COMPUTER-MEDIATED TASK DESIGN: LANGUAGE STUDENT TEACHERS' EXPECTATIONS AND REALIZATIONS

Carolin FUCHS[*]

Abstract: *This paper analyzes how ESL student teachers in the U.S. and EFL student teachers in Germany negotiated their task of creating joint task-based language teaching (TBLT) units via computer-mediated communication (CMC). More specifically, the researcher triangulated data such as pre-course questionnaires, post-course questionnaires, and synchronous and asynchronous CMC transcripts in order to analyze and contrast participants' expectations before the project and their realizations after the project. Following the call for implementing technology into language teacher education through model learning (Hubbard & Levy, 2008; Willis, 2001), student teachers jointly created TBLT units via Moodle over a ten-week period. These student teachers first read about and discussed TBLT criteria and then collaboratively evaluated and re-designed tasks in English language textbooks. This project aimed at enabling participants to share perspectives about teaching contexts and practices in other countries and to learn about technology and TBLT through virtual communities of practice (Lave & Wenger, 1991). Consequently, student teachers not only became more proficient users of technology, but also grew from the unique opportunity of collaborating with their future colleagues abroad. By the same token, the project raised numerous questions with regard to technology training, task design, and institutional contexts.*

Keywords: *Language Teacher Education, Negotiation, Computer-Mediated Communication, Negotiation, Task-Based Language Teaching*

Background

There has been an-going call to integrate technology into teacher education (see Hubbard & Levy, 2006; Johnson, 2008; Kassen, Lavine, Murphy-Judy, & Peters, 2007) and to advance preservice language teachers' professional literacy by modeling "innovative uses of technology" (Willis, 2001, p. 309). Or,

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[*]   Dr. Carolin Fuchs - Lecturer, Department of Arts and Humanities
      TESOL/Applied Linguistics Program
      Teachers College, Columbia University
      cf2307@columbia.edu

in Pasternak's terms, "[i]f technology is to be used as practice, the data show that experimentation needs to start in the methods classes for it to move into the field experiences and beyond" (2007, n.p.).

In line with these calls, the following were the overall goal and objectives of this cross-institutional computer-mediated communication project in language teacher education.

Project Goal and Objectives

The overall goal of the project was for student teachers to learn more about language teaching contexts and practices in other countries and to become more proficient in using technology through cooperative, experiential, and model learning. Ultimately, language teacher educators attempt to not only expose preservice language teachers to this kind of learning format but to also encourage their apprentices to put such projects into practice in their own classrooms. In order to operationalize these goals, the following objectives had been laid out by the teacher educators at Teachers College and at the Pädagogische Hochschule Heidelberg, Germany:

- To share task-based language teaching (TBLT) perspectives through technology use outside of class with preservice or student teachers in different socio-cultural and institutional settings (e.g., in the US and in Germany);
- To analyze and adapt excerpts from American and German ESL/EFL textbooks leading to the joint creation of a TBLT lesson plan.
- The next section highlights the potential of technology-mediated interaction in language teaching and learning and the different research strands that have evolved, especially with regard to telecollaboration.

Potential of Technology-Mediated Instruction

The potential of computer-mediated communication (CMC) and technology-mediated instruction for language teaching and learning has been undisputed. For example, asynchronous CMC (ACMC) through emails, discussion forums, wikis, or blogs have been used for reflective writing and for writing for an authentic audience (e.g., Egbert & Hanson-Smith, 2007; Reinhardt & Thorne, 2007; Richardson, 2006; Warschauer, 1996, 1997; see also Herring, 1996). These Web 2.0 tools can also increase motivation (e.g., Lee, 2004; LeLoup & Ponterio, 2003; Warschauer, 1996), promote language fluency (e.g., Kern, 1995), pragmatic competency (e.g., Belz, 2007), and language play (e.g., Belz & Reinhardt, 2004; Vandergriff & Fuchs, forthcoming; Warner, 2004; see also Tarone, 2005; Cook, 2000). Moreover, messages or posts are easily filed and archived and allow participants to collaboratively analyze discourse (Magnan, 2008; see also Chapelle, 2003; Belz, 2003).

Furthermore, there have been a number of technology-mediated instruction formats across institutions and national borders involving places in the US and Australia, as well as various countries in Europe. For example, in teacher education, online and blended learning (or hybrid – mixing both online and face-to-face instruction) instruction have been integrated increasingly in cross-institutional settings (e.g., Arnold & Ducate, 2006; Arnold, Ducate, & Lomicka, 2005; Lord & Lomicka, 2008; Müller-Hartmann, 2005; Scherff & Paulus, 2006; Shaughnessy, Purves, & Jackson, 2008). Additionally, in second language teaching, educators have argued to blend technology-mediated and traditional forms of instruction for intercultural second language or L2 education (e.g., Chun, 2008; see also overviews by Kern, 2006; Kern, Ware & Warschauer, 2004; Lamy & Hampel, 2007).

A growing body of research on telecollaboration (e.g., Warschauer, 1996; Belz, 2003) has resulted in a number of cross-institutional and cross-cultural projects where students in different countries communicate with each other for the purpose of language study and intercultural learning (e.g., Belz & Müller-Hartmann, 2003; Belz & Thorne, 2005; Furstenberg, Levet, English & Maillet, 2001; Kramsch & Thorne, 2002; Müller-Hartmann, 2005; O'Dowd, 2007). The underlying pedagogical rationale is to use language learners not only as linguistic but also as cultural informants and thus, to stress the connection of language and culture or, in Agar's terms, "languaculture" (1994, p. 60). By the same token, cultural clashes and misunderstandings have surfaced in most of these projects, which has led to the sub-strand *failed communication* in telecollaboration (e.g., Belz, 2002; O'Dowd, 2003; O'Dowd & Ritter, 2006; Schneider & von der Emde, 2005; Thorne, 2003; Ware, 2005). Others have voiced concern that not enough attention has been paid to linguistic analyses of such projects (e.g., Belz, 2003). Thus, there has been an increasing focus on form (e.g., Blake, 2000; Blake, Wilson, Cetto, & Pardo-Ballester, 2008; Jepson, 2005; Lee, 2008; Meskill & Anthony, 2007; Ware & O'Dowd, 2008), especially in synchronous computer-mediated communication or SCMC (e.g., Kötter, 2003; Lee, 2008; Pelletieri, 2000; Sauro, 2009; Vandergriff, 2006).

There is also a rather practical reason for why teacher education needs to be concerned with implementing technology through model learning: more and more job posts require language teachers to have CALL experience (e.g., Kessler, 2006; Hegelheimer, 2006). Yet, the relevant literature demonstrates that many teachers still feel ill-equipped for using technology such as CMC in their teaching because these skills cannot be acquired by theory alone. By the same token, language teachers may not be aware of the intercultural and linguistic learning potential that CMC-based projects can offer. Hence, there is a need for teacher educators to integrate CMC-based instruction into their programs through model and experiential learning and to provide room for intensive reflection so that student teachers are provided the opportunity to embrace dialogue and appreciate differences (see Schneider & von der Emde, 2005). For professional development purposes, student teachers can do these

reflections in form of an electronic portfolio (e.g., The European Language Portfolio; see also Cummins, 2007).

Finally, this project attempts to contribute to the growing body of telecollaboration research by addressing some of the issues preservice language teachers seem to struggle with when experiencing a similar collaboration in their seminar. More specifically, the study looks at student teachers' expectations and perspectives on outcomes and the implications on pedagogical task design (e.g., Breen & Candlin, 1980; Breen & Littlejohn, 2000; Candlin, 2003; Fuchs, 2006, 2007; Müller-Hartmann, 2000; Müller-Hartmann & Schocker-v. Ditfurth, 2008; O'Dowd & Ware, 2009).

This study is informed by a socio-cultural approach to CMC (Warschauer, 1997; see also Lantolf, 2000; Lantolf & Thorne, 2006; Vygotsky, 1978) and based on the notion of Community of Practice as the primary process of learning (Lave & Wenger, 1991; see also Hanson-Smith, 2006; Hubbard & Levy, 2006; Magnan, 2008; Meskill, Anthony, Hilliker-VanStrander, Tseng, & You, 2006; Sorensen, 2005).

Due to the exploratory nature and research design of the study, trends and tendencies emerged from the data and the theory, and hypotheses were not formulated at the outset except for a number of guiding research questions. These questions were as follows:

1. How do participants self-rate their electronic literacy skills with regard to the Internet and software?
2. How important do participants rank different language learning preferences?
3. What are participants' project expectations? What are participants' perspectives on project outcomes?
4. How do participants evaluate their satisfaction with the final product? What are participants' perspectives on what they think they have learned through the collaboration with their cross-institutional group?
5. How do participants' project expectations match with project outcomes and what are the implications for task design?

Research Design

Participants and Context

Hochschule Heidelberg (PHH). The PHH is located in Heidelberg in the state of Baden-Württemberg in the southwest of Germany. Participants included both male and female student teachers between the ages of 20 and 60 years who were from various ethnic and linguistic backgrounds (e.g., American, Bosnian-Herzegovinian, Chinese, German, Kazakh, Korean, Pakistani, Polish, Russian, Taiwanese). All PHH participants were state exam candidates in teaching English in the various state schools in Germany (*Staatsexamen*). The

TC student teachers were all master degree candidates in either TESOL (Teaching English to Speakers of Other Languages) or AL (Applied Linguistics).

At TC, the 25 student teachers formed 12 local groups of two to three members each, and at the PHH, the 27 student teachers formed 13 local groups consisting of two to three members each. The local groups then formed 12 cross-institutional groups consisting of 4 student teachers each (see Table 1 below).

Table 1

TEACHERS COLLEGE COLUMBIA UNIVERSITY	Pädagogische Hochschule Heidelberg
25 Student Teachers	27 Student Teachers
12 Local Groups (with 2-3 student teachers per group)	13 Local Groups (with 2-3 student teachers per group)

Technology Tools and Course Content

The eight-week international collaboration between the two institutions was based on synchronous CMC (chat) and asynchronous CMC (group forum, wiki) through a customized version of the free course management system, Moodle (http://moodle.org/). In order to communicate with the PHH institution as well as share and store data, TC participants used Moodle@Heidelberg, a customized and self-contained version of Moodle located on the PHH server and only granting access to members of this collaborative project. The working language was English. With regard to content, the course at TC was a methods course and first covered the history and evolvement of the various language teaching methods (Grammar Translation Method, Audio-Lingual Method, etc.) Then, the course moved into Communicative Language Teaching, and into Content-Based Instruction and Task-Based Language Teaching (TBLT) in particular. Since the course content at PHH focused first and foremost on TBLT, the natural overlap for the collaborative project was a focus on TBLT. More specifically, student teachers generated discussions and collaboratively designed tasks with their cross-institutional partner groups over a period of eight weeks, between mid-October and mid-December 2007. After having completed a number of practice tasks, each group's joint product involved the redesign of textbook activities based on TBLT principles that participants had chosen to focus on. The final task (Task 4) included a peer critique and was the only graded task (Appendix).

The Project Phases and Tasks

The collaboration was split up into three phases: The Introductory Phase, the Project Phase, and the Presentation and Evaluation Phase.

(1) The Introductory Phase

The TC groups started first by forming groups and posting bios in early September. Once the PHH student teachers started in mid-October, they also formed local groups and then chose one of the TC groups. As part of the introductory task, student teachers had to inquire about each other's institutional contexts and identify similarities and differences.

(2) The Project Phase

The 12 cross-institutional groups completed a number of practice tasks culminating in a final project task which was graded. The content for each of the tasks was based on TBLT readings such as Littlewood (2000) and Willis (1996). For their final task, cross-institutional collaborative groups negotiated a number of general principles they considered paramount for task-based language learning. These principles then formed the basis for an analysis of a textbook unit and the possible redesign or expansion of the existing exercises or activities in the textbook. Additionally, groups included a focus on one cultural aspect (e.g., a photograph in the textbook) in their unit.

(3) The Presentation and Evaluation Phase

During the final week of the semester in the US, mid-December, each local group did an in-class presentation of their joint project task. Each project presentation was then followed by peer critiques and instructor feedback. For the peer feedback, each local group was assigned to another local group to provide a peer critique (see Appendix for instructions).

Data Collection and Analysis

In this study, the author's status was that of researcher, teacher of the course at TC, and project co-designer in collaboration with the Heidelberg teacher educator. In her role as participant observer (e.g., Denzin, 1989), the author attempted to get multiple viewpoints by trying to determine how the different participants viewed the phenomenon under investigation, i.e., the student teachers' and the researcher's perspectives (e.g., Nunan, 1992). Thus, in this study, data triangulation (e.g., Strauss & Corbin, 1998, p.44) involved gathering information through synchronous and asynchronous data from discussion forums, wikis, and chats as well as descriptive quantitative statistics and qualitative

data from pre-course and post-course questionnaires. The pre-course questionnaire consisted of four sections with questions aimed at eliciting information regarding participants' technology skills (part A), language learning preferences (part B), prior group work and cross-cultural experiences (part C), and their course expectations (part D). Part A was sub-divided into 6 Likert-scale items asking participants to self-rate their computer skills, and Part B was sub-divided into 7 Likert-scale items asking participants to self-rate their Internet skills (1 = insufficient; 4 = very good). Part C was sub-divided into 6 Likert-scale items and asked participants to rank their language learning preference (1 = not important at all; 4 = very important). The final two sections were open-ended and asked participants to describe their prior group work and cross-cultural experiences as well as their project expectations. All qualitative data were coded by two coders. The post-course questionnaire consisted of the following 4 open-ended questions and one additional comment section:

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1. What do you think you have learned through the collaboration with your international partners? Were you satisfied with your final product? (Why or why not?) How can you apply what you have learned to your own classroom teaching?
2. Do you feel motivated to try out a Special Project similar to this in your own teaching? Why or why not? (If yes, please outline briefly the teaching context and target student population.)
3. Based on your computer-mediated negotiation experience with your international partners, please make some suggestions as to what kind of learner (and teacher) training we will need in the future to help overcome some of the challenges that participants have to face (e.g., with regard to technological, socio-cultural, linguistic, and institutional challenges).
4. Briefly summarize the benefits (or lessons learned) from this project for you as a language teacher
5. Additional Comments   *[Post-Course Questionnaire]*

The return rate for the pre-course questionnaires was 23 out of the 52 student teachers (44.23%), while the return rate for the post-course questionnaire varied between 8, 15, 21, 22, and 23 student teachers. For most post-course questions, 22 student teachers (42.31%) provided their answers (seven student teachers from TC and 15 student teachers from the PHH).

This study was exploratory in nature and did not seek generalizability of the results beyond the subjects under scrutiny to a wider population. With regard to the open-ended questions, codes and categories were developed as they emerged from the data without trying to force them into categories already outlined in the existing literature. The issue of applying such "borrowed concepts" to one's data is important as it may impede the researcher developing his or her own categories (Strauss & Corbin, 1998, p. 115). Two coders did open coding (i.e., line-by-line or applied to sentences, paragraphs, or the entire

answers) and then categorized the codes by grouping them around phenomena in the data that were related to the research questions. Next, the coders linked such categories to in vivo codes, i.e., to abstract codes taken from the subjects (Strauss & Corbin, 1998). For instance, categories for participants' answers to the question of the benefits (or lessons learned) from the project with regard to language teaching included "different perspectives and teaching methods," "team work," "content," "project familiarity," and "classroom preparation."

The results section below focuses primarily on findings from the post-course questionnaire for the purpose of evaluating the project from the participants' point of view. In the post-course questionnaire, participants provided qualitative comments on open-ended questions discussing what they had learned through the collaboration and how they could apply their newly gained knowledge to their own teaching, whether they were satisfied with the final product, whether they felt motivated to try out a similar project in their language classroom, what kind of learner training they suggested for future projects, what the benefits or lessons learned were for them, and whether they had additional comments. As described in detail above, the purpose of the post-course questionnaire was to help student teachers reflect on the collaboration with their cross-institutional partner group and to get them to think about how they could apply what they had learned (through positive as well as negative experiences) to their own classroom teaching.

Findings and Discussion

Technology Use in Moodle

Main focus of analyzing the CMC data was placed on Discussion Forum posts because this is where the actual task negotiation took place. The groups barely used the wiki nor did they use chat (6-hr time difference).

Table 2. Average posts in Moodle by all cross-institutional groups

Medium	Number of Participants (n)	Average Number of Group Posts
Moodle Discussion Forum	12	21
Moodle Wiki Posts	12	9
Moodle Wiki Views/Edits	12	168
Moodle Chats	12	0.12

Some of the posts had Word document attachments; however, it was not possible to count the number of words per posting or the attachments separately because occasionally, groups copied and pasted parts of or entire

attachments into their actual Discussion Forum message. A similar phenomenon could be observed in the use of each group's wiki: Group members rarely used the wiki. If groups did use the wiki, they included meta-level comments on their actual post in the wiki itself. Moreover, chats were almost never used. The lack of synchronous CMC may have been due to the six-hour time difference between the East Coast in the US and Germany.

Along similar lines, out of the 22 participants who made suggestions for future projects, 32% argued for more technology support for students such as Wiki training courses and 23% suggested more technology knowledge of teachers and that teachers needed to be aware of students' problems and cultural differences. Or, as two PHH members put it:

> Teachers should get help in Moodle and every school should offer regular Moodle courses. There should be more computers available in each school and more computer rooms so that more teachers could use with their classes the computer rooms at the same time. *[Heidi, post-course questionnaire]*

> For the teacher I would suggest that s/he should be well trained in computer assisted language learning in general. In the case of our email project s/he should be able to worked with moodle and all connected functions like hot potatoes, Wiki, doing a questionnaire and so on. From this follows that the teacher should also be able to give his/her knowledge to the pupils. As mentioned above the teacher should be able to help the pupils to overcome certain cultural differences so that the pupils gain ICC. *[Detlef, post-course questionnaire]*

Finally, the researcher has no access to groups' private accounts for obvious reasons. For instance, one group used their private email accounts as became obvious from one of the TC member's message: "I checked this message and replied via personal e mail account. I got your reply and I re-replied to that. […]" [Ting, October 24, 2007, forum post]. Consequently, any type of message or word count in Moodle must be regarded with the limitations mentioned here.

Self-Rated Prior Technology Experience

Bar Graph 1 below shows the results for how student teachers self-rated their prior technology-related experience (on a Likert scale from 1 through 4 with 1 being insufficient and 4 being very good).
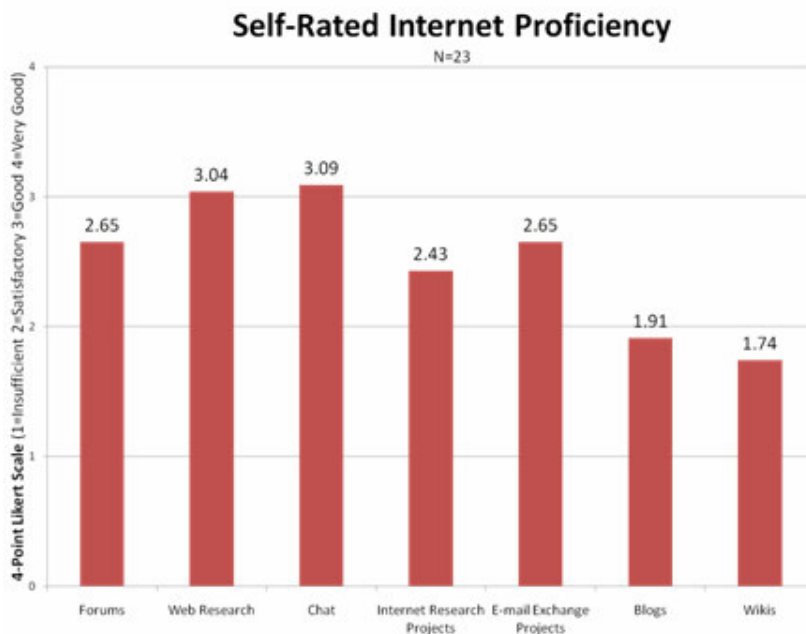
Bar Graph 1.
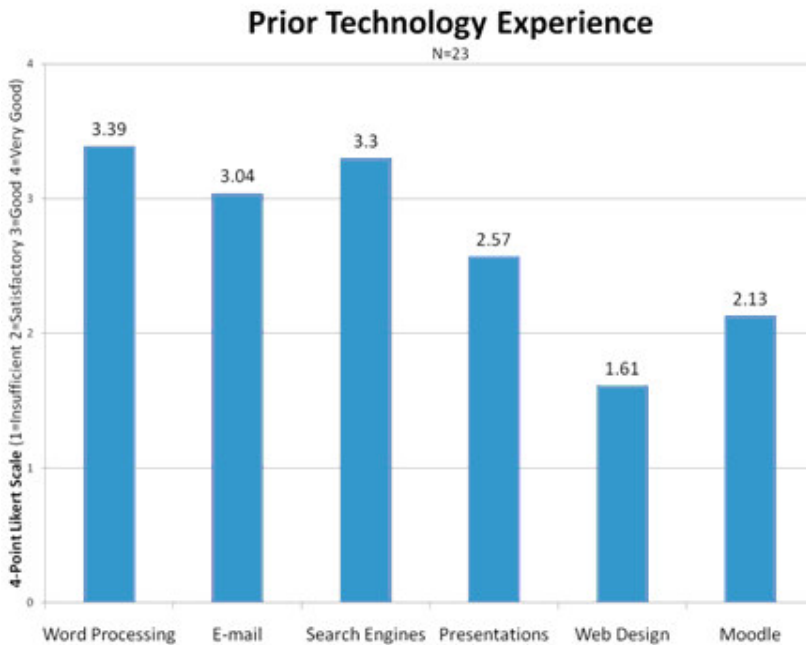
With regard to the communication platform used for this project, participants rated their prior experience with Moodle "satisfactory" (2.13), i.e., Moodle ranked next to last with only Web Design receiving a lower score (1.61). Not surprisingly perhaps, proficiency in technologies that have been around for quite some time now and that seem to be commonly used today by most people ranked high, i.e., Word processing (3.39), Internet search engines (3.3), and email (3.04). On the other hand, participants ranked their proficiency in Moodle, the course freeware system used for this project, rather low (2.13) and next to last.

Self-Rated Internet Proficiency

Bar Graph 2 below shows the results for how student teachers self-rated their Internet proficiency (on a Likert scale from 1 through 4 with 1 being insufficient and 4 being very good).

Bar Graph 2.

As far as student teachers' self-rated Internet Proficiency scores went, Forums and Email Exchange Projects ranked between satisfactory and good (2.65), while Wikis ranked barely at satisfactory (1.74). With regard to the communication platform used for this project, participants rated their prior experience with Moodle satisfactory (2.13).

Not surprisingly, experience with technology that most people are likely to use frequently such as Word Processing, Search Engines, and E-mail were ranked "good" (Word Processing = 3.39, Search Engines = 3.3, E-mail = 3.04).

Language Learning Preferences

Bar Graph 3 below shows the results for how student teachers ranked their Language Learning Preferences with regard to group work, partner work, and publication of a joint product (on a Likert scale from 1 through 4 with 1 being insufficient and 4 being very good).

Bar Graph 3.
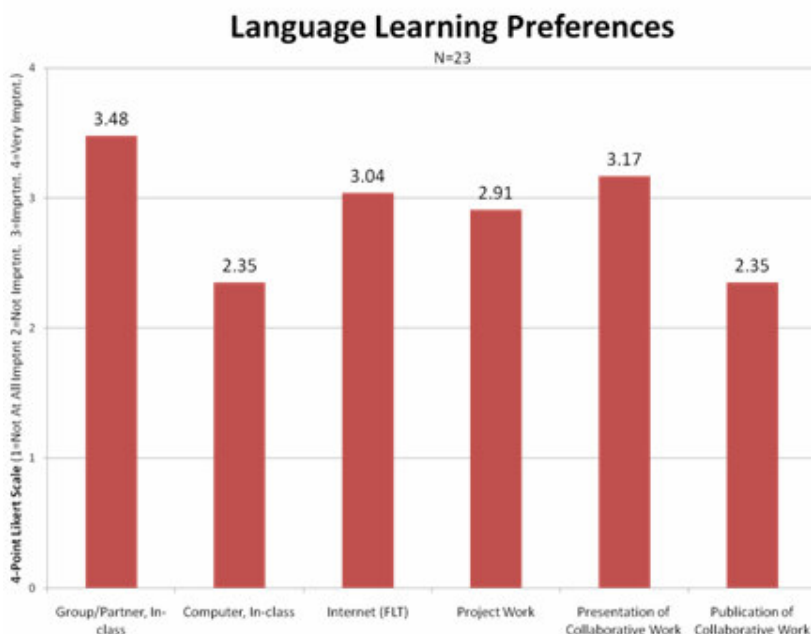
As can be seen from the graph above, student teachers ranked the following Language Learning Preferences the highest: Group Work (3.48), Presentation of Collaborative Work (3.17), and Internet in Foreign Language Teaching (3.04). These results are in line with what 32 % of students teachers indicated what they had learned through the project collaboration (see Pie Graph 3 below).

Project Expectations

Pie Graph 1 below illustrates what student teachers expected from the collaboration prior to starting the project.
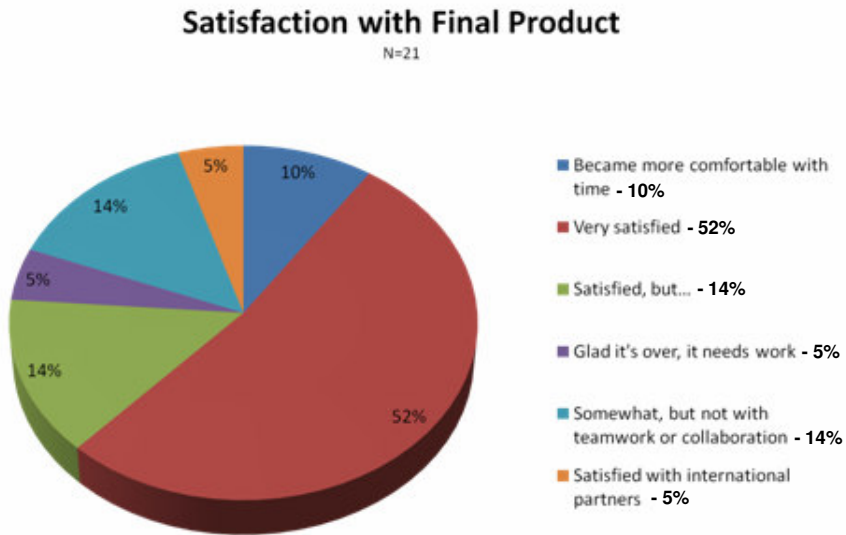
Pie Graph 1.

Project Expectations
N=18
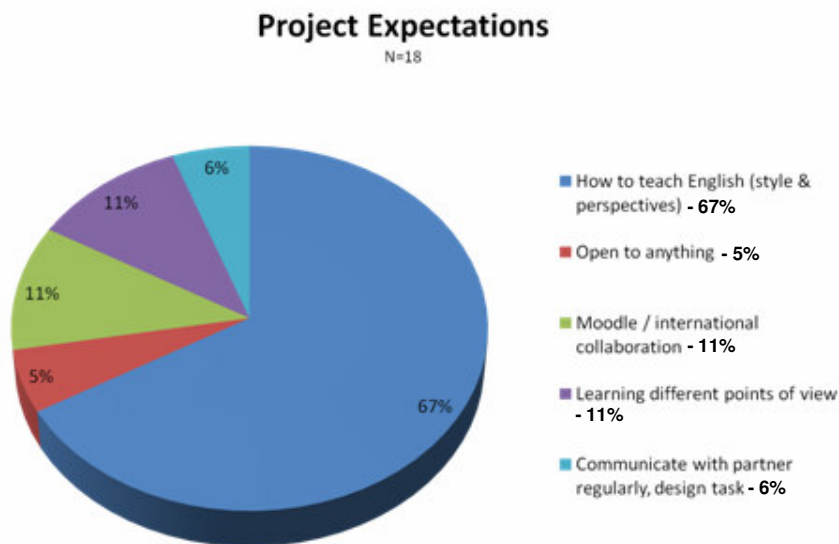
Learning how to teach English ("style & perspectives") was what more than half of the respondents expected (67%). Others expected to learn about "Moodle" and the "international collaboration" (11%), about "different points of view" (11%), or to "communicate with partner regularly, design task" (6%).

The following results are based on participants' responses after they completed the project.

Satisfaction with Joint Task Design

The pie graph below shows the results for how student teachers ranked their satisfaction with the final product, i.e., the joint task design.

Pie Graph 2.

Satisfaction with Final Product
N=21

- Became more comfortable with time **- 10%**
- Very satisfied **- 52%**
- Satisfied, but... **- 14%**
- Glad it's over, it needs work **- 5%**
- Somewhat, but not with teamwork or collaboration **- 14%**
- Satisfied with international partners **- 5%**

More than half of the respondents were "very satisfied" (52%), which supports findings from the author's previous study where six local groups in Germany rated their level of satisfaction with the final product at 3.5 on a 4-point Likert Scale (Fuchs, 2006, p. 153). Some answered "satisfied, but…" (13.64%) and the same number answered "somewhat" satisfied (13.64%). Those who were "satisfied, but…" or "somewhat" satisfied also stated they wished they could have finished Task 4 with their partners or that they were not satisfied with the teamwork or communication.

This was also reflected in replies by student teachers when answering the question of how they would be able to apply what they had learned from the project to their own classroom teaching. 27% felt they were able to do a similar project, but that there was a need to emphasize clear communication and to pick a topic of interest to all participants. Others also stressed the importance of providing "clear instructions to avoid misunderstandings" and the need to discuss "possible problems and cultural differences" (20%). 18% felt that as language teachers, they benefited from the following through the project "team work: cooperation, communication, time management."

Learning Through Task Design Project

Pie Graph 3 below shows the results for how student teachers thought about what they learned through the collaboration on the joint task design project.

Pie Graph 3.

The majority of participants (32%) highlighted the "difficulties and benefits of the collaboration." Five Student teachers (23 %) also emphasized the organizational aspects of the project as something they learned especially with regard to "time, distance, thought, clarity." The same number (23 %) stressed factors such as "communication," ""clear directions," "expectations," and getting to know their partners. This is along the lines of Hubbard & Levy's call that best practices in language teacher education courses should incorporate "authentic constraints" into the tasks student teachers are asked to complete (2006, p. 8).
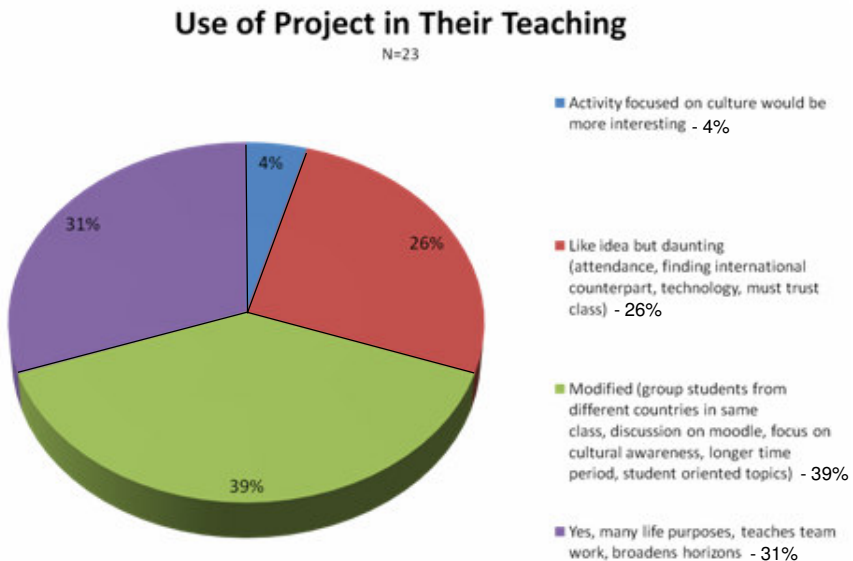
Respondents also commented on having learned about "organization: time, distance, thoughts and clarity (23%). These results are in line with findings in Belz (2002) and Fuchs (2006).

Moreover, the same number of respondents (23%) mentioned that they learned about "communication: importance of knowing partner, of clear directions and expectations." This also supports findings by Fuchs (2006) and Wilhelm (1997). Although Wilhelm's study from the late 1990s did not include a technology component, findings regarding student collaboration were very similar, and Wilhelm concluded that self-directed learning made collaboration very difficult for some students and that they needed more explicit guidance, modeling, and examples.

Use of Project in Future Teaching

The pie graph below summarizes the answers with regard to whether student teachers thought they could imagine using such a project in their own future teaching.

Pie Graph 4.

Use of Project in Their Teaching
N=23

- Activity focused on culture would be more interesting - 4%
- Like idea but daunting (attendance, finding international counterpart, technology, must trust class) - 26%
- Modified (group students from different countries in same class, discussion on moodle, focus on cultural awareness, longer time period, student oriented topics) - 39%
- Yes, many life purposes, teaches team work, broadens horizons - 31%

The majority of student teachers answered in one form or another that they could imagine conducting a similar project in their teaching: More than a third (39%) of respondents said they would use a modified version of the project in their own teaching, roughly one third (31%) liked the many purposes a project like the one they did, and approximately a quarter (26%) liked the idea but felt a bit intimidated. These responses are in line with findings from Fuchs. In her 2006 study, 15 preservice teachers out of n=26 (58%) could imagine using CMC in their own future teaching; additionally, the student teachers in the 2006 study felt motivated but wanted more competence and teaching experience first and they would focus on less complex projects, i.e., with small classes and a lot of learner training (Fuchs, 2006, p. 266). It appears that for students to experience such a project in their seminar may have had a positive effect on their willingness to try out a similar project. Pope, Hare, and Howard (2005) also found that modeling the use of technologies for preservice teachers increases confidence and use of the technologies.

Conclusion and Implications

At the outset of the project, participants deemed the following the most important factors: Group Work, Presentation of Collaborative Work, and the Internet in FLT. These also seem to match with what they said they learned from the project. Moreover, "difficulties and benefits" were two crucial factors that participants said they learned about the collaboration. These results point to a continued focus on technology-mediated communities (e.g., Magnan, 2007). By the same token, there seems to be a need to model technology uses more carefully due to the fact that most groups in this study barely used the wikis. Student teachers also commented that they needed more training in using tech tools (see also Fuchs, 2006). The fact that student teachers said they felt unprepared with regard to technology use appears to remain a continuing problem as the author observed a similar issue in her latest project despite extensive learner training and discussion of what had happened in previous studies. Moreover, teachers may consider moving toward tools such as Google which are a) freely available and do not require server space and b) widely used among students because most of them have Google accounts already. Hence, using such tools may be closer to home compared to a tool such as Moodle, which is used primarily for educational purposes. Finally, Google can be used not only as a class portal and a means for synchronous and asynchronous communication (Google Chat, Google Groups) but also as an electronic portfolio or website (Google Sites).

Future research might also want to look at what groups' outside-of-class interaction was like and if and how they used other technology tools. For instance, did they use any additional synchronous tools such as IM or Skype? Furthermore, the few posts in the wikis point to the need for better training. One main issue for students seems to be the fact that they should only work on the actual project in the wiki and that meta-language on the project should not be included on the wiki (except when added via the "comment" function). There also seems to be a need to go beyond the project phase and integrate groups' self-evaluation of the project in addition to the peer evaluations that each group did. Participants could also be asked to evaluate their private interaction. For instance, groups in other projects have used Skype with their partners. Obviously, these data are not available to the researcher, but it would be useful if student teachers could talk about technology use outside-of-class. Researchers may include a question about each member's use of private technology accounts/tools in their post-course questionnaire or interviews. Additionally, researchers could ask group members to rate the contribution of the use of their private accounts to the overall negotiation. In other words, it would be helpful to find out whether the outside-of-Moodle communication was helpful or not. If it turned out to have been helpful, teacher educators may want to encourage each group to use any channels they deem appropriate even if this may come at the expense of data collection.

Another important finding was that more than half of respondents were "very satisfied" with final task; 96% said they could imagine doing a project like this themselves; yet, there is a need for longitudinal studies to follow up with teachers. Additionally, the remaining data of the other groups from the pre-course and post-course questionnaires need to be analyzed in order to do a cross-case comparison. Moreover, think aloud protocols or post-course questionnaires could be used to find out how participants go about working on joint drafts, which is an important factor for analyzing the wikis.

With regard to task design, one question is how to expand the task and take advantage of working in cross-institutional and cross-cultural settings so as to build on the research by Goodfellow & Lamy (2009) and also to respond to the call to multiculturalism in teacher education and to address culturally appropriate teacher behavior in language teacher education (Lazarton, 2003). Or, in Müller-Hartmann's words, "[i]f foreign language learning and intercultural learning are seen as two sides of the same coin, then teacher education must make sure that teachers know what they have to look for in the learning process and how they can initiate and sustain intercultural learning" (2000, p.145). He continues in stressing the importance of carefully designed tasks:

> It is important to realize that to enhance intercultural learning, the close monitoring of the process by which such learning is carried out is very important. That is to say, the virtual exchange must be thoroughly integrated into the local context of classroom instruction. The joint reading of literature in such a project-oriented approach seems to be one possibility of ensuring that negotiation of meaning takes place. And it is here that the task-based approach develops its fullest potential by allowing learners to develop and express their views, thus making real communication possible and consequently setting the stage to initiate processes of intercultural learning (Müller-Hartmann, 2000, p.145).

Other main challenges with regard to task design seem to be institutional constraints. For instance, there were institutional constraints on the TC end because other things needed to be covered in the methods course. Unlike the PHH course, the TC course did not focus exclusively on TBLT (see also Fuchs, 2006). O'Dowd and Ware (2009) suggest going beyond task types by highlighting the importance of "certain institutional and learning contexts" (p. 185). Compromising different institutional contexts may be more challenging than cross-cultural or linguistic factors. One option could be for teacher educators to integrate precisely this kind of discussion into their respective seminars and into the collaboration. This could also help preservice teachers as apprentices to join the old-timers' discussions on issues that the former themselves will most likely be faced with in their own teaching. These institutional constraints are as real as cross-cultural and linguistic factors (e.g., Belz, 2002; Fuchs, 2006) and addressing them within a Community of Practice could also complement Hedgcock's call for a socioliterate approach to language teacher education.

Finally, future research in language teacher education could add on a linguistic focus in a context like the one described in this paper as most participants in the project were English L2 learners themselves (i.e., 32 of a total number of 52 students or 61.54%). This lends itself to including a linguistic focus and analysis in the project. According to Breen and Littlejohn, negotiation can enrich classroom discourse as a resource for language learning. This requires negotiation in an overt manner and making equal contributions and allowing for diversified input, and extending learners' opportunities for output. Learners get a chance to judge whether their output is appropriate and accurate in relation to the language made available for learning. Making such judgements then can help facilitate further learning as well as foster communicative competence in any language (2000). Preservice language teachers may benefit from experiencing what is expected of language students in CMC-based projects.

Acknowledgements

FUCHS, C. DESIGN DE TAREFAS MEDIADAS POR COMPUTADOR: REALIZAÇÕES E EXPECTATIVAS DE ALUNOS-PROFESSORES DE LÍNGUAS

Resumo: Este artigo analisa como alunos-professores de ESL, nos Estados Unidos, e de EFL, na Alemanha, negociaram a tarefa colaborativa de criação de unidades de ensino de línguas com base em tarefas, via comunicação mediada pelo computador (CMC). Mais especificamente, a pesquisadora triangulou os dados advindos dos questionários pré-curso e pós-curso aplicados, além das transcrições da comunicação síncrona e assíncrona mediada pelo computador, de forma a analisar e contrastar as expectativas dos participantes antes do projeto e suas realizações após o projeto. Considerando a necessidade de complementação da tecnologia na educação de professores de língua, através do modelo de aprendizagem (Hubbard & Levy, 2008; Willis, 2001), alunos-professores colaborativamente criaram critérios de Ensino de Línguas Baseado em Tarefas e as avaliaram , além de redesenhar tarefas de séries didáticas de língua inglesa. Este projeto objetivou capacitar os participantes a compartilhar perspectivas sobre contextos e práticas de ensino em outros países e a aprenderem sobre tecnologia e ensino com base em tarefas por meio de comunidades virtuais de prática (Lave & Wenger, 1991). Consequentemente, os alunos-professores não somente tornaram-se usuários mais proficientes no uso da tecnologia, mas também cresceram em termos de uma oportunidade singular de colaboração com seus futuros

colegas de outros países. Da mesma forma, o projeto rendeu inúmeras questões sobre treinamento tecnológico, desenho de tarefas e contextos institucionais.

Palavras-chave: *Formação de Professores de Língua, Comunicação Mediada por Computador; Negociação, Ensino de Línguas com Base em Tarefas.*

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APPENDIX

Task 4 (Graded Task)

Task-Based Language Teaching Unit: Integrated Skills and Cultural Awareness-Raising

This final task consists of two parts (Part A: Integrated Skills, Part B: Cultural Awareness Raising) and will be graded.

Part A: Integrated Skills

Step 1: Negotiate with your international partners 5-6 general principles that you consider paramount for task-based language learning, for example the focus on meaning or the careful orchestration of focuses on meaning and form. These principles should guide your analysis of the respective textbook unit and the possible redesign or expansion of existing exercises or activities in the textbook.

Step 2: Consult Chapter 10 in Brown (2007) on lesson plans. This will give you a general idea of what is important in a lesson. While you can use Brown as a general basis, your lesson plan is supposed to only cover the aspects listed below.

Required Components of your TBLT Unit:

a) Choose one of the skills you have worked on so far (e.g., reading, writing, speaking, listening, or grammar). The PHH groups will decide on this skill in class on Tuesday, November 27, because they meet first. The Teacher College groups get to choose the textbook later (see Number 5 below).
b) Choose the target student population and grade level you will (re)-design your tasks for. Please specify whether this will be in an ESL or EFL context.
c) Apply the 5-6 principles you chose as Step 1 to your language focus. For example, if you focus on reading, you will need to have meaningful pre-reading tasks that help your learners relate to the text.
d) Analyze three exercises/activities of the unit in each of the two textbooks in light of the general and specific principles you chose. Then evaluate and compare them. You can do this in form of a table as illustrated below.
e) Principle

Principle	Exercise/Activity	Evaluation	Comparison
	Textbook A:	Textbook B:	
	Textbook A:	Textbook B:	

After comparing the activities in the two textbooks, the Teacher College groups will decide which one of the textbooks to use. You will also decide if you want to focus on either the grammar part of that unit (if grammar was your choice in 1) or on a text of the chosen unit, e.g., *The Fortune Cookie,* and re-design exercises/activities according to your TBLT principles. Please focus on integrated skills and cover the following aspects for each activity:

a. **Purpose:** What is your rationale for using a task-based approach? What is the aim of your task? What are the students supposed to learn? Why would you do this task in the classroom?
b. **Procedure:** How do you instruct your students to complete the task? Here

you should also add comments on what the teacher needs to organize in terms of additional material, background knowledge, etc.

c. **Product:** What is the outcome of your task? How are you going to evaluate the task?

Example: If you chose a text and decided on one pre-, one while-, and two post-reading activities, you would have to design four activities. For each activity, you would need to describe its purpose, procedure, and product.

Part B: Cultural Awareness-Raising

Step 1: Choose one cultural aspect of the unit you chose to focus on in Part A. This can either be the representation of people or cultural artifacts in photographs, the use of certain photographs/drawings/pictures in general, or the cultural representation through a text or texts.

Step 2: Expand the actual lesson of the unit to include a short task on cross-cultural awareness-raising for learners. For instance, you could include a discussion of the pictures/photos with your learners. Please provide specifics on *how exactly* you would go about doing this by designing an activity or activities that follow(s) the purpose, procedure, product guidelines outlined above (see TBLT criteria).
Please pay attention to the following deadlines when negotiating with your international partners:

> **Nov. 27:** The PHH teams make their first suggestion regarding the skill to focus on.
> **By Nov. 30:** The TC teams respond to the suggestions and propose a textbook to use.
> **Dec. 4:** Teams on both ends work on Step 1, point 5 in today's class. The TC teams make suggestions as to which picture(s) and/or text(s) they would like to focus on for step 2.
> **Dec. 14:** Deadline to hand in your final version of Task 4.

Please make sure you integrate instructor feedback for Task 3 into Task 4. The grading rubric for Task 4 will be similar with assessment components for Points 1-5 in Part A and Points 1-2 in Part B.

Task 4 – Peer Critique (Graded Task)
Please fill out the following peer critique for the group you have been assigned to. Group 1 will do Group 2, Group 2 will do Group 3, etc. and Group 13 will do Group 1 (individually or with your local partner). Post your peer critique in the folder of the respective group in Moodle@Heidelberg.

Presenters (Group No.):_____Peer Reviewer(s):_____

PART A:
Please comment on the quality of the redesigned/expanded exercises or activities in light of the principles the group has chosen.

PART B:
Please comment on the effectiveness of the group's task on cross-cultural awareness-raising for learners. (e.g., is there anything you would do differently?)

Please comment on the overall effectiveness of the group's TBLT unit: