews with participating teachers were conducted face to face online using video conferencing. The interviewees received the questions beforehand so they could carefully consider their impressions and perceptions on gains and challenges related to the course as well as prepare recommendations to course developers. Two interview protocols were used: one for the first VE round which had a specific question dedicated to online teamwork and another protocol for the 2nd and 3rd round

interviews with broader questions. The interviews were voluntary, they were conducted 1-3 weeks after the completion of the respective VE round, and they lasted for 30-60 minutes each.

The interview data was transcribed and then analysed through a qualitative content and thematic analysis process (Nowell et al., 2017; Merriam & Tisdell, 2016; Guest et al., 2012) consisting of these steps: 1) organizing the data by focusing on teachers' perceptions on international online teamwork, 2) coding the data according to key trends and themes, and 3) interpreting and summarizing the main results with focus on identified challenges and strategies for improvement. To improve the reliability of data analysis and widen the impact of the study's key results, there were two researchers involved in analysing and interpreting the VE experience: one facilitator from VALIANT and one observer from Erasmus+ KA2 project LEARN&CHANGE – Collaborative Digital Storytelling for Sustainable Change, focused on digital collaboration and innovation across cultures.

#### 3. Results

According to the interviews, learning to work together online as an international virtual team presents challenges with team building and digital and cross-cultural communication.

## 3.1. Challenges and strategies in building a virtual international team online

**Building a team online:** Virtual and online team building is more stressful than in-person collaboration at the outset of a teacher development course, because participants do not know each other's strengths and weaknesses. Distributing roles and choosing a team leader created feelings of awkwardness since getting to know each other online requires more time than in face-to-face in-person contexts. For some participants working in a virtual team was difficult essentially because they did not know the other team members well.

**Breaking the ice online**: Teachers reported a need to experiment with ways of knowing each other better. They felt they needed some time online in breakout rooms to get better acquainted and find points in common from which to establish a rapport. Several participants highlighted the importance of informal chatting time (about personal things) to develop a feeling of belonging with the group: "having that time just for chatting, you know, because that breaks the ice, because we are from different countries, different cultures" (R112).

**Team size:** Participants felt that keeping the team small (up to 5 participants) was key to success. Some participants highlighted how working in a team of 3 was easy because it allowed team members to connect and it developed a sense of familiarity: "it was like sitting at our desks in the teacher's room and having a chat" (R1I2). Bigger teams were more likely to cause apprehension because starting a conversation becomes more difficult and building team cohesion takes more time.

Task distribution and management: Several problems were identified in distributing tasks and working together online such as: procrastination; leaving everything at the last minute; or finding the motivation. When working online, participants felt uncertain of the tasks they needed to accomplish: "I wasn't sure if I was actually meant to be doing something about that" (R1I4). Another problem identified was that when working as a team in breakout rooms, team members had difficulty focusing on the task and diverged into small talk. Some participants also felt they had taken on too much responsibility for tasks that should have been shared with other team members.

The role of the team leader: A leader was recognised as important in the team as the one who initiates emails, sends instructions, and encourages the team to move forward. Choosing a leader for the team was found particularly hard and decisions were not always based on voluntary proposals to become the team leader. "I was chosen by them because I guess they didn't feel confident about doing that role when they didn't have time" (R1I5). The role of leader in a virtual team is difficult to take on if participants know each other only superficially. Some leaders had problems in leading the team to accomplish all tasks, while others had problems with cross-cultural communication. Leaders were all seen to be overburdened and having to juggle familiar and private duties with leading an international virtual team. They also had trouble in inspiring all team members to participate on an equal footing.

**Team building strategies:** Interviewees suggested that dedicated team building activities be planned into the VE to facilitate sharing experiences and resources among team members. The following strategies were mentioned: being open to one another and chatty (in several languages); being humble to learn from others and combine expertise; focusing on what each team member has to do to ensure that all tasks fit together; agreeing on tasks beforehand and monitoring task development; creating a list of team roles to agree on; and learning to collaborate effectively online using several tools and platforms.

**Leadership strategies**: The team leader should act less as a content developer in the team and more as helper and encourager who inspires people to agree on and share tasks and reminds them of deadlines and agreements made. The team leader should have access to guidelines of what the team needs

to achieve in order to be prepared to steer the team in the right direction. Furthermore, the team leader should have relevant background information on other team members, so having detailed introductions of each team member at the beginning of the VE project is of utmost importance.

Affinity of interests, ideas, and goals to build cohesion: According to the interviews, defining a shared purpose and committing to common goals will keep the team cohesive and collaborative. Social skills required for good teamwork mentioned by the participants included the following: showing friendliness; negotiating and jointly agreeing on tasks; sharing responsibility and helping each other out; sharing knowledge; openness to new ideas and differences in viewpoints; willingness to participate in the team and dedicate time to the tasks in hand.

# 3.2. Challenges and strategies in digital and cross-cultural communication

**Time management across cultures**: Teachers participating in the VE rounds were on different time zones and their teaching schedules were very disparate thus creating difficulties for finding a common time to meet. Meeting online had to be juggled with participants' professional and private schedules. Time management to keep deadlines also constituted a problem for some teams, as they wanted to focus more on sharing experiences and relegated deadlines and tasks to the background.

Barriers to digital and cross-cultural communication: Some participants claimed that synchronous sessions on a video conferencing platform were preferable to asynchronous collaboration because team members could talk to one another and get an immediate answer, while by emailing they would get an answer several days later. Not having a facial reaction was mentioned as an additional difficulty to ascertain emotions in team communication, so video conferencing helped in that sense as well ("[one needs to] have a face to react to" [R116]). Interviewees also mentioned barriers due to cultural differences and challenges in using English to communicate. Furthermore, digital knowhow sometimes constituted a barrier, as discrepancies between team members' technological expertise caused problems for team organization ("because some are more skilled digitally and others not so skilled we sometimes lose time organizing ourselves" [R218]).

**Time-management, digital collaboration, and language strategies:** One of the time-management solutions interviewees proposed was that instead of working entirely asynchronously, it is useful to schedule regular synchronous sessions. They also recommended using email to remind each other of tasks and deadlines. Language barriers were best overcome by making use of all team members' linguistic repertoires. Sharing the expertise of more digitally advanced team members was regarded as important to guide and support the rest of the team. Interviewees also reported feeling reassured by the presence of VE facilitators to provide support if needed. VE participants appreciated that facilitators were "available in case we had any problems" (R114).

#### 4. Conclusion

Two researchers from two digital innovation projects joined forces to interview teacher participants of VE implementations and to analyze their considerations and feedback to develop virtual team collaboration. The main conclusion drawn from the interviews was that increased scaffolding is needed for team leadership and shared leadership to help virtual teams collaborate more effectively and cohesively across cultures. This is in line with Wu and Cormican (2021), who claim that shared leadership in project teams increases team effectiveness, and team leaders should have knowledge and skills to encourage the sharing of leadership roles and tasks among team members right from the start of the team decision-making process. Recent studies have also underlined the importance of effective leadership for online collaborative learning, pointing out the usefulness of shared, emergent, and distributed leadership over assigned leadership to positively influence collaborative learning in virtual teams (Luo et al., 2022; Morrison-Smith & Ruiz, 2020). In business contexts, transformational leadership style has been found fruitful to inspire engagement and effectiveness in virtual teams (Sedrine et al., 2021; Mysirlaki & Paraskeva, 2020). Extant research also shows that careful advance planning of a VE course is needed "especially if it is intended to be collaborative" (Zak, 2021, p. 75). We therefore recommend that VE developers design distinctive support for collaborative leadership to address the specific challenges, identified in this study and many others, that affect successful team building, organization, and performance in online learning environments.

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