Developing communicative competence in global virtual teams: A multiliteracies approach to telecollaboration for students of business and economics

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Abstract: Telecollaboration is a learning scenario in which groups of foreign language learners communicate with geographically distant partner classes via the internet. Besides its principle focus on developing linguistic and intercultural competence, telecollaboration provides opportunities for rehearsing multiple literacy practices. These include media and academic literacy as well as the collaborative and critical thinking skills that are needed for academic and professional contexts alike. Drawing on studies of online intercultural exchange from the fields of Foreign Language Education and Business and Economics, this paper discusses the similarities and differences in approach to online exchange between the two disciplines and then shows how this informed the design of a multiliteracies model for telecollaboration projects that is tailored to the specific needs of students of Business and Economics.

Key words: telecollaboration, global virtual teams, multiliteracies

Introduction

International organizations are increasingly using what is widely referred to in business contexts as global virtual teams (GVTs) as a potentially cost and time-saving method of bringing together geographically and often temporally and functionally dispersed employees for work on a common task or project. The importance of GVTs for international business is reflected in the field of Business and Economics by a growing body of literature that analyses the work processes of such teams in an attempt to define the characteristics that best contribute to their productivity (e.g. Koles and Nagy, 2014; Maynard et al, 2012; Schlenkrich and Upfold, 2009). However, there are only a few examples of pedagogy aimed at preparing students for such work scenarios (e.g. Osland et al, 2012 and Taras et al, 2013) and little consideration of exactly what communicative competence in GVTs entails.
Foreign language teachers, on the other hand, can draw on two decades of research into the affordances of online intercultural exchange projects for developing not only linguistic and intercultural competence, but also a range of interrelated competences, including media literacy, academic literacy and collaborative practices. Besides its intrinsic educational value, multiliteracies development through telecollaboration may also serve to prepare students for the networked, global contexts in which many of them will probably later work. This was the underlying rationale for establishing an online exchange between students of Business and Economics at the Universities of Paderborn (Germany) and Masaryk (Brno, Czech Republic), incorporating insights from both Foreign Language Education (FLE) and Business and Economics in its design.

The following review of studies of telecollaboration in FLE and GVTs in Business and Economics provides the theoretical background against which the rationale and design of a telecollaboration model for Business and Economics students is discussed.

**Literature review**

**Telecollaboration in FLE**

Telecollaboration originally became popular about twenty years ago within a communicative approach to FLE because of the opportunities it provides for authentic interaction with native speakers of the target language. Early exchanges were often of a loose ‘e-pal’ character, akin to ‘snail mail’ pen friends and emphasizing the learner’s intrinsic motivation to seek a tandem partner with whom they could work primarily on their language skills while acquiring some knowledge of the target culture in the process (Brammerts, 2006).

A second phase of telecollaboration can be aligned with calls for an intercultural communicative approach to FLE in which language learning objectives are less native speaker focussed and more about becoming an ‘intercultural speaker’ (Byram, 1997). Studies of telecollaboration in this phase have mostly reported on institutionalized exchanges between student groups in different countries who usually work in pairs or triads on scaffolded tasks with cultural themes in order, above all, to support the development of intercultural competence within a language education context (e.g. Belz, 2004; Furstenberg et al, 2001; Müller-Hartmann, 2007; O’Dowd, 2003; Woodin, 2001).

Despite general agreement about the educational value of such exchanges, much of the literature reports on the challenges that telecollaboration poses educators and students, a detailed overview of which is provided by O’Dowd and Ritter (2006). Challenges include communication breakdown as a result of cultural misunderstandings or ‘institutional asymmetries’ – i.e. differences between the participating institutions and cohorts. Asymmetries not only take the perhaps more obvious forms of differing
age, cohort size, language proficiency and prior experience of other cultures, but also media literacy – including different practices in using communication tools – as well as mismatched semester dates and grading requirements. Any of these factors might in turn lead to varying levels of participation, commitment, (de)motivation or, in more extreme cases, conflict. Lindner (2015) suggests, however, that asymmetries are not necessarily undesirable in the design of online exchange projects. After all, if the aim of telecollaboration is to promote language and intercultural learning by bringing together students from different cultural and linguistic backgrounds, asymmetry, as an expression of difference, might be understood as an integral component of its pedagogical rationale. Providing students with opportunities to rehearse the skills needed to negotiate cultural difference in academic and professional online contexts might therefore be seen as an important affordance of telecollaboration.

Given its pedagogical and organizational challenges, a blended approach to telecollaboration has been widely recommended, in which in-class discussions, reflective practice and teacher guidance provide input at each stage of the project. Scaffolding of this kind can enable students to better understand the process in which they are participating and to pre-empt, analyse and learn from any communication problems (Müller-Hartmann, 2007; Dooley, 2008). O’Dowd (2003) and Ware and Kramsch (2005) further contend that structuring telecollaboration projects in this way may help students develop intercultural competence regardless of the degree of ‘success’ of the actual exchange experience.

In keeping with an increasing focus on multiliteracies education in FLE, a third phase of telecollaboration, coined ‘Telecollaboration 2.0’ (Guth and Helm, 2010), builds on the language and intercultural goals that previously underpinned online exchanges to encompass a wider range of literacies at play in the acquisition of a second language. This includes media literacy, which in the telecollaboration context involves the culturally sensitive development of skills needed for online communication through a range of synchronous and asynchronous media (e.g. Guth and Helm, ibid; Hauck, 2010). It also involves placing more focus on the collaborative aspect of telecollaboration (Lamy and Goodfellow, 2010) not only through use of ‘collaborative’ web 2.0 tools, but also by encouraging social skills and taking into account the cultural issues associated with collaborative practices. With regard to the latter, Lindner’s 2011 study of telecollaboration, in which Sociology students worked on collaborative team tasks using English as a lingua franca, found that the use of ELF in virtual team contexts may actually reduce awareness of national cultural and linguistic difference, encouraging instead more focus on the successful completion of the collaborative task itself and the unique emerging ‘culture’ of the team. This finding is

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1 The Invite Project (http://invite.cjv.muni.cz/results.html), for example, was set up to develop methodology for video-conferencing between groups of students in different countries in both educational and professional contexts.
relevant for the field of Business and Economics and research into the characteristics of global virtual teams, which is discussed in the next section.

**Global virtual teams in international business contexts**

International companies that require geographically dispersed co-workers to collaborate on tasks are primarily interested in how to achieve positive business results (Lee-Kelley and Sankey, 2007). Consequently, studies of GVTs in the field of Business and Economics have mainly focussed on analysing aspects of team constellations and team processes that have either hindered or contributed to successful outcomes. Like telecollaboration, research into GVTs considers the skills required by participants (i.e. team members), with culture playing a significant role. However, what is striking in Business and Economics discourse is that competence in communicating across cultures (cross-cultural competence) is viewed as a means to an end (the end being productivity or, ultimately, profit) whereas in telecollaboration, competence in engendering understanding between cultures (intercultural competence) is the humanistic end in itself. Cultural issues arising in GVTs tend to be analysed in terms of quantitatively measured cultural dimensions that compare the characteristics of national cultures (e.g. Hofstede, 1980; Hall, 1984; Trompenaars and Hampden-Turner, 1997). This is perhaps not surprising given that analysis of culture in Business and Economics generally instrumentalizes cultural dimensions. Dekker et al (2008), for example, build their analysis of critical incidents in GVTs on Hofstede’s (op. cit.) cultural dimensions (power distance, uncertainty avoidance, individualism versus collectivism, masculinity and long-term orientation) and Gunarwardena et al (2006) draw on both Hofstede’s (op. cit.) framework and Hall’s (1984) low and high context communication and monochronic versus polychronic cultural dimensions in their discussion of factors that influence online group processes. The suggestion is that an understanding of national cultural dimensions will help GVTs to manage in-team conflict. Cultural issues in telecollaboration, on the other hand, as shown in the last section, are usually discussed in terms of developing intercultural competence, which is an individual learning endeavour that lends itself more to qualitative analysis. Table 1 summarizes the differences.

While some literature on GVTs suggests that task focus may reduce negative power dynamics through less awareness of hierarchical difference, language proficiency and cultural or geographic variation (e.g. Koles and Nagy, 2014), other research shows how team tensions derive from precisely these differences. Nurmi et al (2009) note that team hierarchies may be formed by the most linguistically proficient members ‘shouting loudest’ (i.e. dominating) in online team interaction while less linguistically proficient members withdraw from team dialogue. This shows that simply being good at the language is not in itself a prerequisite for success since less communicative team members may possess other valuable knowledge and skills. In the same study Nurmi et al further argue that uneven power distribution may also
Tab. 1: Key differences between GVTs and telecollaboration

<table>
<thead>
<tr>
<th>Working in GVTs (business context)</th>
<th>Telecollaboration (FLE context)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exchange across cultures is the means to the end.</td>
<td>Exchange between cultures is the end in itself.</td>
</tr>
<tr>
<td>Goal orientation: Participants achieve successful project outcomes in GVTs that are measured in terms of productivity and profit.</td>
<td>Process orientation: Participants learn through experiential online exchange and reflection on the experience.</td>
</tr>
<tr>
<td>Cross-cultural communication is informed by cultural dimensions (e.g. Hofstede, 1980; Hall, 1984).</td>
<td>Intercultural communication is facilitated by the ‘intercultural speaker’ (Byram, 1997).</td>
</tr>
<tr>
<td>Cross-cultural difference is managed.</td>
<td>Intercultural understanding is guided.</td>
</tr>
<tr>
<td>Positive project outcomes depend on building a cohesive team culture that transcends national borders and national cultures.</td>
<td>Positive learning outcomes may be achieved even if the project itself (involving communication between participants) is less ‘successful’.</td>
</tr>
</tbody>
</table>

engender the dominance of one national group within a GVT. Dominance may stem from asymmetries, such as the size of co-located groups within a team, proximity to the main source of information or control of the technology. Cramton (2001) found that in virtual student groups, co-located sub-groups formed within the team, with the dominant sub-group perceiving the contribution of other sub-group members to be inadequate. Counterbalancing this problem, Misiolek and Heckman (2005) observe that team leaders may naturally emerge within a team to co-ordinate asymmetries, assuming either task leadership (i.e. the organization and execution of tasks) or group maintenance leadership, which focuses on interpersonal aspects of building trust and team cohesion.

While the literature on GVTs in business contexts is prolific, examples of business school projects akin to telecollaboration in FLE are rare. The GVT simulations conducted by Osland et al (2004) and Taras et al (2013) are exceptions, with both studies testifying to the merits of experiential learning about GVTs in business education. There is a clear rationale here for telecollaboration projects in ESAP courses which can contribute insights from FLE to the field of Business and Economics. This was the starting point for the Paderborn–Brno Global Virtual Teams Project.

The Paderborn–Brno Global Virtual Teams Project

Project context

The exchange between students at the University of Paderborn in Germany and Masaryk University in Brno in the Czech Republic took place over eight weeks within the wider framework of semester-long ESAP courses for Business and Economics students at each of the participating universities. Table 2 shows key information about the course participants and their home institutional contexts. The asymmetries between the two groups are immediately apparent and needed to be taken into consideration when forming teams.
Tab. 2: Asymmetries between the two participating universities

<table>
<thead>
<tr>
<th>University of Paderborn</th>
<th>University of Masaryk</th>
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<tbody>
<tr>
<td>All students studying towards the same master’s degree. Most also studied together on the same bachelor degree.</td>
<td>Students studying towards various Business and Economics bachelor degrees.</td>
</tr>
<tr>
<td>All students knew one another outside the classroom and most had collaborated with each other on other projects.</td>
<td>Little or no familiarity with one another outside the classroom in most cases.</td>
</tr>
<tr>
<td>The English course (and GVT project) was mandatory; the grade counted towards the master’s degree.</td>
<td>The English course was voluntary.</td>
</tr>
<tr>
<td>27 participants, only two of whom had a non-German background (Portuguese and Afghan).</td>
<td>16 students, three of whom were Erasmus students from France, Belgium and Russia and two students from Slovakia.</td>
</tr>
<tr>
<td>All Paderborn students were either 22 or older than the average participant age of 22.</td>
<td>Several of the students were younger than the average participant age of 22.</td>
</tr>
<tr>
<td>English proficiency was a strong C1–C2. Relatively advanced academic skills – all students had written a bachelor dissertation.</td>
<td>English proficiency was C1 (B2 in some cases). Less academic experience.</td>
</tr>
<tr>
<td>Semester started in mid-October; the GVT Project took place early in semester.</td>
<td>Semester started in September; the GVT Project took place towards the end of semester.</td>
</tr>
<tr>
<td>Considerable cultural experience, for example through study sojourns. A number of students spoke French and one spoke Russian, but there were no participants with experience of the Czech Republic.</td>
<td>Considerable cultural experience, for example through study sojourns. A couple of students were familiar with Germany and the German language.</td>
</tr>
<tr>
<td>Familiar with online communication, though less so in academic projects.</td>
<td>Familiar with online communication. A couple of participants specialized in Business with IT.</td>
</tr>
</tbody>
</table>

**Team constellations**

Asymmetries can be framed positively as diversity, the management of which is an important topic in business management. This was acknowledged in the project design by organizing students into teams of mixed culture, age, language proficiency, gender, academic experience etc. The German students dominated in terms of numbers, an asymmetry that is not uncommon in GVTs in business contexts and which could also be replicated in the team constellations. In total there were eight teams, five teams of five (each with three Paderborn and two Masaryk students) and three teams of six (each with four Paderborn and two Masaryk students). As too much dominance may lead to either in-team conflict or a sense of being overwhelmed on the part of the minority team members, students had to be sensitized to the implications of the team constellations for team processes and team outcomes early in the course input. Teams were not assigned leaders or other roles; however, we discussed their significance for team performance in class so that students could decide whether to
assign themselves roles or, even more experientially, could observe whether roles emerged as the project progressed.

**Blended learning framework**

By conducting the project within the wider framework of an ESAP course, classroom sessions at both institutions could be dedicated to theoretical input (for example on intercultural and cross-cultural communication), for project guidance and for on-going reflection on the learning experience. Class sessions were also used for practising professional writing skills for the project task, academic writing skills for the post-project reflective paper and presentation skills for the project video conferences.

**Project phases**

Telecollaboration is usually divided into task-based learning phases. Dooley (2008, 51) emphasizes its collaborative e-learning aspect by describing project phases in terms of Salmon’s (2000) five-stage model of online collaboration. In the first stage students make contact and explore the tools of communication. They then move on to online socialization, which is critical for positive group dynamics. In the third stage, teams organize themselves for collaboration. In stage four students create knowledge (e.g. in a team project). In the final stage, participants reflect on the outcomes of the task itself as well as the process of online collaboration and finally adjourn the collaboration.

Although Salmon’s model was not specifically devised for collaboration between people from different cultures, it is in keeping with a multiliteracies approach to telecollaboration. It also reflects Furst et al’s (2004) study of the life-cycle of GVTs in which the authors map GVT project phases on to Tuckman and Jensen’s (1977) five-stage model of team formation in face-to-face teams: forming-storming-norming-performing-adjourning (see Table 3). This model highlights the potential for conflict in online collaboration, which is not specifically acknowledged in Salmon’s (op. cit.) model.

The Paderborn–Brno project included elements from both telecollaboration and GVT models. In keeping with most real-life GVTs, the project life-span was purposefully short and task-focussed, with tight deadlines that allowed relatively little time for socialization and trust-building in comparison to telecollaboration projects. This made the project particularly challenging for students and reflective practice all the more important.

Phase 1 took place over two weeks in a Wikispaces wiki (www.wikispaces.com), which served as the central online space for the project. Each team had its own page in the wiki, where they made initial contact and considered key aspects of collaboration.
Tab. 3: Stages of virtual project team development (adapted from Furst et al., 2004)

| Phases                     | Forming                                                                 | Storming                                                                            | Norming                                                                 | Performing                                                                 | Adjourning                                                                 |
|----------------------------|-------------------------------------------------------------------------|----------|-----------------|-------------------------------------------------|-----------------------------------------------------------------------------|--------------------------------------------------------------------------|
| **F-2-F team formation behaviour** | • Getting to know each other    | • Similarities and differences revealed | • Team members identify ways of collaborating | • Work towards project goals    | • Project conclusion    |
|                             | • Building initial trust       | • Identification of responsibilities and roles – conflicts may arise        | • Bonds are strengthened          | • Mutual support                | • Feedback        |
|                             | • Clarifying goals and expectations |                       |                                      |                                | • Team disbands with some sense of loss |
| **GVT team formation challenges** | • Fewer opportunities for off-task trust-building | • Reliance on less rich communication channels may worsen conflict | • Difficulty in developing norms for communication modes, speed and frequency | • Vulnerability to pressures from local (competing) assignments    | • Project conclusion    |
|                             | • Trust is slower to develop | • Reliance on an emerging or assigned team leader | • Commitment to using software is unclear | • Frustrations over free-riding or non-commitment | • Feedback        |
|                             | • Gaps in information about team members may lead to stereotyping |                |                                      |                                | • Team disbands with some sense of relief |

guided by discussion prompts that had been set up in the wiki by the teachers. At this point in the exchange, teams could decide to use other communication channels and online tools for working on their team task. Besides its organizational and team-building functions, the visibility of this initial phase was important for the teachers to be able to see that the teams were all up and running. By the end of this phase, most teams had moved into their chosen communication channels, where more team socialization and organization took place as they prepared for the first video conference.

Phase 2 took place in weeks 3–8, starting and concluding with plenary video conferences which not only acted as a second plenary space for group interaction (in addition to the group wiki), but also provided students with opportunities for professional presentation skills development when the teams formally presented ideas for and the results of their projects.

Between conferences, students worked on team projects. From class discussions and post-project reflections it emerged that the more ‘successful’ teams dealt with the storming and norming aspects of Tuckman and Jensen’s (1977) model in Phase 1 or early in Phase 2 (though not necessarily sequentially), so that they could dedicate
most of Phase 2 to performing. In other teams, storming and norming seem to have taken place almost parallel to performing, making teamwork frustrating and project outcomes unsatisfactory for the students involved. Reflection on this process was therefore essential for positive learning outcomes.

Phase 3 started after the second video conference and involved ‘adjourning’ the project – i.e. debriefing, feedback and reflection. Throughout the project, students had kept a log of all online dialogue and any critical incidents that might have occurred. After completing the exchange, they analysed this data as the basis of a reflective academic paper in which they compared the exchange experience with the business literature on GVTs, focusing on those aspects that seemed particularly relevant to them. In the opinion of this author, post-project reflective work is an essential part of the project design, as much of what takes place during the project becomes clearer in retrospect. In the Paderborn group, topics that were most frequently chosen as the focus of the reflective paper included:

- English language proficiency in online ELF contexts
• The impact of e-leadership on team communication
• The emergence of team culture in GVTs as opposed to national culture
• Trust building and mismatched communication expectations
• The impact of asynchronous and synchronous communication tools on collaboration
• Interpersonal relationships and collaborative practice
• Technological and linguistic barriers to effective communication

The choice and discussion of these topics signalled that students recognized that being communicatively competent in GVTs requires a wider set of communication skills than simple language proficiency. They also considered in their papers what skills they felt they personally still needed to work on and, in line with the Business and Economics focus, made GVT training recommendations for international business.

Project task design

In keeping with descriptions of other telecollaboration studies, the Paderborn–Brno GVTs task had a cultural theme that was inspired by the task design reported in Osland et al (2004, 120) for their GVT simulation. Teams were asked to prepare a report or create a website comparing a product, service or managerial innovation across at least two different cultures. For example, one group created a webpage in which they explored marketing approaches and consumer attitudes to Škoda cars in Germany and the Czech Republic. In addition to the report, teams had to briefly present their project proposal in a class video conference at the beginning of Phase 2 and present the results in a longer team presentation at the end of Phase 2. Task instructions were kept to only the most essential information in order to necessitate negotiation not only of the topic, but also of how to complete the task, thus encouraging interaction within the team.

Besides submitting the report to the wiki, teams also had to upload a 500-word reflection on what went well and what went less well in their GVT. This was framed as advice to a company in which teams should give recommendations for GVT best practice in terms of organisational, interpersonal and communication processes. The team reflection was used to inform the individual post-project reflective papers.

Use of language

Since English is generally considered to be the lingua franca of business, it was used as the common language for this exchange. Paderborn students generally had higher English language proficiency than the Masaryk students; however, online lingua franca contexts require communication strategies that are different from those usually used in the ESAP classroom. For example, one team thought it would be convenient to use a single platform for all communication, but discovered that some chan-
nels were more suitable for transactional communication while others lent themselves to interpersonal communication. Moreover, although video conferencing is a commonly used tool in GVTs and was therefore planned into the course design for project presentations, most teams avoided it in their project work because they felt the organization would be too complicated. In retrospect, they came to the conclusion that the synchronous face-to-face nature of conferencing might have played an important role in building trust and team cohesion, thereby mitigating misunderstandings within the team.

Concluding comments

Telecollaboration projects for Business and Economics are an experiential approach to ESAP that provides students with valuable situated practice for a workplace scenario that they will very likely encounter in the future. The design of this project benefited both conceptually and methodologically from incorporating insights from research into GVTs from the field of Business and Economics. Conversely, since there are few examples of business school pedagogy in this area, the faculty can likewise benefit from FLE’s extensive experience in online exchange as well as the different pedagogical perspective.

There is a strong rationale for introducing projects to the curriculum that have the potential for a wide range of skills development. However, telecollaboration projects are not to be entered into lightly as they involve considerable dedication and sometimes equally considerable frustration on the part of instructors and students alike. Teachers must consider in particular what aspects of the course design need to be prescriptive for the exchange to work (e.g. team constellations, task objectives, task products and deadlines) and how much can be guided experiential learning (e.g. team roles, choice of technology, when and how to interact, expected project outcomes etc.), the balance of which will impact on the overall learning effect. Similarly, teachers can aim to find partner institutions with which there are likely to be fewer institutional asymmetries, but should bear in mind that this may detract from the experience of negotiating difference. Rather than smoothing the edges in this way, in future versions of the Paderborn–Brno exchange, we intend to add more diversity to the teams – and more potential for asymmetries – by introducing a further institution. We also plan to develop the video-conferencing aspect of the course, the skills for which are highly relevant for business students, but which at the same time proved daunting for participants both in terms of formal plenary presentations as well as in conducting in-team interactions using teleconferencing tools. Finally, research is required in future years to analyse more precisely the impact of the project design on student learning outcomes in a Business and Economics ESAP context.
References


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