TILA Research Results on Telecollaboration[1]

Chapter 1

GENERAL PART

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1 PRELIMINARY REMARKS

In the general part of the TILA research report, the overall objectives, methodological procedures, research outcomes and pedagogic implications are briefly sketched out to provide a comprehensive picture of what has been achieved. The research studies reported on in chapters 2 to 10 offer more detailed and complementary insights into the impact of telecollaboration on intercultural communication practice and competence development in foreign language learning.

2 OBJECTIVES AND APPROACH

Telecollaboration exchanges in TILA serve pedagogic objectives in connection with enabling pupils (= younger learners) in secondary schools to engage in communicative interaction with peers from other lingua-cultural backgrounds in order to practise and further develop their intercultural communicative competence in their respective foreign (target) language. The very same telecollaboration exchanges are also used to pursue TILA's research objectives regarding the impact of telecollaboration on intercultural foreign language learning with a focus on pupils' attitudes and behaviour and their intercultural communication practice and competence development as well as on the attitudes and involvement of (student) teachers. With pedagogic and research objectives as an overall orientation, TILA telecollaboration exchanges were designed, implemented and evaluated in close collaboration between teachers and researchers from the TILA project consortium and the wider TILA network.

The telecollaboration environments and tools used in the TILA intercultural exchanges include 3D virtual worlds based on OpenSim, the video communication platform BigBlueButton as well as chat and forum/blog in Moodle. The interaction focus was on intercultural conversations in pairs or small groups under either tandem or lingua franca conditions. The tandem condition refers to a pedagogic language constellation in which each of two interacting school classes has the native language of the other as target language, e.g. a French class learning German and a German class learning French. Under the

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lingua franca condition, the two interacting school classes have different native languages (e.g. a Spanish and a Dutch class) while sharing the same target language (e.g. French). Telecollaboration exchanges are pedagogically designed and implemented as blended learning ensembles typically consisting of a telecollaborative main phase combined with preparatory and follow-up phases in the classroom and Moodle as required. The physical locations from which the telecollaboration exchanges are carried out mainly include computer labs in schools as well as pupils' computers and internet connections at home.

Empirical data compilation included the following procedures:[2]

- participant observations during the implementation process
- performance recordings of telecollaboration exchanges
- questionnaires for pupils concerning background information, user experience and motivation/anxiety
- questionnaires for teachers concerning teacher roles and their views on the telecollaboration and intercultural communication
- feedback interviews with pupils and teachers

The data resulting from the evaluation of the intercultural telecollaboration exchanges carried out in TILA provided a rich basis for a range of case study analyses of complementary thematic orientation. Guided by TILA's research objectives, sub-sets of data were selected and triangulated to gain insights into the pedagogic impact of telecollaboration. Special attention was given to pupils' user experience profiles, issues of task design and implementation, intercultural communication practice under tandem and lingua franca conditions, negotiation of meaning, pupils' linguistic self-confidence and language anxiety, as well as (student) teachers' perspectives and roles.

3 OVERVIEW OF RESEARCH OUTCOMES

Following the structure of the research objectives specified in the TILA project proposal, this chapter presents and integrates results from the TILA research studies (see chapters 2-10) to show how the insights gained address all relevant research questions the TILA project set out to answer.

3.1 GENERAL IMPACT ON PUPILS (= YOUNGER LEARNERS)

- How do pupils experience telecollaboration with peers?
- Do pupils have preferences for using a specific telecollaboration tools?
- Is there an impact of telecollaboration on pupils' motivation and attitudes?
- What is the impact of telecollaboration on content and learning activities?
- What is the impact of telecollaboration on learner roles and group dynamics?
- Do individual differences regarding age and proficiency have an effect on telecollaboration and on how telecollaboration is appreciated?

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[2] Questionnaires and interview questions can be found in the appendix.

Across all studies, pupils are generally quite enthusiastic about being able to communicate with peers from other countries and cultures. This goes hand in hand with a preference for synchronous and oral communication tools and with a certain robustness margin when faced with sound problems. Pupils' preferences, however, are also individual: some feel more at ease with written chat, others find voice more exciting. Familiarity with Skype or WhatsApp on their mobile phones has a strong influence as well. Intercultural telecollaboration fits into the emerging networking culture and is clearly seen as a natural extension of the physical classroom.

An outstanding advantage of telecollaboration is the facilitation of authentic intercultural contact and communication. In this connection, topics and tasks seem to work best that enable pupils to draw on their own experiences and opinions. The authentication potential of telecollaboration has a strong motivating effect. At the same time, however, it needs to be emphasized that seemingly attractive tools like video communication platforms and virtual world environments are not motivating per se. Pupils who are intrinsically motivated and more proficient and active are also clearly better able to profit from these environments. It is quite evident that competence for autonomous collaboration needs to be developed and supported through careful scaffolding. In this connection, initial explorations in the TILA OpenSim environment seem to provide evidence that telecollaboration exchanges with gamification components might have a positive impact on the motivation of less competent young speakers.

Learner roles are generally positively affected by intercultural telecollaboration with a trend towards pupils being active and feeling responsible for others. The telecollaboration approach seems to be suitable across proficiency levels and age groups. An important prerequisite, however, is the pedagogic embedding of telecollaboration activities in a blended learning ensemble that provides pupils with the encouragement and guidance they need to feel comfortable with the new conditions for learning, to reduce initial anxieties over a sequence of exchanges, and to find their own roles. Learner preparation and "learning to learn" need to be given sufficient room.

3.2   IMPACT OF TELECOLLABORATION ON COMMUNICATIVE COMPETENCE

- Are communicative skills in the target language enhanced through telecollaboration activities with peers?
- Are there differences according to the tools being used: asynchronous (blog, forum) or synchronous (video communication, virtual worlds or chat)?
- What is the comparative impact of telecollaboration on tandem and lingua franca communication?

The impact of telecollaboration on pupils' communicative competence is highly encouraging. Pupils are provided with opportunities for spontaneous and authentic written and spoken communication. They also may become aware of and develop communication strategies including topic management, meaning negotiation, accommodation, and handling of misunderstandings. Telecollaboration should, however, be used on a regular basis. In the case of oral communication, exchanges from pupils' homes should also be envisaged in order to avoid network overload in the school's computer lab and to ensure a sufficient degree of communicative privacy.

The various tools greatly differ in their communicative characteristics and qualities. This should be seen as an advantage and opportunity for complementary pedagogic exploitation. A multimodal

telecollaboration approach offering tool options from virtual worlds and video communication to chat and forum is ideally suited for providing practice opportunities for all skills relevant in foreign language learning from reading and writing to listening and speaking. In addition, the availability of multimodal options can be used for scaffolding purposes by e.g. leading pupils from asynchronous forum posts to short text chat conversations to more complex spoken interactions in BigBlueButton or OpenSim. Another advantage of a multimodal set-up was observed in connection with offering pupils telecollaboration from home in order to avoid shortcomings of the computer lab for spoken communication because of limited network capacities and lack of communicative privacy. The availability of multimodal options made it possible to cater for different infrastructures and preferences and thus provide satisfactory access to telecollaboration for all pupils in a class.

As regards pedagogic language constellations, teachers' initial preference was for tandem pairings, i.e. for exchanges in which the native language (e.g. German) of one of the two communication partners was the target language (e.g. English) of the other and vice versa. This was to be expected because of the traditional focus in foreign language teaching on a native speaker orientation. In the course of the project development, however, teachers' preferences changed, with the result that the majority of the telecollaboration activities (73%) were implemented in a lingua franca format, i.e. as exchanges between pupils of different native languages sharing the same target language (e.g. English or German) for both interacting parties. Only 27% of the exchanges were set up as tandems. While initially the principal reason for this move towards lingua franca was influenced by the general lack of required target languages in schools, the lingua franca format gradually gained pedagogic credibility as a natural medium for authentic non-native speaker communication. Pupils felt being "in the same boat", were less anxious to make mistakes, and focused more on content and interaction than on form. The tandem format proved valuable because of two complementary pedagogic benefits: learners profited from contact with their native speaker partners, and native speakers themselves were required to accommodate to their non-native partners' proficiency level and to engage in supportive collaborative production. The need for more pedagogic guidance was obvious.

3.3 IMPACT OF TELECOLLABORATION ON INTERCULTURAL (COMMUNICATIVE) COMPETENCE

- Is intercultural awareness enhanced through telecollaboration sessions? And how?
- What kinds of tasks are best suited to enhance intercultural communicative competence?
- How can intercultural communicative competence be assessed in telecollaboration?

The impact of telecollaboration on intercultural (communicative) competence can be traced in pupils' gains in their intercultural awareness when engaging in everyday conversations, exchanging their views on similarities and differences, or discussing critical incidents. They showed openness towards one another and were curious about other ways of doing things, e.g. when talking about holidays and festivities or when moving beyond the conversation task to explore topics of their own choice. An overall cooperative communication attitude seemed to prevail with many occurrences of agreement and comfort, collaborative comprehension and production, and tenacious engagement in clarifying misunderstandings. Because of the speakers' visual presence and the immediacy of spoken language, interactions in BigBlueButton seemed to be more conducive to enhancing intercultural openness curiosity and awareness.

TILA's focus on ordinary conversation tasks involving soft intercultural topics such as Christmas", "fashion", "eating habits" or "use of modern technology and social media" very much emphasized the interactional quality of intercultural communication. These topics enabled pupils to draw on their own experience, opinions and preferences and helped them to raise their awareness and appreciation of different lifestyles and points of views. The evaluation analyses, however, make it convincingly clear that success depends on guidance and scaffolding. The conversational telecollaboration part must therefore never be seen in isolation. It needs to be pedagogically embedded in a blended learning ensemble that includes preparatory and follow-up activities as necessary constituents. Besides setting up the telecollaboration teams and providing support for technological and thematic learner induction, the preparatory phase proved particularly relevant for "warm up" activities concerning empathy, openness and flexibility. Substantial follow-up tasks turned out to be quite indispensible in connection with "digesting" the telecollaboration experience. More often than not, the pupils' awareness for communicative and intercultural issues is only raised in the follow-up phase when they (collaboratively) reflect on the telecollaboration exchange they had been engaged in.

Follow-up activities easily blend into self and teacher assessment. Suitable methodological instruments include peer feedback, learning diaries, and portfolios. The assessment value of a more substantial portfolio is obvious: it would for instance be possible to ask pupils to add passages they consider particularly felicitous from their recorded written and spoken exchanges and to provide them with an accompanying comment. The TILA experience shows that a more extended assessment approach involving rich portfolios is an important pedagogic asset which, however, requires long-term involvement of intercultural telecollaboration exchanges in the regular foreign language curriculum.

3.4 IMPACT OF TELECOLLABORATION ON (STUDENT) TEACHERS

- How do (student) teachers experience telecollaboration in blended learning?
- Do (student) teachers have preferences for specific telecollaboration tools?
- What is the impact of telecollaboration o teacher-roles and teacher-student interaction?

The overall impact of telecollaboration on teachers and student teachers can be described as a conflict between perceived pedagogic potential and adverse conditions for implementation. Teachers generally experienced the telecollaboration exchanges they were involved in as a great pedagogic opportunity for intercultural competence development. At the same time, however, they were challenged and frustrated by technical and organisational problems. In this connection, it must not be overlooked that for most teachers and pupils the telecollaboration exchange in TILA was a first-time experience. It can be confidently expected that in the course of long-term involvement technical and organisational shortcomings will become less frequent and pedagogic gains will increase.

Similar to their pupils, teachers and student teachers showed a particular preference for oral communication in BigBlueButton and OpenSim. Despite this general preference, telecollaboration exchanges were by far more frequent in BigBlueButton than in OpenSim. An important reason for this imbalance seems to be the necessity to install a separate OpenSim viewer on the individual computer that is used in the exchange. Ease of access simply is a key factor; and there is evidence that in future more mobile solutions involving pads and smartphones will be of strategic importance. As regards teachers' preference for oral communication, it needs to be emphasized that on the whole they

appreciated the pedagogic potential of written chat and forum activities a lot. From a comprehensive foreign language learning perspective, a multimodal approach seems to be the answer. A most important and initially not expected trend among teachers was their increasing appreciation of the lingua franca setting.

Teacher-roles were affected in interesting ways. Most noticeably, new procedures needed to be found and implemented for collaborating with a colleague from another country, embedding the telecollaboration exchange in a sustainable blended learning framework, getting the technology in place, and making sure that pupils had robust access either from the computer lab or from home. Concerning and teacher-student interaction, some teachers found it difficult to step back from their omnipresence in the face-to-face classroom. Guiding and scaffolding pupils to communicate autonomously with peers from other lingua-cultural backgrounds in telecollaboration exchanges and to assess their online communication and learning outcomes clearly is a great challenge. Teachers are required to develop a new perception of their professional self and to adjust tried and tested teaching practices to the conditions and pedagogic affordances of intercultural telecollaboration.

From a pedagogic-organisational perspective, it should be added that telecollaboration, quite obviously, does not naturally fit into the common school routine of face-to-face class teaching. To move from the odd intercultural telecollaboration pilot to implementing such exchanges as a pedagogically sustainable element of foreign language learning in schools requires adaptation processes that go well beyond the telecollaboration event itself.

4 PEDAGOGIC IMPLICATIONS AND SUGGESTIONS

Despite computers and social media increasingly permeating our societies and lives, the implementation of telecollaboration for intercultural communication practice and competence development in foreign language learning contexts in secondary schools is by no means a "self-starter". The TILA research outcomes give rise to a number of implications and suggestions for change.

In order to be successful, intercultural telecollaboration exchanges require:

- long-term involvement to build up familiarity and preferences as part of a new pedagogic culture;
- a multimodal approach integrating all (available) tools to ensure communicative and pedagogic diversity and richness;
- pedagogic embedding of tasks and activities in a normalising blended learning structure;
- a sufficiently powerful technological infrastructure including technical support staff;
- pedagogic incorporation and deployment of different physical locations (as required and suitable) from classroom to computer lab to pupils' homes;
- learner preparation, scaffolding and continuous guidance as well as clear learning requirements and responsibilities;
- continuous teacher education, networking and collaboration.

All in all, TILA research outcomes provide a wealth of empirically grounded insights for professionals in school education including in particular teachers and student teachers, teacher educators and researchers as well as educational policy makers.