WHY IS INTERACTION KEY IN ONLINE LEARNING

Initial observations from the UNPOSMC blended learning course

Tuire Oittinen, Iira Rautiainen & Pentti Haddington



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Why is interaction key in online learning? Initial observations from the UNPOSMC blended learning course

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PeaceTalk studies talk and interaction in multinational crisis management training, in which the tasks simulate real-life conflicts and problem-solving. The language used in training is English. The project relies on video recordings collected during various course exercises and uses conversation analysis as the method. The project describes efficient and effective interactional practices as well as challenges in crisis communication. It focuses on teamwork, situational awareness, information flow and interaction across institutional communities (e.g., between civilians and military staff) and in both co-present and technology-mediated environments. More specifically, it has studied talk and interaction as part of car patrolling exercises in UN military observer training (e.g., interaction during navigation, radio communication, observation, and preceding team casualties), as well as in a tactical operations centre, with a focus on situational awareness in a multilingual context. Moreover, the project has investigated interaction in an intensive course that trains professionals to deal with high-risk and emergency situations in hostile environments. The project collaborates with key organisers in crisis management training, and the results will be used to inform their future development. PeaceTalk is funded by the Research Council of Finland (2019-2023) and the University of Oulu's Eudaimonia Institute (2022-2026). See this video for a brief introduction to PeaceTalk: https://www.youtube.com/watch?v=f2iM4bbyAGo.



1. Introduction

Planning future activities, tackling problems, and progressing work-related tasks and activities together with others always involve and require talk and interaction. The joint progression of tasks and the establishment of shared understanding is particularly important in situations that involve or attempt to resolve crises. The PeaceTalk group, based at the University of Oulu, is a research team composed of experts in language use and interaction. The group has collaborated with FINCENT since late 2016 (see Haddington et al., 2020) and studied interaction in various crisis management training courses (Haddington et al., 2021; Rautiainen et al., 2021; Oittinen, 2021). The researchers in PeaceTalk use qualitative, video-based methods and ethnographic field notes to study the trainees' conduct during their work. Video recordings are crucial in forming a truthful and reliable perspective on the unfolding of activities in the courses. The analyses focus on what trainees do, and how they do it through talk and other actions, such as gestures, facial expressions, and body movement. The aim is to identify and describe in detail the visible and joint interactional practices that are used to progress the teams' tasks and activities, and how the participants establish a shared understanding as part of these activities (see, e.g., Haddington & Oittinen, 2022; Kamunen et al., 2023; Oittinen, 2022; Rautiainen, 2022; Rautiainen et al., 2023). Technology- or videomediated environments present a unique context for interaction and collaborative work, and social interaction research in such settings is still relatively scarce (but see Stokoe et al., 2021). Therefore, the possibility to participate in and conduct research on the Basic phase of the UNPOSMC course in autumn 2023 offered us an exciting opportunity to fill in this gap.

Our interests and aims regarding the UNPOSMC course were multifaceted. First, we aimed to collect recordings from the online sessions for our research and to gain a comprehensive view of this unique learning environment, which would then be transformed into a series of analyses and research papers. Second, we were interested in the practices and guidelines the course organizers had recently developed; we had heard great things about the course (e.g., regarding the carefully drafted design for online learning) and took it as an invaluable learning opportunity. Our work gained significant support from the motivated group of course designers, coordinators and instructors, who welcomed us in their meetings already in the preparation phase of the course.

Video recordings were made in the Basic (i.e., online) phase of UNPOSMC. We used screen capture software to record the lectures and syndicate work that took place online. In addition, we video-recorded the events in the course instructors' coordination room in Santahamina. At the outset, we had the following questions in mind:

1. What kind of instructors' interactional practices in the online learning environment(s) enhance team building and teamwork?

- 2. What features of interaction support equal participation, joint negotiation, and effective decision-making?
- 3. How do interactional practices change or develop during the Basic phase?
- 4. How are diverse linguistic and professional expertise visible in interaction, and what is their impact on group dynamics, collaborative thinking, and learning?

2. Interactional research approach to distributed learning situations

Our research is based on an approach called Conversation Analysis (CA; Sidnell & Stivers, 2013). CA provides us with the theoretical framework and an in-depth understanding of *what constitutes social interaction*. CA also offers a set of qualitative tools that guide us towards seeing details in interaction that are often overlooked or treated as irrelevant (see, e.g., Schegloff et al., 1977). We are interested in verbal and non-verbal (i.e., gestures, facial expressions, body movement and object use) features of talk and interaction. This is important because the details of such features reveal how people make sense of and interpret the events and other participants' actions around them. In sum, anything that can influence the way in which people interact with each other and organise their behaviour is treated as potentially meaningful.

In the past decades, technology-mediated interaction (i.e., interaction between people who are physically in different geographical locations; see e.g., Hutchby, 2014) has drawn a lot of attention in diverse fields of study, such as applied linguistics, as well as communication and organizational studies, but also among practitioners (e.g., designers at Microsoft). Research shows that the features and practices of technology-mediated interaction vary, depending on the communication channel (e.g., whether video connection is used) and its affordances as well as other situationspecific contingencies (e.g., the type of event and number of participants). While a commonly recognized interactional challenge relates to technical issues, such as poor sound quality, network delays, or distorted or small image displays, which may cause difficulties in participation and getting one's point across (e.g., Oittinen, 2018; Rintel, 2013), another challenge concerns ways to maintain mutual focus on the shared business and ongoing discussion. In synchronous settings of online education, such as remote classes, this is a substantive concern to educators, since learners' orientation to each other and the ongoing activities, and their understanding of what is happening and why, form an important prerequisite for collaborative work, engagement, and learning. Furthermore, the interactional management of distributed learning situations that often involve the use of multiple communication channels, such as video, chat, and digital whiteboards, may be challenging for both instructors and learners (see Balaman & Pekarek Doehler, 2021). However, human competences and one's ability to adapt to digital environments, as manifested in reflexive and creative practices developed during the learning situation, have been recently raised as key in overcoming these challenges (e.g., Luff et al., 2014; Melander Bowden & Svahn, 2020; Oittinen, 2023a; Oittinen, 2023b; Stokoe et al., 2021).

While participating in UNPOSMC as researchers and observers, our attention was drawn to the resourceful ways in which the instructors, facilitators, and learners deployed the digital platform and tools, and, in particular, how these were connected to

- promoting interaction and collaboration,
- facilitating the accomplishment of task-specific goals,
- collaborative problem-solving,
- inclusive and supportive behaviour, and
- showing empathy.

3. Initial observations on interactional practices in the UNPOSMC 2023

The Basic phase of UNPOSMC lasted for five weeks and consisted of weekly whole-day meetings around thematic modules, which included plenary sessions and syndicate work. The plenary sessions comprised introductions and lectures by subject-matter experts. For each learning day, the instructors pre-assigned specific individuals in the syndicates to take up the role of the chair. The information on who would act as chair was given in the previous week, allowing the assigned trainee some additional time to familiarize with the upcoming task. What made the UNPOSMC Basic phase unique as a learning context were the different forms of competence and skills that came into play. It was not only about the trainees learning the content but also about their learning of how to "be a member and a learner" in a distributed, digital environment.

Furthermore, due to the course participants' diverse communication behaviours, as well as the varying levels of their expertise in the language used for training (i.e., English) and in the topics discussed over the course, two practical questions emerged: how were all the course participants included in the discussions and how were functional routines for participation created? Our analysis provides some preliminary observations relating to these questions, showing how such supportive actions can become visible in interaction. We highlight two things: 1) the instructors' and facilitators' role in promoting interaction and creating a supportive learning atmosphere and 2) the learners' resourceful ways to participate in interaction and contribute to teamwork – and how this develops over the course.

3.1. Developing practices for interaction: the role of instructors and facilitators

Online learning situations require the participants' involvement in several things at the same time, for example, using technological devices and interfaces (e.g., navigating between tabs, windows, and documents), writing text, and engaging and contributing to the ongoing discussion. Another important point that we wish to emphasize is that learners participate in joint activities and discussions in different ways. On the one hand, such variation is of course natural and reflects a range of personal choices and preferences to engage and participate in the learning situation. On the other hand, diverse ways to participate reflect the fact that the *opportunities* to participate verbally (i.e., in speaking) in online learning situations are more restricted compared to situations that take place in physical classrooms. In practice, this becomes evident in how the routines of turn-taking and upholding dialogue are not self-evident and require active support. Our findings show that instructors and facilitators can encourage and advance interaction and support the trainees' engagement by

- a. doing roll calls at the beginning of sessions,
- b. asking questions that are targeted at particular trainees or address specific issues (instead of asking generic and open-ended questions, such as "Do you have any questions?"),
- c. using digital tools and functions, such as reaction buttons, in a versatile and appropriate manner,
- d. using chat to invite questions, clarify points and pick up points posted by learners, and
- e. using cameras in a pre-planned and meaningful way to invite joint displays of bodily presence, for example, at the beginning of sessions or for a round of applause at the end of sessions.

These practices also help build a positive and conversational atmosphere, supporting the trainees' involvement and engagement in the learning activities. While observing the course, we noticed that the more active and involved the learners were from the beginning of sessions, the more they engaged with the topics and contributed to achieving the task-related goals and completing the assignments.

3.2 Developing practices for interaction: the role of peer support and teamwork

As many of the participants in UNPOSMC 2023 were attending the course from secondments in missions, unstable internet connections caused problems for some learners. This became visible in and generated challenges for joint work or enacting assigned roles. In particular, working as a chair, note-taker, or presenter was difficult with a poor connection. Furthermore, the fact that the course took place on specific weekdays over the course of several weeks – and overlapped with the course participants' work and secondment responsibilities – meant that trainees regularly had to miss lessons. Absences led to, for example, unequal distribution of work and ad hoc chairing, which each syndicate group resolved in their own way.

One helpful resource for carrying out tasks and solving connectivity as well as language- or terminology-related problems was the chat function. In syndicate work, the chat was used both in situations where connectivity problems made it difficult to hear or understand what was being said. The chat function proved useful also when the content of the tasks, discussions and shared information was rich and complex. When the trainees shared information that included abbreviations, acronyms or complex descriptions, the chat proved to be a useful way to share that information.

Our initial observations highlight the importance of peer support during collaborative work in syndicates and how, over the course of five weeks, the syndicates developed their individual ways of working

The learners deployed practices by which they, in discreet ways, took into consideration their peers' varying competences in the use technical devices and the used language (English as a lingua franca). Similar to multinational settings in general, the participants' level of proficiency in the shared language varied, which occasionally manifested as troubles in speaking or understanding what was being said. The participants with more confidence, for example, in the use of English, supported the more silent and less active learners by offering them the floor to voice their thoughts and giving them time to verbalise their ideas.

In addition, the trainees' professional expertise was diverse, covering a wide spectrum of knowledge that was vital for the syndicate work. The trainees relied on their expertise and shared their experiences and personal histories to support and advance their team's learning tasks. The practice for sharing personal experiences helped the teams to identify and discuss solutions at critical moments of the assignments.

Overall, the learners with more knowledge of the contents, language and the available digital tools for collaborative work helped those with less knowledge and expertise. During Finally, during the Basic phase, the forthcoming Advanced phase was mentioned frequently and seemed to be an important aspect during collaborative work. For example, the course participants often talked about the prospects of meeting their peers in person in the upcoming phase. Towards the end of the Basic phase, the amount of talk about the future phase of the course increased. The possibility of meeting one's team members in person – and talking about it – seems to be a feature that supports team building.

4. Why is interaction key when participating in online learning situations?

Participation and engagement in distributed learning situations can take different forms, which makes understanding interaction and its details fundamental. Our research gives insights into the practices that can be used to promote interaction and overcome challenges *during a learning situation*. It also illustrates how individual actions may impact the overall progression of activities in the digital online environment. Overall, instructors, facilitators, and learners in these settings benefit from an open mind and the ability to adapt and be flexible in their ways of working and collaborating with others.

In UNPOSMC, becoming familiar with the multi-professional UN operational network, understanding the different UN security actors' roles in the operational context, and learning to collaborate and interact with other components in the field were important objectives. All these objectives required interaction between people who work in diverse roles in various organizations.

Taking the practical challenges of scheduling and travelling into consideration, an online environment is a useful and functional way to implement a knowledge-oriented course for a large group of learners (in this case, approx. 25 participants). As collaborative work and information sharing are highlighted as objectives, it is evident that group work is a fitting method of instruction. Discussions following an introduction from a subject-matter expert and syndicate work where people from various organizations and branches come together to create a shared understanding of a scenario are valuable interactions that cannot be easily replaced by any other means of sharing information.

Our findings offer an informed understanding of the affordances and communicative challenges that influence and impact interaction and learning in online environments. They can also be used to show how instructors and learners work together and develop their practices once they get accustomed to the resources available in the setting. The findings can be used to inform future training that takes place between instructors and learners across distances.

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