

Chapter 3

Learning How to Teach Intercultural Communicative Competence via Telecollaboration: A Model for Language Teacher Education

Andreas Müller-Hartmann

Abstract

Much of the research on Internet-mediated foreign language education to date has focused on how participation in telecollaborative partnerships facilitates the development of intercultural or linguistic competence in the foreign language learner. In contrast, this chapter focuses on the ways in which participation in such a partnership might facilitate the development of both intercultural communicative competence and critical media literacy in the foreign language teacher. Because Internet-mediated intercultural exchange is a highly complex social activity, teachers cannot be adequately prepared for their crucial role in such exchanges by simply reading the relevant academic literature in a typical pre-service teacher education seminar; instead, they must build their knowledge base via experiential learning and model teaching, two practices that will afford them the opportunity to become intercultural speakers themselves before they will be required to facilitate the processes of intercultural learning for their own future students. Within a reflective practice model of teacher education, this chapter explores how pre-service teachers of English in Germany as well as in-service teachers of various foreign languages in the United States began to build their knowledge base with respect to Internet-mediated foreign language education, critical media literacy, and intercultural communicative competence via participation in a two-tiered, project-based telecollaborative exchange with international partners during their pre- and in-service education.

Introduction

The *Common European Framework* (Council of Europe 2001), which has become the basic guideline for teaching and assessing foreign languages (FLs) in Europe, describes intercultural communicative competence (ICC) as one of the central goals of FL learning (see Byram 1997). At the same time, the use of the computer in language learning has increased dramatically in the last decade (Liu, Moore, Graham, and Lee 2002; Salaberry 2001). Research has shown that telecollaborative projects between learners from different cultures have a strong potential for supporting FL learning and facilitating the development of ICC (e.g., Kern 1998; Kinginger *et al.* 1999; Warschauer 1996). As a result, teacher education programs need to take into consideration both fields of expertise in the education of future

language teachers. To facilitate innovative technology use in schools and other educational contexts, it is essential that prospective teachers learn about effective computer use while still at the university. They need to experience the affordances and constraints of international telecollaborative projects and the processes of intercultural learning that such projects entail. Only then will student-teachers be able to reflect on their experiences, enabling them to build a knowledge base that will eventually allow them to integrate such projects into their future professional field of language teaching.

This chapter presents best practices on how to develop student-teachers' knowledge base for ICC, computer-assisted FL learning, and critical media literacy by using complex, technology-enhanced project formats such as international telecollaboration in FL teacher education programs. In the current study, pre- and in-service student-teachers in two upper-level courses at the *Pädagogische Hochschule Heidelberg* (PHH) in Germany collaborate via e-mail and chat with students in two university-level courses at *The Pennsylvania State University* (PSU) in the United States.¹ Both courses at the PHH are teacher education seminars for pre-service instructors of English in Germany. At PSU, one course is an undergraduate German-language and culture course, while the other is a graduate seminar for pre- and in-service teachers of English as a Second Language (ESL), English as a Foreign Language (EFL), and various other FLs as well as Ph.D. students in applied linguistics. The four courses, which all run in the same semester, form an innovative, two-tiered learning arrangement because the PSU students in the graduate seminar (B1) and the PHH students in one of the courses in Germany (B2) participate in a telecollaborative exchange that centers on their observation of the PSU students in the undergraduate course (A1) and the PHH students in the other course in Germany (A2) as the latter students carry out their own telecollaborative partnership that focuses on language and culture learning (see Table 1). Thus, the two B-level courses use the A-level courses as a field laboratory for the construction of the participants' knowledge base of critical media literacy, ICC, and Internet-mediated FL education, among other things. They gain firsthand experiential knowledge of networked intercultural exchanges by discussing electronically the A-level courses with their own keypals in the corresponding B-level course. The PHH students in A2 also gain firsthand experiential knowledge of Internet-mediated FL education via participation in a project-based telecollaborative exchange with the PSU undergraduate students in A1. Because the student-teachers in B1 teach a variety of languages and all the participants in B2 are preparing for careers as English teachers, this exchange takes place in English only. The A-level exchange, however, is bilingual in nature (English and German) because the PSU undergraduate students are students of German and native speakers (NSs) of English, while the PHH students are NSs of German and students of English.

Because the author functioned as a participant observer on the German side of the exchange, data analysis in this chapter is restricted to the experiences of the pre-service teachers at the PHH. Their experiences, however, will inform FL practitioners and administrators in a variety of contexts, including language program directors at U.S. institutions, with regard to the possibilities of international

Table 1
Collaborating Courses

Courses at PSU	Courses at PHH	Academic Year
A1: Intermediate German Conversation and Composition (undergraduate course)	A2: Encounters with the United States: Intercultural Learning through E-mail Projects (upper-level course—TEFL teacher education)	2000/1–2004/5
↑	↑	
B1: Telecollaborative Language Study: Theory, Praxis, and Research (graduate course in applied linguistics—M.A. and Ph.D. students)	B2: Telecollaborative Language Study: Theory, Praxis, and Research (upper-level course—TEFL teacher education and TEFL M.A. program)	2002/3 and 2004/5

telecollaboration as a means of experiential learning and model teaching in FL teacher education. The analysis is based on five years of student-teacher portfolio data in A2 and two years in B2. Analytical categories for the development of ICC are taken from Byram (1997). In the following section, the general concept of teacher knowledge is outlined. In the next sections, ICC and media competence (as it relates to FL learning) are discussed. Next, the syllabi of the four parallel courses (A1, A2, B1, and B2) are presented in more detail. In the subsequent section, portfolio data are examined as a reflection of the participants’ development of ICC through experiential learning in the pre-service telecollaborative partnerships. Conclusions are presented in a final section.

Developing Teacher Knowledge

Learning to teach a FL is a complex undertaking because it combines knowledge about language learning, the learners, the school setting, and instructional practices (Larsen-Freeman 1990). Freeman and Johnson re-conceptualize language teachers’ knowledge base by focusing on the “teacher-learner” (1998, p. 407). Although student-teachers are usually novices to the teaching profession, they do bring prior knowledge to the enterprise, i.e., their own beliefs about language learning and teaching, which are based on their experiences as language learners. Student-teacher belief systems form “a structured set of principles that are derived from experience, school practice, personality, education theory, reading, and other sources” (Richards 1998, p. 67). Teacher education programs need to develop both the knowledge base and the belief system, facilitating their interaction and integration.

The present study, which includes novices and more experienced teachers, focuses on the specific knowledge areas of the development of ICC *through* language learning and the use of technology *for* language learning. In their argument for the development of a specific body of knowledge for language teachers, Tarone and Allwright (2005, pp. 15–16) point out that the use of technology is one area that

requires serious consideration when developing pre- and in-service language teachers' knowledge base. While novice teachers usually have little knowledge about the use of technology, experienced teachers might need to "reexamine their classroom practice . . . in light of new possibilities for the delivery of instruction via technology" (Tarone and Allwright 2005, p. 15). The same is true for the development of ICC, which has become one of the mainstays of language learning in a number of contexts.

In international telecollaborative projects, as in any other dynamic classroom situation, teachers have to deal with complex demands, which have been characterized by uncertainty, complexity, uniqueness, instability, and value conflicts (Schön 1983). As a result, reading relevant academic texts alone is insufficient in order to develop teachers' knowledge base in this area. Tarone and Allwright have called the assumption that academic knowledge would suffice in this case the "academic fallacy" (2005, p. 12). While the expert teacher makes her decisions largely on the basis of routines rooted in her practical knowledge of diverse teaching situations, the novice will not be able to draw on such experiences. She needs to develop experiential knowledge to create routines in her future classrooms. To enable student teachers to develop a knowledge base as well as their belief system, they need to get the chance to develop experiential knowledge through action and reflection. As Frank relates, "This reflection on theories, instructional strategies, and management strategies is vital to the process as students construct their knowledge base, make teaching decisions in clinical settings, and formulate their individual teaching styles" (2003, p. 81). At the same time, in the process of becoming reflective practitioners, learners begin to revise their belief systems. Johnson has stated that if "pre-service teachers' beliefs are to shift at all, they must become cognizant of their own beliefs, have opportunities to resolve conflicting images within their own belief system, have access to develop an understanding of and, more importantly, have successful encounters with alternative instructional practices and alternative images of teachers" (1994, p. 451).

Although it might be possible for student-teachers to draw on prior knowledge of ICC, it is more likely that their knowledge and beliefs about innovative classroom practices (such as the integration of technology into the classroom for telecollaborative exchange) is still rather uneven or even non-existent. To illustrate, Egbert, Paulus, and Nakamichi point out that "even when teachers do believe that technology has empowering potential, they do not always know how to make this happen in the classroom" (2002, p. 3). Participation in international telecollaborative projects at the university level can provide such an experience. Furthermore, face-to-face encounters such as residence abroad are not integrated systematically into teacher trainees' courses of study. Because teachers-to-be are later likely to encounter a multicultural student population in their local school contexts, classroom-based intercultural learning experiences are a prerequisite to help teacher-learners develop the necessary skills of ICC. Here again telecollaborative projects provide a means to experience instructional techniques for developing ICC in classroom-based instruction.

Model teaching, then, provides student teachers with the opportunity to experience instructional practices they can emulate in their future classrooms.

Calderhead stresses the relationship between model teaching and the process of reflection: “Much discussion of reflective teaching tends in fact to devalue the modelling of routines which for student teachers might even be an essential stage in the process of becoming reflective about teaching” (1991, p. 534). Experiential learning and reflection on their experience is therefore necessary to develop the knowledge base that enables teachers to handle complex teaching situations in their future classrooms. The process of articulating their reflections during the learning process may be facilitated through portfolio work (see Johnson 1996; Seldin 1993), the approach chosen for this study.

In summary, student teachers need to integrate relevant perspectives on learning and teaching by reading and discussing public knowledge, by experiencing practice in the form of model teaching, and by reflecting on their experiences via portfolios. By doing so, they may integrate the newly acquired knowledge into their belief system, turning into intercultural speakers and prospective organizers of international telecollaborative projects in the process.

Expanding Teachers’ Knowledge Base: Intercultural Learning and Media Competence

Intercultural Learning

As the *Common European Framework* points out, ICC is the basis of FL learning. When someone learns a second or a FL, she is already “competent in . . . her mother tongue and the associated culture” (Council of Europe 2001, p. 43). In the process, the learner does not lose this competence, but “becomes plurilingual and develops interculturality. The linguistic and cultural competences in respect of each language are modified by knowledge of the other and contribute to intercultural awareness, skills and know-how. They enable the individual to develop an enriched, more complex personality and an enhanced capacity for further language learning and greater openness to new cultural experiences” (Council of Europe 2001, p. 43; see also Müller-Hartmann and Schocker-v. Ditfurth 2004, pp. 18–27). Before teachers can teach ICC in their language classes, they need to become “intercultural speaker[s]” themselves, i.e., they need to develop the capacity “of establishing relationships, managing dysfunctions and mediating” (Byram 1997, pp. 31–32) before they will be able to support learners in the same process in their future classrooms. Apart from face-to-face encounters or longer stays in the target culture, telecollaboration is the best way to facilitate the development of ICC. By participating in a university-based telecollaborative project, student-teachers have to negotiate course content, experiencing possible institutional constraints and cultural misunderstandings in the process (see Belz and Müller-Hartmann 2002, p. 77).

Byram’s model of ICC grew out of the field of teacher education and provides a clear set of factors for analyzing and facilitating intercultural encounters. In addition to affective factors, his concept covers cognitive factors, the interactional skills of interpreting and relating, and critical cultural awareness, all of which

make up the “intercultural speaker” (Byram 1997, pp. 33–38; see also Kramsch 1998). As intercultural speakers, learners “may also be called upon not only to establish a relationship between their own social identities and those of their interlocutor, but also to act as mediator between people of different origins and identities” (Byram 1997, p. 38). Because portions of Byram (1997) comprise the syllabus in some of the courses under study, the four components are briefly explained.

Attitudes

The attitudes of learners (and teachers) participating in intercultural partnerships do not necessarily need to be positive, but they “need to be attitudes of curiosity and openness, of readiness to suspend disbelief and judgment with respect to others’ meaning, beliefs and behaviors. There also needs to be a willingness to suspend belief in one’s own meanings and behaviors, and to analyse them from the viewpoint of the others with whom one is engaging” (Byram 1997, p. 34). Learners need to be able to decenter from their own position, which might even lead to partial or complete re-socialization in another language and culture.

Knowledge

Byram differentiates between knowledge about “social groups and their products and practices in one’s own and in one’s interlocutor’s country” and the knowledge “of the general processes of societal and individual interaction” (1997, p. 58). This includes knowledge about means of communication such as telecommunication as well as knowledge about the conventions of communication; both of these are necessary to negotiate and capitalize on misunderstandings (see Schneider and von der Emde, this volume). While primary and secondary socialization into a culture often leads to a “national” frame of mind, Byram stresses the fact that there are other social identities as well, such as those based on gender, social class, or race. At the same time, knowledge about other groups is not isolated factual knowledge, but rather “relational, i.e., it is knowledge acquired within socialization in one’s own social groups and often presented in contrast to the significant characteristics of one’s national group and identity” (Byram 1997, p. 36), a fact that could lead to prejudices and stereotypes. On a higher level, if partners know how members of other social groups have acquired their processes of interaction, they will be more competent in understanding the perceptions that group has of itself and of others, thus supporting interaction with members of that group. In face-to-face-interaction as well as in telecollaboration this declarative knowledge needs to be complemented with procedural knowledge of “how to act in specific circumstances” (Byram 1997, p. 36), which is essential for engaging in successful interaction and establishing a relationship.

Skills of Interpreting and Relating

Based on one’s knowledge of one’s own and other cultures, the intercultural speaker is able “to interpret a document or event from another culture, to explain it and relate it to documents or events from one’s own” culture (Byram 1997, p. 61). Critical in this respect is the often unconsciously acquired knowledge of aspects of one’s own culture, which may “obscure from the individual the ethnocentric values” (Byram 1997, p. 37) that sometimes make intercultural communication difficult.

Skills of Discovery and Social Interaction

When confronted with a different culture, learners need to be able to “recognise significant phenomena” in that environment “and to elicit their meanings and connotations” (Byram 1997, p. 38) in that culture. At the same time, they must develop “the ability to operate knowledge, attitudes and skills under the constraints of real-time communication and interaction” (p. 61). While real-time constraints do not play a role in asynchronous e-mail communication, they do play a role in synchronous chat communication when cultural content has to be negotiated on the spot (see O’Dowd, this volume, for the case of videoconferencing).

Critical Cultural Awareness

Byram argues that the aforementioned competencies can be further embedded in a “broader educational philosophy” (1997, p. 33), if the teacher guides the learners in reflecting critically on their respective cultures. By pursuing a strategy of political education, teachers help learners to develop “an ability to evaluate, critically and on the basis of explicit criteria, perspectives, practices and products in one’s own and other cultures and countries” (p. 63).

Media Competence in Language Teacher Education

In their overview of literature on information technology and teacher education, Willis and Mehlinger asserted almost ten years ago that “most pre-service teachers know very little about effective use of technology in education and leaders believe there is a pressing need to substantially increase the amount and quality of instruction teachers receive about technology” (1996, p. 978). The authors conclude that pre-service teachers feel insufficiently prepared for the use of computers in school (pp. 980, 984). Furthermore, Dunn and Ridgeway, who collected data during a four-year British teacher education program, found that “students may require 4 years (or more) of experience and training before they are confident that they can use technology efficiently” (cited in Willis and Mehlinger 1996, p. 1012; see also Dawson and Norris 2000, p. 7). This conclusion corroborates the findings of studies of in-service teachers (e.g., Egbert, Paulus, and Nakmichi 2002). Other studies have examined the expertise of university faculty in integrating technology in the classroom and found that they are often unable to adequately model these processes, which then leads to low confidence on the part of their students or to qualitatively inferior use of technology in the classroom (e.g., drill and practice) (Cuban 2001, pp. 99–130; Willis and Mehlinger 1996, p. 1012).

Since the mid-1990s, programs for pre-service teachers have been initiated to develop media competence, e.g., *Preparing Tomorrow’s Teachers to Use Technology* (PT3) (2002). Legutke, Müller-Hartmann, and Schocker-v. Ditfurth (in press) make a number of recommendations in this field. First, the traditional stand-alone computer course “does not correlate well with scores on items dealing with technology skills and the ability to integrate IT [information technology] into teaching” (*Milken Exchange* 1999, p. 3). Instead, technology should be integrated into general methods courses and it should form part of the whole teacher education curriculum. At the same time, the quality of technology use must improve for students to profit from the enormous potential of technology integration. Second, apart

from the improvement of university courses, many studies see the necessity of providing more field-based courses to promote “the creation of authentic technology-rich field experiences” in primary and secondary classrooms (Dawson and Norris 2000, p. 5). University-school partnerships, such as the professional development schools in the United States (see Book 1996), facilitate these experiences, ensuring at the same time an integrated model of teacher pre- and in-service education. Finally, the (continuing) education of university faculty as well as school mentors to provide adequate models for pre-service teachers is mandatory (Willis and Mehlinger 1996, p. 999; Thomas and Cooper 2000). For example, novice teachers can be paired with more expert practitioners and, in the “cascade” model, new experts can then “cascade what they have learnt to their own designated novices” (Barnes and Murray 1999, p. 174). While in-service education is obviously necessary for both groups, the education of interested teachers can also be enhanced through various field-based course models.

While their findings demonstrate the necessity of integrating such courses into teacher education, most of these studies have not concentrated on telecollaboration in pre-service teacher education. Field experiences in schools connected to university courses are extremely difficult to organize because of their complex logistics. Consequently, student-teachers should be able to experience the complex situation of Internet-mediated FL education themselves as participants in such an exchange, with an expert instructor as a model. Such an arrangement includes the cognitive demands of working with partners from another culture in the FL on a common project as well as learning how to deal emotionally with possible misunderstandings in the partnership.

The university seminar provides a secure space for this type of experiential learning and modeling because students do not have to deal with the institutional constraints that such a project might involve in the school setting. Institutional constraints do have an impact on the project in the seminar as well, but they are mostly navigated by the instructor who can explain problems and help the novices to develop an understanding of why the partners acted in certain ways (see Belz and Müller-Hartmann 2002, 2003). The seminar also provides the necessary space for collaborative learning because “pre-service teachers need opportunities to share reflections with each other in a supportive context” as a “community of emerging professionals” (Doering and Beach 2002, p. 2), thereby gaining confidence in enhancing similar projects in future classroom contexts.

In order to develop their knowledge base, student-teachers also need to experience the different roles teachers have to fill when designing and carrying out an international telecollaborative project. The ubiquitous “facilitator” is perhaps “too facile a term to describe the multifarious skills that are needed by teacher trainees” (Barnes and Murry 1999, p. 176) in such projects. Apart from the most obvious role of the teacher, that of language instructor, Legutke, Müller-Hartmann, and Schocker-v. Ditfurth discuss four other categories that need to be taken into consideration:

In her/his *pedagogical* role the teacher will, for example, promote interest in relevant topics, focus on content, on the processes of

intercultural learning and s/he will promote responsible and critical authorship. In her *social* role she will promote human relationships and collaborate with learners in creating a productive and challenging learning climate and in maintaining group cohesiveness. In his *managerial* role he will be in charge of the overall time-frame, he will make sure that schedules are kept, plans followed, and that both institutional constraints as well as affordances to be utilized are taken into account. In her *technical* responsibility the teacher must make participants comfortable with the system and the software, making the technology as transparent to learners as possible (in press; see also Berge 1995).

Finally, to provide examples of good practice to student-teachers, the instructor needs to ensure that course content and methodological processes of the university-based seminar are transferable to the future professional field of the learners.

Context of the Study

Courses

The telecollaborative project under study involved undergraduate and graduate courses at PSU in the United States and upper-level courses (*Hauptseminare*) at the Universität Gießen (year 1) and at the PHH (years 2–5) in Germany. The U.S. students in A1 (the first elective beyond the three-semester language requirement) were enrolled in a number of B.A. and B.S. programs. The graduate students in B1 were pre- and in-service ESL/EFL teachers, in-service graduate student teachers of German, Japanese, Russian, and Spanish, and Ph.D. students in applied linguistics who were interested in the use of technology in FL learning from both methodological and theoretical perspectives. The German students in A2 and B2 were enrolled in a teacher education program for EFL teachers at the primary and secondary level in Germany. The student-teachers in B2 were slightly more advanced than those in B1; some of them were also pursuing an M.A. in Teaching English as a Foreign Language (TEFL).

Due to different institutional calendars, the courses at PSU lasted from the middle of August until the middle of December, while the courses at the PHH began in mid-October and ended in mid-February of the following calendar year. Consequently, the telecollaborative project took place from mid-October to mid-December, usually involving about twice as many students on the German side as on the U.S. side. This discrepancy led to the formation of dyads on the German side from the very beginning of the exchange. Each dyad was partnered with one or two PSU students. Participants collaborated on a series of teacher-guided tasks (see Table 2) via the computer conferencing system *FirstClass*, which enabled the exchange of e-mails and chats. It also provided folders for every transatlantic team where all their data were collected. The system was open for all participants and everybody had access to all texts.

Table 2
Phases and Tasks of Collaboration

Course Phases	Tasks: A1–A2 Collaboration	Tasks: B1–B2 Collaboration	Participants
End of August– Mid-October	<p>Web Project I:</p> <ul style="list-style-type: none"> • short biographies • information about studying at PSU <p>Young adult (YA) novels and films:</p> <ul style="list-style-type: none"> • Härtling (1997) • Woodson (1998) • Nach fünf im Urwald (Schmid 1995) • American Beauty (Mendes 1999) 	Readings on computer-mediated communication, communicative language teaching, and network-based language teaching	USA
Mid-October– Mid-November	<p>Introductory phase—getting to know each other (German students also read the YA novels)</p> <p>Discussion of parallel texts</p>	<p>Discussion of Byram’s (1997) text on ICC and data from telecollaborative (TC) exchange</p> <p>Observation of Encounters course and possible interviews</p>	USA/Germany (e-mail and chat)
Mid-November– Mid-December	<p>Web Project II:</p> <p>Bilingual essay about the parallel texts</p>	<p>Discussion of Byram (1997) and data from TC exchange</p> <p>Observation of A1 and A2 and possible interviews</p>	USA/Germany (e-mail and chat)
Mid-December– Mid-February	<p>Reflection on collaborative experience and discussion of transfer to a high school context</p> <p>(end of term requirement: portfolio)</p>	<p>Reflection on collaborative experience and discussion of transfer to a high school context</p> <p>Presentation of analysis of one transatlantic group’s possible development of ICC</p> <p>(end of term requirement: portfolio)</p>	Germany

Course Procedures

The A-Level Courses

The telecollaborative exchange consisted of two phases at the A-level. During the introductory phase, students got to know each other and exchanged information about their two educational contexts. This exchange of information was supported by a website (Web Project I) that the U.S. students had constructed during the first two months of their term when the PHH was not in session. Web Project I included personal sites where the participants introduced themselves, as well as an informative site about PSU. In this phase, the participants also collaborated on a number of tasks based on their common reading of parallel young adult novels and their common viewing of parallel films from both cultures. Parallel texts deal with the same topic, but are in different languages (Kinging *et al.* 1999). The parallel reading/viewing of texts facilitated the exchange of views and opinions among the transatlantic groups, which provided a basis for possible topics for the second and final phase of the exchange, namely, the transatlantic construction of a website (Web Project II). Here, student teams dealt with a wide variety of issues in both societies, including racism, patriotism, or gender relations, to name only a few. After the close of the fall semester in the United States (A1), the German seminar (A2) continued with a reflective phase about the experience gained during the telecollaborative project.

The B-Level Seminars

The collaboration in B1 and B2 consisted of two parts. Over a period of seven weeks, the transatlantic groups discussed Byram's (1997) text *Teaching and Assessing Intercultural Communicative Competence*. To ground this theoretical discussion in concrete data from a telecollaborative project, students examined the development of a telecollaborative partnership between three students (one American, two Germans) from an A-level exchange in 2000/2001 (see Belz 2003, 2005). At the same time, each B-level transatlantic group selected a transatlantic group from the concurrent A-level exchange, which they were required to observe at least twice in the course of their partnership. To clarify, PSU participants in B1 observed PSU participants in A1 *in vivo* as the latter students corresponded with their keypals in A2. Conversely, PHH participants in B2 observed PHH participants in A2 while the latter corresponded with their U.S. keypals in A1. In addition to observing the A-level students, the B-levels students read all the electronic correspondence that the A-level students produced each week as archived in *FirstClass*. Furthermore, some B-level participants interviewed A-level participants about their experiences in telecollaboration. In their own e-mails and chats, the B-level student-teachers exchanged their findings, discussed possible reasons for intercultural misunderstandings, and attempted to analyze transatlantic communication based on Byram's (1997) model of ICC. Students in B1 were required to write full-length seminar papers as their final assessment in the course. To date, two B1 participants in 2002/2003 are writing doctoral dissertations on A-level telecollaboration; two B1 participants in 2004/2005 have completed M.A. theses on telecollaboration, while two other B1 participants in 2004/2005 have used A-level

telecollaborative data in their Ph.D. candidacy examinations. Students in B2 were required to maintain reflective course portfolios as a final seminar assessment (see next section).

The Reflective Phase after the Collaboration in the Teacher Education Seminars

The reflective phase, which was essentially the same in A2 and B2, consisted of three basic tasks. First, the student-teachers were required to engage in a general group discussion of their experiences in the telecollaborative project. To prepare for this discussion and to ensure that all individual experiences were represented, the approach of the “magnifying glass” was used. Each student had to develop a “mind-map” on a large piece of paper that included all aspects of the telecollaborative project that came to her/his mind at that point. One item from the mind-map that was found to be particularly interesting, frustrating, or surprising was then drawn (no text allowed) in a magnifying glass on the other side of the paper, i.e., literally and figuratively putting the critical incident under the “magnifying glass.” In the ensuing group discussion, students presented their pictures and engaged in a lively discussion of the potential meanings of the critical incidents. This procedure ensured a discussion of all the salient issues and enabled students to learn about their colleagues’ experiences, thus working through their own experiences and putting them into a larger context. It also laid the foundation for a more theoretical discussion of the issues involved in telecollaborative projects.

Second, students were required to compile a list of “dos and don’ts” that they would have to consider when doing an e-mail project with a ninth-grade class in secondary school before they joined A2 or B2. In the reflective phase, groups of students reconsidered their original lists and came up with a new list, framed by their experiences during the exchanges with A1 and B1. While the first lists had been completely open and arbitrary, including each individual student’s prior knowledge—if any—and assumptions about telecollaborative projects, the second list had to be structured according to Nunan’s (1989) six categories of task-based language learning, i.e., goals, input, activities, teacher and learner roles, and the setting. This activity led to an attempt at restructuring their experience in relation to a prospective classroom, thus engaging students in a negotiation of which issues were important for the design of a telecollaborative project.

The third step involved dealing with published knowledge about the pedagogy of e-mail projects as well as research on telecollaborative projects in school settings, including the issue of ICC (e.g., Byram 1997; Donath 1996; Müller-Hartmann 1999). Instead of just discussing the texts in class, students read them in conjunction with an examination of actual data from various telecollaborative projects in school settings. Personal relationship building between teenagers in e-mail communication was highlighted by using examples of very direct German communication strategies (which were negatively experienced by the U.S. partners) and by using an exchange between a German boy of Turkish descent and an American girl. Thus, students’ theoretical reading was grounded in situated local practice with perspectives from teachers and learners involved in that practice. Students in B2, who had already dealt with published knowledge and data from

telecollaborative exchanges (see Table 2 on page 72), also presented the findings of their observations of A2 during this phase.

Student-Teacher Portfolios

As mentioned previously, portfolios served as the major reflective instrument in A2 and B2 as well as the primary data source in the current chapter.² Students were instructed to include reflections on their learning processes in their portfolios in addition to interesting e-mails or chat transcripts from the telecollaborative exchanges. The reflective aspect was deliberately kept as open as possible in order to allow participants to show how they made sense of their learning process. The portfolios had to be written in English, they were graded, and students received course credits on the basis of the portfolios. Due to accreditation procedures in the German tertiary education system, only a segment of the student-teachers elected to receive credit for their participation in A2. As a result, 53 of the 91 participants submitted a portfolio (five of 21 in 2000/2001; 13 of 14 in 2001/2002; 8 of 14 in 2002/2003; 8 of 15 in 2003/2004; and 19 of 27 in 2004/2005). Data from students in B2 comprised the e-mails and chats for both academic years (see Table 1) as well as the portfolios of the 2004/2005 cohort (10 out of 18). Although portfolios are graded, students still tend to be very open and honest about their learning experiences because they realize that it is the level of reflection, not their positive or negative evaluation of the course, that is decisive for receiving credit in the seminar. The e-mail correspondence produced in these exchanges has been analyzed in detail elsewhere in terms of the institutional affordances and constraints operative in the process of intercultural learning (Belz 2002; Belz and Müller-Hartmann 2002, 2003). In this chapter, the analytical focus lies on the development of these student-teachers' knowledge base with respect to Internet-mediated intercultural FL education, as captured in the pages of their portfolios in the process of retrospective reflection on their experiential learning.

Voices from the Language Classroom: Developing the Medial and Intercultural Knowledge Base

Discussion of the data begins with the students' expectations for a course in which such a complex learning environment is established and then proceeds according to Byram's (1997) components of ICC. It is important to remember that even though the different components are examined separately, they are nevertheless interrelated, making up each student-teacher's individual ICC. Students' emerging knowledge base upon completion of the project is also examined. Data from students in A2 and B2 are dealt with together because the overall aim was the same in both seminars.

Expectations

"How can you organize such projects not to end in a mess?" (Renate 2003A, p. 2)³

Before the courses, students' expectations were quite similar. Except for Margit (2002A), who has grown up bilingually, all students expected improvement

in their language proficiency, because they were going to be in touch with NSs of English; they also wanted to learn about U.S. Americans and their culture. Quite a few of them saw the pending exchange as an opportunity not only to learn new facts about the other culture or to find out about “other point of views from people in my age and with a different cultural background” (Hermine 2004B, p. 1), but also “to make new friends” (Konrad 2003A, p. 1; Sabine 2002A, p. 1). At the same time, all students—even those who already had telecollaborative experiences (Gudrun 2002A, p. 1; Karina 2004B, p. 1; Patricia 2000A, p. 1)—wanted to improve their technical media skills. In the initial year, even e-mail was a first for a few students, and they expressed their fears about it: “I have to admit that I was worried about using e-mail to communicate, as I had never worked on an e-mail project before and I was doubting my abilities to do so” (Gesa 2000A, p. 1). For most students throughout the projects, chatting was indeed a first and they commented extensively on this experience (for example Cordula 2004B, p. 2; Dagmar and Norbert 2001A, p. 5; Renate 2003A, p. 4), comparing it to e-mail communication (see below). Many students also expressed their regret that only the American students worked on the technical side of Web Project II.

Moreover, they expressed their premonitions about media usage in relation to the complex classroom situation. Beatrice (2003A, p. 3), for example, writes, “I wanted to learn how to manage and organize a whole class of 28 pupils doing an e-mail project and not losing control of what is going on.” Others wondered how the integration of media would change teaching and their role as a teacher: “I wondered before the course how the new media could change lessons in school, how they effect the communication and in what way they finally change our role as a teacher” (Norbert 2001A, p. 7).

Attitudes

“They valued us and our opinion and relativized themselves” (Sabine 2002A, p. 10).

At the beginning of the seminar, all the students expressed curiosity and openness about getting to know U.S. American students, an important requirement for developing ICC. This is probably due to the fact that more than half of them had already spent one year in the United States. Kerstin, for example, wrote that she “was basically a bit doubtful [whether the project would work], but at the same time curious and open” (2002A, p. 2). Even students who had misgivings about the United States voiced their concerns openly: “Up to that point I was not very much interested in the United States, in their culture or their people. . . . This seminar though seemed the most pleasant and easiest way to approach [my prejudices]” (Beate 2001A, p. 2). While Beate “felt slightly offended” that her partner corrected her British choice of vocabulary, she still conceded in the end that even though she had considered all Americans as being patriotic she “had to adjust [her] opinion a little” because her partner did not support Bush as president (2001A, pp. 6, 9). Sabine’s quote at the beginning of this sub-section shows that students realized that de-centering was an important aspect of achieving ICC. After feeling

frustrated at their partners' choice of topic for the final project, Sabine and her German partners proposed another one instead, and were glad when their U.S. partners did not persist in sticking to their original choice, but "relativised themselves" instead, as she puts it, and agreed to a topic change.

Knowledge

"I would not have thought that such a critical film was possible in America" (Berit 2001A, p. 8).

The fact that more than 50% of the students had spent a year in the United States led them to believe that they were cultural experts. Still, they wanted to learn more about the United States and almost all of them mentioned the fact that they had learned a lot about the education system at the university-level and college life in general (e.g., Jutta 2003A, p. 9). Hanna (2004B, p. 2), for example, relates that she "didn't know or realize the fact that American universities have other term times. I thought they have pretty much the same times than in Germany except maybe some holidays." In some cases, this realization was facilitated by the assignment to exchange information about the educational system at the outset of the exchange. Students evaluated this knowledge also in view of the school situation where they have to work with textbooks containing "typical pictures and stories . . . which, sadly enough, seem to produce a lot of clichés" (Pia 2001A, p. 5). They not only acquired factual knowledge, but also actually experienced institutional constraints. One place this came up was with the different assessment procedures. The assessment of Web Project II on the U.S. side put a lot of stress on the teams to come up with a good product (see also Belz and Müller-Hartmann 2003). This was an aspect on which almost all teams commented. Students in B2 mentioned the stress that some of their partners had to deal with because of other requirements, which often reduced the time they had to chat with each other. Gerd (2004B, p. 2) explains that "another difficulty was that our partner often was away on job interviews."

While they acquired other factual knowledge about religion, family life, sexuality, and patriotism, students also became aware of the different means of telecommunication as well as their interactional conventions (Byram 1997, pp. 58, 60). Dagmar and Norbert (2001A, p. 5), for example, commented on chat conventions in the following way: "At the beginning we wrote long and correct sentences but soon we noticed that there is a certain way to chat." And Franz (2001A, p. 10) reflected that his partner's perceived reluctance in the chat may have had something to do with his own level of inquisitiveness, thus reflecting particular cultures-of-use in chats (see Thorne 2003): "Maybe Veronika and I wrote too much and asked too many questions or did too many proposals for further work." Sabine (2003A, p. 9) finally realized "that capital letters in an e-mail meant shouting." Students thus realized the importance of different forms of communication, attributing different potentials to each form. The majority of them also saw the need to have the ability to create hypertexts in their future classrooms, integrating textual, visual, and audio texts.

Interactional Skills

“I discovered my mediator role (. . .)—a role that can be quite exhausting at times” (Margit 2002A, p. 17).

The choice of texts (young adult novels and films) was unanimously commended by the students because the texts allowed them to relate to the different cultural backgrounds. The texts triggered a discussion of stereotypes and prejudices that led the teams to consider which representations might be stereotypes and which might be individually based, negotiating cultural differences and similarities (e.g., Berit 2001A, p. 7). Ilse (2000A, pp. 7–8) describes the potential: “Of course the Americans also learned a lot of new things about the Germans and I hope that it helped to clear up some stereotypes. We had some attitudes and stereotypes about the Americans as well but I got to know another point of view and now I can understand some of their attitudes much more better. All in all I can say that the materials helped to change some of my attitudes and helped to avoid prejudices.” By trying to explain common German cultural artifacts, such as the *Gartenzwerg* (little colorful dwarves that can be found in German gardens and are seen as representing a lower-middle-class, conservative attitude), or culturally specific terms, such as *Umsiedler* (people of German descent who live abroad but who are allowed to immigrate to Germany from the former eastern regions because of their birthright), the students realized how difficult it is to make partners understand a concept that does not exist in the other culture.

Students realized the importance of interpreting texts, of looking below the surface to get to hidden meanings. Ulla provides the following summary after talking about the “invisible facts” one has to find by reading between the lines, i.e., interpreting incoming e-mails: “Despite getting to know the other country and culture, you also learn a lot about yourself and your own cultural background when reflecting on it” (2001A, p. 4). Interaction proved to be another cultural minefield, and helped students to become aware of their potential future roles as “intercultural mediator.” Ilse, for example, was worried that her partner would feel offended when she “criticized the way Americans cope with violence on TV” (2000A, p. 3). She did so nevertheless and was relieved when the partners did not comment on it. In other cases, German communicative directness led to conflicts (Beate 2001A; Pia 2001A). One group disagreed about how bluntly to tell their U.S. partners that they were unhappy with their performance. Margit (2002A, p. 15) describes the situation and her developing role as a mediator: “I felt bad, mainly because I did not want to poison the German–American relationship, I also thought about the stress the Americans must have been in with the end of their term approaching. . . . I pointed out my “mediator” role I put myself in. . . . I always try to “build bridges” defending the “other side,” explaining points of views and “reactions” and focusing on the SIMILARITIES rather than differences.” Communicative styles and the fact that lower FL skills on the American side could pose a problem for negotiation were important topics in some of the chats between B1 and B2. Karina (2004B, p. 10), for example, analyzes one of her chats thus: “In this part of the chat I got the feeling that Esther and Bill wanted to kind of protect the two girls [in A1]. They always tried to find excuses for their unwillingness to

answer the Germans' questions. . . . While I was more interested to find out why the two girls *did not want* to answer some questions; especially questions about love or the nude scene in the book, Esther was very anxious to excuse why the girls *were not able to* answer the Germans' questions" (see also Doris 2004B, p. 6). By dealing with stereotypes and prejudices in both cultures and by realizing the historical and cultural grounding of some of them, students developed a critical cultural awareness with regard to both cultures.

Teacher Knowledge Base

"We learned something at the PH with relevance to our teaching profession!" (Pia 2001A, p. 15)

In their final evaluations, students reconsidered their expectations at the outset of the course. When reflecting on telecollaborative projects in general, some were still a bit hesitant about their integration into their future language classrooms. Dagmar and Norbert (2001A, p. 4) are a case in point. At the same time, they also realized that a more comprehensive media competence was necessary: "We were curious whether we could realize a similar e-mail project ourselves in a school context. We noticed that it demands a lot of interest in the subject, enthusiasm, knowledge and not only special technical skills." Jutta (2003A, p. 17) still expresses her fears about media usage and handling a school class, but she draws a positive conclusion: "The computer can shut down before you can save your e-mail, the server won't let you in, etc. It's also hard [to] keep an eye on all the students while they are online. . . . I came to the conclusion that this project is definitely worth facing these 'fears' because the benefits seems to be much higher."

In general, frequent references were made to developing a new knowledge base and a feeling of security as to the tackling of a complex teaching situation. Matthias's final comment reads as follows: "In my opinion [A1] is a great enrichment for future language teachers. We didn't only get good advices how to organize or rather how to realize e-mails projects, we also get an insight how to integrate intercultural aspects . . . or how to initiate discussions. . . . Also the analysis of different chats and mails helped us understand how misunderstandings can be caused and prevented" (2003A, p. 13). And Jutta (2003A, p. 18) even ended on an enthusiastic note when answering her initial question "would I do such a project in my classroom?" She writes, "YES, I would definitely try to arrange such a project. I am very much encouraged by this class. I think it is one of the best ways for authentic intercultural (language) learning!"

Participation in a telecollaborative project proved to be emotionally demanding, especially during the final weeks of the exchange when time pressure led to misunderstandings and conflicts. But even though institutional constraints or personal student behaviour created stress and sometimes frustration, the second part of the seminar helped to put things into perspective. Bettina (2003A, p. 8) comments: "as my expectations [motivation of partner] had not been met really, the whole thing started to get stressful. Today I'm glad to have made this experience because of one major point: I personally experienced how important the motivation factor is, how the success of the project can rise and fall with the

motivation of its participant.” While all students commented on the experiential approach to teaching, i.e., being able to actually do an e-mail project during their own pre-service education, they also appreciated the approach of model teaching. Students, for example, often worried about technical problems, but, as Jutta (2003E, p. 10) notes, they observed that if there was a problem with *FirstClass*, “there was always a back-up plan.” She continues, “I’m sure if I did a project myself in my futures profession it might look different because of varying circumstances, but I will never forget the value of having a ‘back-up-plan’ and of thinking ahead.” Beatrice (2003A, p. 11) and others wrote about transferring the evaluation procedure of the magnifying glass (see above) into their own classroom. Bettina (2003A, p. 12) takes the structure of the seminar, the choice of media, and the choice of texts and reflects on why they would work in a secondary school and what she would need to change.

Even though initially some students had been unsure about the relevance of the second part of the seminar, they eventually all commented positively on that phase and many stressed its importance for developing a teacher’s knowledge base. Patricia (2000A, p. 3) put it the following way: “In the evaluation phase we slowly became teachers again.” Students stressed its importance for reflecting on their experience: “This to me was basically the most important phase, because I got the chance to recap my feelings and thoughts, visualize problems, and become aware of my personal learning progress” (Margit 2002A, p. 7; see also Cornelia 2001A).

Apart from the reflection on the project, this phase was also seen as preparation for future classroom work: “This was the most important part of the seminar in my opinion. As I had no knowledge how to do such a project in school, I learned a lot about the organization and realization of such a project” (Sabine 2003A, p. 9). Having been insecure about the methodological approach, students now realized the correct choice of texts, i.e., parallel texts that involve both participating cultures, and the importance of tasks (see Müller-Hartmann 1999 on tasks in telecollaborative projects). As Bettina (2003A, p. 9) observes, the discussion of Nunan’s (1989) tasks shows the progress students have made: “What I liked very much was the idea of building a bridge back to the pre-semester task [dos and don’ts of e-mail projects] after our project had finished. By looking at the posters the groups had made I was able to see how students’ conceptions had been changing or strengthened during the project. Our list of do’s and don’ts had grown considerably and I was happy to hear about the other’s opinion.” This “community of emerging professionals” (Doering and Beach 2002, p. 2) also realizes how important collaborative reflection is when many of them comment on the value of having heard other opinions during the group discussions.

At the same time, students began to realize the complexity of the teacher’s role in telecollaborative projects, commenting on the different roles that are involved. Taking a chat excerpt from an eighth-grade class as a basis, Bettina (2003A, p. 11) realized “the important role of coordinators” in such a complex learning environment. She also writes about the teacher’s task as monitor to “interfere if they detect misunderstandings or difficulties” and she recommends that teachers “should try to resolve them together with the students” (see also Beatrice 2003A, p. 12; Jutta 2003A, p. 13). From the same chat session Jutta

(2003A, p. 13) gleaned the importance of positive feedback (“All your answers are really great!!!”) but also the fact that “the teacher leaves things open for the students to develop their own answers.” The realization of the importance of student choice—many students remarked positively on the fact that they had had the choice of topics for the Web Project II—and teacher guidance at the same time was definitely one of the most important outcomes in the seminar.

Conclusion

Telecollaborative projects have enabled participants to develop ICC and thus supported their process of becoming intercultural speakers themselves. Student-teachers have perceived their lack of technical skills and desire to develop this area of their knowledge base because they realize that not only are their future students often well versed in media usage, they also see the potential for highly motivational and authentic language experiences. At the same time, the combination of A- and B-level courses has facilitated a research approach for the more advanced students. While they were able to develop their ICC as well, this specific setup allowed them to gain firsthand experience in the analysis of international telecollaborative encounters on the basis of Byram’s (1997) model of ICC.

The combination of experiential learning, model teaching, and intensive reflection facilitates the development the student-teachers’ knowledge base. Apart from making the step of initiating telecollaborative projects themselves with less fear and greater ease, they are also able to better deal with the affordances and constraints of telecollaborative projects, thus having laid the first basis for possible routines in their future classroom. They still need to try out such encounters in their future local contexts, but the emotional anchors have been set during the pre-service projects, impacting on their teacher beliefs. Even though students had to deal with quite a bit of emotional turmoil during the exchange as well as problems of misunderstandings and conflict, discussions in class after each chat or e-mail session, reflections during the group discussions, and in the portfolio have hopefully given them the necessary amount of security to venture into the complexity of telecollaboration in their future classrooms.

Notes

1. The PHH courses were taught by the author, while the PSU courses were taught by Julie A. Belz.
2. Students in A1 were also required to keep formative as well as summative language learning portfolios in German.
3. All names are reported as pseudonyms. The pseudonyms used here for the students in the A-level courses are the same as those used in various publications by Belz and colleagues and they therefore index the same language learners and student-teachers. For example, the Norbert referred to in Belz and Kinginger (2003, pp. 617–618) is the same Norbert referenced here. The year indicates the particular year in which the student-teacher in question participated in the exchange. A refers to A2, while B refers to B2. Page numbers refer to pages in the student-teachers’ portfolios. In all cases, the authentic texts have been quoted, disregarding language mistakes.

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