

TEACHER PARTICIPATION AND FEEDBACK STYLES DURING CLASSROOM
SYNCHRONOUS COMPUTER-MEDIATED COMMUNICATION IN
INTERMEDIATE GERMAN: A MULTIPLE CASE STUDY

by
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ABSTRACT

This mixed design multiple case study of learners' interactions explores the effects of teacher participation during third semester German in-class chatting activities. Three third-semester German courses taught by two different teachers were investigated over the course of one semester, during which the class members were asked to chat for 20 minutes per week using activities design by the researcher and adapted from the textbook.

Multiple data sets were collected: teachers' participation styles and feedback moves; students' language learning achievement levels; students' attitudes towards corrective feedback and technology; their experience with feedback and technology; and evidence in chat transcripts of errors, uptake, and error uptake. Students were administered a pre- and post-instruction achievement test on the structures taught during third semester German. In addition, they were surveyed at the beginning and the end of the semester on their attitudes and experiences with feedback and technology in the foreign language classroom. Furthermore, chat transcripts were analyzed to identify errors, corrective feedback, teacher moves, uptake, error uptake, student and teacher word count and words per minute, error rate, and target language use. In order to better understand the context of the transcripts, classroom observations were conducted once a month, and students completed a self-report form after each chat session. Informal conversations with the teachers provided additional insights.

It was found that the students overwhelmingly appreciated teacher involvement and feedback, and that they saw chatting as both fun and beneficial for language learning. The corrective feedback rate was generally low, as were rates of uptake and error uptake. The two teachers were found to have different interaction and feedback styles. Furthermore, the three classes operated with differing levels of technical support during the lab sessions, which did not appear to influence the students' experiences except for the amount of teacher output. Six case study subjects, namely the two students from each class who contributed the most to chat sessions, were selected for an in-depth analysis of their chat transcripts.

CHAPTER I: INTRODUCTION

1.1 General Introduction to the study

Computer-assisted instruction has led to new approaches to teaching, from computer-enhanced classes, to classrooms in which portions of syllabi are conducted remotely, to exclusive remote delivery of instruction. In each of these cases, especially during the use of computer-mediated communication (CMC) activities, the role of the teacher varies from what we have become accustomed to in the traditional classroom. That is, according to research on CMC in language instruction, a teacher's dominance decreases and student participation is more democratic (for a summary see Ortega, 1997). While many studies have explored the changed roles and conditions for students in a CMC environment, little research has been conducted on the role of the teacher and its influence on student learning. Yet, this research is necessary in order to understand effective teaching with CMC, as well as teacher training and program administration toward an ideal CMC teaching environment, which may not exist. As Blake (2000) points out, technology will not replace teachers, but teachers who know how to use technology will replace teachers who do not. Thus, the effective use of technology in the classroom will become an important factor in teacher employability and retention. Although Blake refers to technology in general, CMC has become recognized as a major factor in technology-enhanced instruction, and due to its interactive nature the question of the role of the teacher becomes especially crucial for this form of technology in the classroom. The teacher's role in the CMC environment, then, must be paid greater attention than has been the case in CMC research in the past.

This dissertation investigates teacher participation styles, including comfort levels, feedback styles, and influences on student language learning and language production within synchronous computer-mediated communication (SCMC) in beginning German-as-a-foreign-language classrooms. In this study, SCMC refers to text-based synchronous communication on local chat servers. The project builds on and is inspired by a previous study conducted by Ene, Goertler and McBride (2005), initially intended to investigate the effect of teacher presence or absence on students' language production. These researchers found, however, that teacher presence or absence has less influence on the students' language production than teacher participation style. It appeared that the teacher who provided more explicit feedback and saw her main role as a corrector, had a silencing effect on her students.

This dissertation consists of a background and a main study. In the background study, chat transcript sets from randomly chosen SCMC sessions are used to describe the participation patterns of 5 teachers, particularly in regards to corrective feedback. This part informed the main study. The main study consists of an analysis of three third-semester German courses taught by two teachers, focusing on patterns of teacher participation styles, corrective feedback, and student proficiency levels. The teacher's comfort level with technology and support through lab assistants were considered as possible contributing factors to the students' experiences. In addition, the analysis focuses on students' error patterns and consequential error treatment (or lack thereof), uptake, and error uptake. The relationships between error type and corrective feedback type, corrective feedback type and uptake, and error type and error uptake are all

considered. In addition to the analysis of the transcripts, this study also reports the kinds of interactions that occurred in the physical space to provide recommendations for adjustments when CMC activities are moved into a remote setting.

This study is grounded in an interactionist framework, one that encompasses various theories on second language acquisition (SLA), and assumes interaction to be beneficial for language learning. Early comparative research studies on CMC claim that it has benefits for language learning. Yet, most CMC studies have focused on either comparing CMC with traditional instructional delivery in the classroom, or on an analysis of the discourse in CMC without regard for the events in the physical environment. In addition, previous studies on error treatment focus only on face-to-face interactions, versus the more anonymous environment occurring with CMC. Thus, while most other studies of SCMC have focused solely on the analysis of transcripts, this study draws from additional data sets to enhance the analysis of the transcripts, such as self-report forms, informal conversations, classroom observations, and attitude surveys.

One of the interesting aspects of SCMC is that it has discourse features of both written and oral communication, and is becoming a form of communication with its own rules, especially with the young generation of college language learners. Because of these unique discourse features, teachers must consciously decide how to treat errors in this mode of communication. In Ene et al., one teacher treated SCMC as a written form of communication, correcting errors more often and explicitly because she believed that non-corrected errors would lead to fossilization. The other teacher, however, focused on the spontaneous element of SCMC, treating errors implicitly and generally only if they

inhibited comprehension. She assumed that the language practice would lead to language acquisition, and error correction would instill fear of production. Other than Ene et al. and this dissertation, I am unaware of any other study investigating teachers' treatment of errors in CMC. However, as CMC becomes a more frequent component of language courses, it is important that language teachers, program administrators, and teacher trainers understand the intricacies and complexities of these interactions.

1.2 Research Questions and Overview of the Study

This research is guided by five questions: the first addresses how the two teachers under investigation participate during chatting; the second considers relationships between corrective feedback and language learning for the students in this study during chatting; the third analyzes patterns evolving from varying error types during the chatting in this study; the fourth investigates the perceptions of teachers and students in this study; and the fifth acknowledges the elements of chat interaction that occur in the physical environment in place of the virtual environment performed by the students and teachers in this study.

In order to answer these research questions, a multiple-case study with a multi-faceted research design was conducted. In the first informative phase, previously collected chat transcripts from German-as-a-foreign-language courses were analyzed, and corrective feedback moves and participation styles of the instructors were categorized. This information was then used to create the training manual for the teachers in the second, main phase of the study. In this main phase, three third-semester German courses

taught by two teachers were observed and studied over the course of one semester. The classes were intended to include one 20-minute chat sessions per week focusing on researcher-designed activities on the vocabulary themes and grammatical structures covered in these courses. However, in reality the chat sessions sometimes lasted longer or shorter, or had to be canceled altogether for technological or curricular reasons. To assess students' language ability and language improvement, achievement pre- and post-tests were administered in week 2 and week 15, respectively, of the semester which focused on the most relevant structures taught in third semester German. Students also completed pre- and post-surveys which asked them to comment on their attitudes and experiences with corrective feedback and technology. For a more detailed view specifically of the chat sessions in their circumstances in the physical and virtual environment, self-report forms were completed by the students at the end of each chat session, and monthly classroom observations were conducted taking detailed observation notes. These data were then combined and considered in order to understand the interactions between these students and teachers, and the effects of these interactions on student learning.

The first research question is informative. In order to find out how teachers participate when they chat with their students a sample set of transcripts from the two teachers in the main phase of the dissertation, were analyzed. The teacher turns were analyzed and categorized according to their functions in the chat conversations. Furthermore, corrective feedback moves were analyzed and categorized. In a selection of transcripts from the three third-semester German courses from the main study all errors

and corrective feedback moves were coded in order to establish patterns of error treatment.

The first question and its subquestions are:

(1) How do two case study teachers participate in foreign language classroom chatting?

(a) What appears to be the teacher's definition of her role, as evidenced by participation styles?

(b) What form does corrective feedback take during chatting in this study?

The second question is approached through the analysis of transcripts and pre- and post-tests administered and collected in the three third-semester German classes under investigation in this study. Again the transcripts which were coded for errors, and corrective feedback moves provided information about the dominant form of corrective feedback used by teachers with six case study subjects selected based on the total time spent chatting. This information was then analyzed in relation to measurements of language improvement, such as the number of words produced, evidence of learner uptake, and gain scores between pre- and post-tests covering all relevant structures taught in these classes. This research question explores which types of corrective feedback were used as well as the effectiveness of that feedback for each of the case study subjects. In addition observed errors and observed feedback was also analyzed and considered.

The second question and its subquestions are:

(2) What influence do corrective feedback styles have on students' learning, as perceived through:

- (a) language production during the chat as measured through word count;
- (b) learner uptake as measured by evidence of correction uptake within the same transcript;
- (c) and improvement of the structures taught during third-semester German classes as measured by a achievement pre-/post-test?

The third question was answered using the coded transcript data from the six case study subjects, in which errors and corrective feedback moves were coded. This coding was used to identify patterns between errors and consequential moves in the SCMC.

The third question and its subquestions are:

- (3) What patterns occur in the data:
 - (a) between error type and error treatment?
 - (b) between error type and error uptake?
 - (c) between source of error and error uptake?

The fourth question investigates the students' perceptions of the teacher's role and how well they match with the actual practice. The perceptions of the teacher's role are taken from the student surveys and to some extent also from the self-report forms. The actual practices used were analyzed by categorizing teacher moves in the transcripts for the virtual context, and by analyzing the notes from the classroom observations for the physical space.

The fourth question and its subquestions are:

- (4) (a) How do students perceive the teacher's role in the chat room and in the physical space? (b) How do these perceptions correspond with actual practices?

The fifth question is particularly interesting for program administrators, considering whether SCMC activities could be scheduled outside of class time or from remote locations. With the help of the students' self-report forms, informal conversations with the teachers, and classroom observations, physical moves were recorded to develop ideas for modifications of SCMC activities should they occur out of the classroom. The fifth question and its subquestions are:

- (5) (a) Which parts of the interaction are happening in the physical space and not in the virtual space? (b) What modifications would have to be made when moving SCMC activities to a remote location?

1.3 Background to the Study

CMC is communication mediated through the computer and can take asynchronous (Email, Message Boards) as well as synchronous (LAN/IRC chats, MOOs) forms. It can be used within or outside of the classroom, with classmates or with outsiders i.e; participants not enrolled in the class. Either way, this form of communication, in contrast to face-to-face communication, affords some anonymity. As a written form, it is slower than the spoken language and allows the participants time to edit their messages, to read and re-read other participants' messages, and to simultaneously send messages. In contrast to oral communications, messages can be ignored, and the managing of turn-taking in some regards becomes easier (Kern, 1995). However, the fact that interlocutors can be ignored can lead to chaos in turn-taking (Bump, 1990; Kern, 1995). The latter can, however, be controlled through smaller group

sizes (Beauvois, 1992 suggests small conferences; Bump, 1990 suggests 4-5 participants). Although CMC is written, especially synchronous CMC shares many aspects with the oral genre of communication, such as a conversational style, spontaneity, and informality (e.g., Böhlke, 2003; Gonzalez-Bueno, 1998; Kern, 1995). Furthermore, as a written medium, pronunciation is not an issue. In the absence of paralinguistic features, everything must be expressed in writing (Donaldson & Kötter, 1998). Yet, when CMC occurs with speakers in the same physical space, such paralinguistic features may be employed in the physical environment. Since the onset of CMC, conventions have been developed by participants to make up for the lack of paralinguistic signs such as emoticons, all CAPS, or extensive punctuation (Kern, 1995).

Most of the early research and use of CMC in the classroom utilized the Daedalus Integrated Writing Environment's synchronous discussion feature, InterChange (see Kern, 1995; Ortega, 1997). Today, language teachers can choose from a variety of different software programs affording them the opportunity for remote as well as local CMC, synchronous as well as asynchronous communication, and the options of picture, video, and voice capabilities.

Research on CMC has identified some advantages and some potential dangers of the use of computer-mediated communication in the classroom. Some of the benefits discussed are a positive influence on language development and also a democratization of participation.

While CMC studies have analyzed the discourse in CMC, most studies have ignored the role of the teacher and the analysis of errors and error treatment. In SLA,

research discussions about effective error treatment are ongoing, and have focused on either classroom face-to-face interactions or natural face-to-face conversations outside of the classroom, but not on CMC. Within SLA research positions on the role of corrective feedback is controversial. Some argue that corrective feedback is not necessary for SLA since it is a process similar to first language acquisition (e.g., Krashen, 1985). Others say that corrective feedback is helpful for adult second language (SL) learners, especially in regards to speed of language acquisition and accuracy (e.g., Long & Robinson, 1998; Nicholas, Lightbown & Spada, 2001; Panova & Lyster, 2002). And still others argue that adults cannot learn a second language in the classroom without corrective feedback (e.g., Higgs & Clifford, 1982). Furthermore, which kinds of corrective feedback are most beneficial is also controversial. In addition, research has not come to a consensus as to effective measures of corrective feedback. A more thorough discussion on the research on corrective feedback will follow in chapter two. Since error treatment and its effectiveness are controversial and context-specific, an in-depth descriptive study of error treatment in CMC is necessary.

1.4 Theoretical Grounding

This study is informed by the interactionist framework in SLA which will be discussed in more detail in chapter 2. The interactionist framework is a sociolinguistic, sociocultural perspective of SLA, based on the assumption that elements of interaction are essential for first and second language learning.

Within an interactionist framework input (e.g., Gass, 1997; Krashen, 1985), output (Swain, 1985), interaction (Long, 1996), and the negotiation of meaning (e.g., Gass & Varonis, 1985) are considered beneficial and crucial elements of language learning.

During CMC participants have the opportunity to be engaged in interactions with peer learners as well as the teacher. This allows them to receive input, though most input will be non-target like at a third-semester German level. In addition, students can test out their own hypotheses about the target language through their own language production in the chat. Together with the teacher and the other students, they have the opportunity to interact and negotiate meaning.

1.5 Rationale for the Study

Previous research on CMC has focused on the learner, while only a few findings pertain to the role of the teacher. However, in order to best use CMC in the classroom, teachers and teacher trainers need to understand how to maximize the benefits of CMC in foreign language classrooms. Further, since it is becoming more common for universities to offer online courses, understanding the role of the teacher during CMC will help educators design such courses in a more effective way. Considering the research on CMC and SLA to date, this dissertation is important for three reasons: (1) the effectiveness of corrective feedback in second language acquisition remains controversial; (2) the role of corrective feedback in chat has been underexplored; (3) the role of the teacher in CMC has not been explored adequately.

To my knowledge, the only study investigating (2) and (3) above is Ene, et al. (2005). The Ene et al. study resulted from a class project and was hindered by many of the constraints of such course assignments, leading to methodological flaws. Furthermore the study was based on the assumption that the teacher's presence or absence in the chat discussions would have an effect on students' behavior. While some connections between the teacher's presence or absence and students' behaviors were observed, the major difference appeared to be between the two teachers themselves. Initially the teachers were assumed to have a similar teaching style as had been observed in the classroom setting. However, their behaviors during the chat sessions were different, with one teacher focusing on form and the other on content. The teacher focusing on form appeared to have a silencing effect on the students. However, due to the lack of time-stamping of individual postings in the transcripts, this could not be determined beyond a reasonable doubt. Yet, the impact the second teacher's participation style had on the students was suggested by the transcripts as well as students' comments acquired through survey. Hence, this dissertation builds on the foundation created by Ene et al. (2005), and specifically investigates the influence of teacher participation style on students' uptake, language learning, and language production.

1.6 Definition of Key Concepts

The following definitions of key concepts are an introduction to the terminology used in this dissertation. As discussed before, teacher turns, corrective feedback, and

errors were categorized. These categories and coding procedures are discussed in chapters three and four. At this point only the salient concepts are defined.

A **chat** is an electronic conversation occurring in real-time utilizing a server. In the case of the chat in this study, the server is local and can only be used in the College of Humanities computer labs.

CMC (computer-mediated communication) is communication using the computer and can be synchronous and asynchronous. As discussed earlier, CMC can be used in a variety of ways in the classroom.

Corrective feedback moves are turns made by the student, teacher, or the students' partner correcting one's own or other's mistakes. These feedback moves include implicit and explicit feedback forms following an error.

An **error** in this study is defined as a morphological, lexical, syntactical, or pragmatic error. Any non-standard language use is considered error, even those that could be considered as regional varieties. However, errors in spelling and capitalization were not considered, neither for the coding of errors nor for the coding of correction.

Error uptake are instances in which one person made an error and in a consequential turn in the same transcript another person made the same kind of mistake. In many cases it is impossible to identify whether something is an instance of error uptake or evidence for the students being at the same language development stage.

Explicit feedback is feedback that is marked overtly in some form. Explicit feedback has a tendency to interrupt the flow of the conversation.

Implicit feedback is feedback that is not marked overtly and usually does not interrupt the flow of the conversation.

Teacher move is any turn produced by the teacher in the chat transcript.

Turn is defined in this study as a posting by a participant. Before each turn, the name and the time of posting is indicated. A turn can be one word or symbol or several sentences long. Every time a person hits enter on the keyboard, what he or she has written in the text box is published to the chat window. This language is considered a turn.

Uptake in this study is considered attempted correct use of a structure or word following a correction within the same chat transcript.

1.7 Organization of the Dissertation

After this short overview of the study and its context, chapter two contains more information about the theoretical framework and previous research. First, I outline the interactionist framework and its related theories. Then I discuss previous research on error correction. In the third part I summarize the research on SCMC. The last portion of chapter two provides a short summary and critique of the studies most relevant to this dissertation.

In chapter three I discuss my research questions and how they were examined. A detailed description of the methods, the context, the participants, the instruments, the data collection procedures, and the coding systems is presented in chapter three. The scoring of the pre- and post-test are also outlined.

In chapter four I present the results obtained from each instrument. This is followed by a detailed discussion and interpretation of the results in response to the before-mentioned research questions. In the last part of this chapter, I discuss additional findings not related to the research questions.

In chapter five I summarize the most important findings from chapter 4 and offer some implications for the field of SLA, language teaching, language teaching and technology, teacher training, and program administration. Finally, the limitations of the study are discussed and recommendations for improvement for further studies are given.

CHAPTER II: THEORETICAL FOUNDATION AND LITERATURE REVIEW

2.1 Introduction

This dissertation operates within a sociocultural, sociolinguistic view of language learning, specifically the interactionist framework, and within the larger contexts of research on computer-mediated communication (CMC) and corrective feedback. This chapter will address the theoretical foundation for this study, the interactionist framework, and will summarize the relevant research on corrective feedback and CMC.

2.2 Theoretical Foundations of the Interactionist Framework on SLA

Second language acquisition (SLA) research is an interdisciplinary field drawing from several areas of interest through research findings and theoretical perspectives. These fields include, but are not limited to: sociolinguistics, psycholinguistics, neurolinguistics, cognitive science, psychology, anthropology, first language acquisition, theoretical, and functional linguistics. The interactionist framework, the foundation for this dissertation, is a sociolinguistic perspective on second language acquisition.

An interactionist framework is a sociolinguistic, sociocultural perspective on second language acquisition which assumes that elements of interaction are essential for second language learning, and encompasses related language learning theories. The interaction hypothesis as formulated by Long (1996) states:

... negotiation of meaning, and especially negotiation work that triggers interactional adjustments by the NS or more competent interlocutor, facilitates acquisition because it connects input, internal learner capacities,

particularly selective attention and output in productive ways (pp. 451-452).

This framework considers all aspects of interaction, such as input, the processing of input, output, and interaction, as crucial for second language learning. On one hand, it focuses on learners and what they do with the input and feedback received and the output produced. On the other hand, it addresses the modifications made and feedback given by the interlocutor, especially a native speaker (NS) or more expert non-native speaker (NNS). Hence, the framework is based on social interaction as a central part of learning, and can be seen in the larger framework of learning set forth by Vygotsky (see for example Lantolf, 2000).

2.2.1 Input

Input is the language a learner is exposed to and is the central part of language development in Krashen's (1985) second language learning theory. Accordingly, input must be comprehensible, and is sufficient for language learning. In the past two decades, these theoretical assumptions have been modified by others such as Gass (1997), who believes that not all input leads to language development, but rather that input is processed through several steps which can lead to further language development. Gass' (1997) model consists of five stages: apperceived input, comprehended input, intake, integration, and output. Here, input is defined as the language a learner is exposed to, while frequency, affect, attention, and prior knowledge influence the learner's ability in processing the input. "...Apperceived input is that bit of language that is noticed in some way by the learner because of some particular recognizable feature" (p. 4). What is then

comprehended by the learner, either immediately or after negotiation or NS modification, is referred to as the comprehended input. The comprehended input interacts with language universals as well as prior linguistic knowledge for further processing, leading to intake. Intake is the process of hypothesis formation and testing which can result in hypothesis rejection, modification, or confirmation. During the integration process, this hypothesis is stored and either immediately or later integrated into the second language (L2) grammar. During output, the learner has the chance to test hypotheses, practice, and receive feedback. In this sense, output interacts with intake as well as the process of moving apperceived input to comprehended input. Due to the cognitive processes involved, Gass argues that effects of interaction may be delayed rather than immediate. This poses a challenge for research design as the effects of a particular input segment may be impossible to measure directly.

2.2.2 Output

Output, as discussed in relation to Gass' (1997) model, is based on Swain's (1985) claim that comprehensible input alone is insufficient for language learning, which she confirmed through her research of immersion students. During input processing, the learner can rely on contextual clues and semantic processing. When being pushed to output, however, a learner must utilize syntactic processing. Output in general plays several roles: (1) creating knowledge from semantic to syntactic processing as described by Swain (1985); (2) practicing or applying existing knowledge; (3) creating automaticity; (4) eliciting further input; and (5) testing hypotheses formed and receiving

feedback about them in regard to the target language (Gass & Selinker, 2001). This important role of output in SLA has also been confirmed by Swain and Lapkin (1995) and Izumi, Bigelow, Fujimara, and Fearnow (1999).

However, a major concern with research on output is whether it is really the output that attributed to the language learning or the feedback received as a reaction to the output. It is conceivable that the opportunity to recall and reevaluate one's hypotheses about the target language in the struggle to produce output is sufficient, or at least that such repeated struggle can lead to greater automaticity.

2.2.3 Noticing

Noticing, or attention, is the cognitive process necessary in the learner to identify mismatches between the learner's own hypotheses about and the actual rules of the target language. This conscious awareness of such differences is important, if not necessary, for second language learning to occur (Schmidt, 1990). In order for input to be processed to intake, i.e., to be incorporated into interlanguage, the learner must be aware of the gap between his or her interlanguage rules and the target language rules. Noticing then is similar to what Gass (1997) refers to as apperception. If noticing is necessary for intake, then an attention to form is important for SLA, which goes against the arguments made by Krashen. The difference between Schmidt and Gass is that, in Schmidt's model, input automatically becomes intake if it is noticed, whereas Gass argues that input that is noticed, or apperceived, does not necessarily become comprehended input. Regardless of the particular interpretation, theorists agree that attention and awareness in some form is

important for language learning. However, the concern in conducting research is to find measures to identify whether an element of language was actually noticed. In general, such a theory appears to operate in a circular argumentation: if something is learned, it was noticed, and it was noticed if it was learned. Through such argumentation, it is difficult for empirical research to prove a hypothesis.

2.2.4 Negotiation of Meaning

As discussed, both output and input afford opportunities for **negotiation**. In interactions with another NNS or with a NS, a learner will encounter many moments of misunderstanding. During those moments the opportunity for the negotiation of meaning arises. Negotiation of meaning is the “attempt made in conversation to clarify a lack of understanding” (Gass & Selinker, 2001, p. 457). During this step, learners can receive feedback on the hypotheses they have formed about the target language, and through the negotiation create a target-like utterance of their intended meaning. “Negotiation of the sort that takes place in conversation is a means to focus a learner’s attention on just those areas of language that do not match those of the language being learned” (Gass & Selinker, 2001, p. 291). Negotiation, then, makes it possible for a conversation to continue after misunderstanding.

Negotiation consists of a trigger and a resolution. The trigger is information that is not understood, while resolution is the process of achieving understanding. Resolution is begun by the participant who has trouble understanding, and who indicates such a struggle through confirmation checks or clarification requests. The conversation partner

must respond to the indicator by clarifying the misunderstood output. The negotiation of meaning is completed when the first interlocutor responds to the second interlocutor, indicating understanding (Gass & Varonis, 1985). Pica, Holliday, Lewis, and Morgenthaler (1989) refer to the trigger and resolution as the trigger and signal.

Long, in his dissertation (as cited for example in Ko, Schallert, & Walters, 2003), emphasized the conversational modifications, later referred to as negotiation of meaning, when a NS and NNS talk. Such modifications include: slower speed of talking, clearer articulation, longer pauses, less slang and idioms, more high frequency words, fewer pronouns, gestures, pictures, additional semantic information, short simple sentences, movement of topic to the front of the sentence, repetition, restatements, new information at the end of a sentence, recasts, comprehension checks, and clarification requests (summarized and adapted from Gass & Selinker, 2001, and Ko, Schallert, & Walters, 2003). The modified input used when speaking with NNSs has been referred to as foreigner talk, similar to “motherese” for first language acquisition. Conversational modifications have also been referred to as negotiation (Pica, 1994), negotiation of meaning (Nakahama, Tyler & van Lier, 2001), and negotiated interaction (Mackey & Philip, 1998). More importantly, several researchers have claimed that the negotiation of meaning assists SLA (Gass & Varonis, 1985; Pica, 1994; Pica & Doughty, 1985; Scarcella & Higa, 1981; Varonis & Gass, 1985).

Long (1996) considers implicit negative feedback received during the negotiation of meaning to be a facilitating factor in SLA. It has been argued that since there exists incomprehensible input (White, 1991) during the negotiation of meaning, learners must

focus their attention on the language forms being used during the negotiation, in turn leading to a noticing of the mismatch between interlanguage and target language grammar. It has been argued that this noticing facilitates second language learning (Gass, 1997; Long, 1996; Pica, 1994). However, some researchers suggest that there is little explicit feedback in conversations (Chun, Day, Chenoweth, & Luppescu, 1982), and that most errors do not receive corrections by the NS (Day, Chenoweth, Chun, & Luppescu, 1984: 7.3% corrected).

Long (1983) and Pica and Doughty (1985) have identified five strategies in the negotiation of meaning: clarification requests, confirmation checks, comprehension checks, self-repetition, and other-repetition. Clarification requests are made by the listener to clarify spoken information. Confirmation checks are also made by the listener, but to indicate understanding. Comprehension checks are made by the speaker to check understanding by the listener. Self- and other-repetition are both made by the speaker, to partially, exactly, or in an elaborating manner, repeat an utterance from within the last five speaking turns. A self-repetition is a repetition of a speaker's own turns, while other-repetition is of another's turn.

Just as there are different ways of responding to misunderstanding, there are also different triggers for misunderstanding: lexical (verb phrases and noun phrases, word choice), morphosyntactic (verb inflections, partitives, and plural morphemes), global (based on discourse, content, or both) (Nakahama, Tyler, & van Lier, 2001), and pronunciation. Considering these starting points of the negotiation, Chun, Day, Chenoweth, and Luppescu (1982) found that (a) corrective feedback in natural

conversation, in contrast to game-like tasks, is avoided, but that (b) the types of triggers in the two tasks were no different.

Several factors have been identified in influencing negotiation of meaning, such as pairing, proficiency level, age, gender, status, ethnicity, personality, and task. In respect to pairing, differences between NNS-NNS, NS-NNS, and NS-NS dyads have been explored. Negotiation of meaning is the most frequent in dyads between NNSs and the least frequent in dyads between NSs (Gass & Varonis, 1985; Oliver, 2002; Pica & Doughty, 1985; Varonis & Gass, 1985; Yule & MacDonald, 1990). If the interlocutors are on different levels of acquisition, negotiation occurs more often (Doughty & Pica, 1986; Gass & Varonis, 1985). In a like manner, the lower the perceived proficiency of an interlocutor the more negotiation will take place (Gass & Varonis, 1985; Oliver, 2002; Yule & MacDonald, 1990).

In addition to these speaker factors, issues concerning task, type, and design of the research can also play a role in the negotiation of meaning. Tasks that are focused on language learning or even a specific structure will allow the learner to pay attention to the language and the feedback received (see for example Long, 1983, 1996; Sato, 1998), and thus be most beneficial for language learning (Gass & Varonis, 1994). Nakahama, Tyler and van Lier (2001), however, found conversational activities to be more beneficial than information gap activities in their research with NS-NNS dyads. In their study, the conversational activity offered the NNS a larger variety of language use opportunities, such as more complex utterances and opportunities for the application of pragmatic knowledge. Furthermore, the learners reported that the conversational activity was more

challenging, and that as a result they paid closer attention than during the information gap activity. If attention is necessary for SLA, it may be argued that less structured tasks would better allow for the negotiation of meaning to facilitate acquisition. This is in contrast to the earlier mentioned study by Chun et al. (1982), which found that negotiation is avoided in natural conversation in comparison with game-like tasks. Hence, arguments for the effectiveness of tasks are still mixed.

Long (1985) saw an indirect effect of negotiation of meaning on SLA. He argued that linguistic and conversational adjustments enhance the comprehensibility of input, which in turn promote acquisition. Assuming this to be true, it can be argued that interactional adjustments benefit SLA. The attention paid and feedback received during negotiation of meaning have also been claimed to benefit SLA in general (Oliver, 2000), and the negotiation of meaning has been linked to improved language comprehension (Doughty & Pica, 1986; Ellis, Tanaka, & Yamazaki, 1994; Gass & Varonis, 1994; Long, 1985; Pica, 1991; Pica & Doughty, 1985; Pica, Young, & Doughty, 1987). Gass and Varonis (1994) found that both negotiated and modified input had a positive effect on comprehension, i.e., the ability of the learners to complete the task. However, in terms of later language production, only the negotiated input showed such a positive influence. Polio and Gass (1998) confirmed this finding. In general, Long (1996), Gass (1997), Mackey (1999) and Pica (1994) agree that negotiation of meaning is a facilitating factor in SLA.

Sato (1988), however, in a longitudinal study on natural SLA, did not find evidence of the effectiveness of interaction for the encoding of past-time in ESL.

Additionally Loschky (1994) could not find an effect of interaction on grammatical development (specifically the acquisition of locatives in Japanese-as-a-second-language). Although he did confirm a positive effect on comprehension, the same was not true for retention of vocabulary. Complexity of structure and perhaps a delayed effect on learning have been suggested as reasons for the varied findings. "...The results of interaction are not necessarily immediate. That is, they may not affect the conversation in which the interaction takes place, as much as they do subsequent conversations" (Gass & Varonis, 1994, p. 298). Mackey and Philp (1998) further divided modified interaction into negotiated interaction with and without intensive recasting. For the advanced learners they found recasting to be beneficial, as measured in greater language production with more morphosyntactic forms. This research suggests that it is the kind of feedback in the interaction that makes the difference in facilitation of SLA. It could be that different forms of negotiation of meaning with different levels of corrective feedback are the explanation for contradictory findings.

Strong supporters for the effect of negotiation of meaning in SLA have even gone so far as to argue that the negotiation of meaning may be of benefit even if only observed and not directly experienced. Ellis, Tanaka, & Yamazaki (1994) confirmed such a view in regard to vocabulary acquisition. Mackey (1999), however, found a greater benefit for learners actively participating in the interaction as measured in improvement of developmental stages in question acquisition. Learners in the control group and in the group receiving premodified input increased little in comparison. The difference was

especially pronounced over time, and the learners who only observed interaction did not show improvement on delayed tests.

The influence of negotiation of meaning on SLA is extremely complex with many influencing factors. More research needs to be done and further attempts need to be made to measure the facilitating effect of negotiation on SLA, especially longitudinally. Furthermore, practical applications of the theory and empirical findings of subsequent studies must be identified for language teaching.

The greatest challenges in research on the negotiation of meaning, as well as research within an interactionist framework, are measurability and interpretation of terminology. As a result, the greatest challenge in interactionist SLA research is arguably an effective research design. The processes underlying SLA are complex, creating a nearly impossible separation of variables. Furthermore, only few elements of SLA have been researched in their developmental stages. As a result, measuring improvements in interlanguage becomes difficult, and neither the advancement in the interlanguage nor the isolation of variables and their affects can be measured directly; research can only find indirect relationships.

2.2.5 Limitations of the Interactionist Framework

One of the limitations of the interactionist framework is the difficulty in proving that the theorized internal processes actually occur. The only way that research can attempt to prove such hypotheses is to provide repeated indirect evidence.

Since Long's Interactionist Hypothesis was formulated with NS-NNS interaction in mind, empirical research within an interactionist framework in a foreign language classroom environment may be considered outside these boundaries. However, since Gass and Varonis (1985) argued that most interaction occurs in NNS dyads, it is important to test the applicability of the hypothesis to such a context. During interactions between NNSs, both learners are likely non-target-like, being that the input they receive and the output they produce is also likely to be non-target-like. As a consequence, their negotiation may result in the adaptation to or uptake of a non-target-like structure. However, since most of our foreign language (FL) students will only have few opportunities to interact with a NS in the target language (TL) other than the teacher, it is important to understand how this interactional framework can be applied to FL learning in the classroom setting.

2.3 Corrective Feedback

As already shown, opinions regarding the necessity of corrective feedback vary in the field of SLA. Furthermore, there appears to be little agreement as to what corrective feedback, if any, will lead to more accurate and/or faster second language learning. Most current teaching approaches, however, seem to suggest using only conversational styles of corrective feedback, such as clarification and comprehension requests. In the following section I will discuss current positions on corrective feedback, provide definitions for corrective feedback moves, and summarize the research findings on corrective feedback in SLA.

2.3.1 Positions

Researchers of SLA take varied and opposing positions regarding the role of corrective feedback. Some argue that corrective feedback is not necessary in SLA since first and second language acquisition processes are similar (e.g., Krashen, 1985). However, even first language learners receive corrective feedback. Others believe that corrective feedback is helpful particularly for adult SL learners, especially in regards to speed of language acquisition and accuracy (e.g., Long & Robinson, 1998; Nicholas, Lightbown & Spada, 2001; Panova & Lyster, 2002). Yet others argue that adults simply cannot learn a second language in the classroom without corrective feedback (e.g., Higgs & Clifford, 1982).

Research is also divided as to what kinds of corrective feedback, if any, may be beneficial for SLA. Individual differences in language learners such as age (see review in Nicholas, Lightbown & Spada, 2001), aptitude, motivation, and learning style may play a role in the effectiveness of one corrective style (or lack thereof) versus another (Schachter, 1991). Researchers may also need to consider the instructional setting (Nicholas, Lightbown, & Spada, 2001; Schachter, 1991), the proficiency or developmental stage of the learner (see for example Lyster & Ranta, 1997; Mackey & Philp, 1998), and the perceptions of teachers and learners on corrective feedback as explored by Schulz (1996, 2001).

2.3.2 Definitions

Learners are presumed to receive positive and negative evidence through input. While **positive evidence** shows a learner what is possible in the target language, **negative evidence** provides information on what is impossible (Long, 1996; White, 1991). Long and Robinson (1998) further divide positive evidence into authentic and modified evidence. **Authentic positive evidence** is input that has not been modified for a less proficient speaker. **Modified positive evidence** may either be simplified or elaborated information to better accommodate comprehension difficulties in the learner. Negative evidence, which indicates to learners that their utterance was not correct, can also be divided further into preemptive and reactive negative evidence (Long & Robinson, 1998). As these names suggest, **preemptive negative evidence** is given to the learner before language production in the form of a rule explanation, and **reactive negative evidence** is an error correction in response to a non-target language utterance by the learner (Long & Robinson, 1998; Morris, 2002). Just as grammar can be taught explicitly or implicitly, so may reactive negative feedback be explicit or implicit. **Explicit negative feedback** includes overt rule explanation or error correction, in which the correction is clearly identifiable and a correct form is supplied. Explicit, or overt, error correction “provides explicit signals to the students that there is an error in the previous utterance” (Panova & Lyster, 2002, p. 584). **Implicit negative feedback** includes simple and complex recasts, as well as negotiation moves such as confirmation checks, clarification requests, and repetitions following communication breakdown (Long & Robinson, 1998).

Long and Robinson's (1998) classification of positive and negative evidence has often been cited in related literature. However, Lyster and Ranta (1997) present a similar yet different categorization of error types which has also often been cited in research on corrective feedback. They analyzed teacher-student interactions in an immersion classroom and identified six types of corrective feedback moves: explicit correction, recasts, clarification requests, metalinguistic feedback, elicitation, and repetition of errors. Recently, Panova and Lyster (2002) added translation to this list, although Lyster and Ranta (1997) had previously considered translations to be a subcategory of recasts. Long and Robinson (1998) had considered recasts, repetitions and clarification requests as implicit feedback, but the corrective feedback definitions they proposed did not include elicitation or translations. Lyster and Ranta (1997) consider metalinguistic feedback a form of corrective feedback which is "either comments, information, or questions related to the well-formedness of the student utterance, without explicitly providing the correct answer" (Lyster & Ranta, 1997, p. 46). In Long and Robinson's model this may have fallen into the category of explicit correction except that it lacks the provision of the correct form.

Within an interactionist framework, feedback is embedded in interaction. A modification of the learners' target language grammar can occur due to several factors, such as: receiving input, especially in modified form; noticing of difference between hypotheses formed and actual NS production; testing hypotheses during output; or receiving implicit and explicit feedback in response to language production. Researchers working within such a framework consider positive evidence (models of correct input)

alone insufficient for language learning. Within this framework, the negative evidence provided during interaction is crucial (see for example Long, 1983). Long (1996) argues “negative feedback obtained in negotiation work or elsewhere may be facilitative of SL development at least for vocabulary, morphology, and language-specific syntax, and essential for learning certain specifiable L1-L2 contrasts” (p. 414).

Corrective negotiation moves following communication breakdown have been argued to be beneficial. Confirmation checks are “a device used in conversation to determine whether one has been understood correctly” (Gass & Selinker, 2001, p. 452). Clarification requests are “a device used in conversation to ask for more information when something has not been understood” (Gass & Selinker, 2001, p. 451). According to Panova and Lyster (2002), “...the purpose of a clarification request is to elicit reformulation or repetition from the student with respect to the form of the student’s ill-formed utterance” (p. 583). Repetition may be defined as the repetition of a learner’s utterance without change other than intonation, whereas recasts are repetitions that correct parts of the ill-formed utterance.

The most controversial form of feedback according to the literature appears to be recasts. Although recasts have been studied extensively, as will be shown later, and it may be that the inconclusive research surrounding this form of feedback can be attributed to varied definitions (for an overview of such definitions see Nicholas, Lightbown & Spada, 2001, p. 733). Morris (2002) summarizes features of recasts as follows: “... (1) they reformulate an ill-formed utterance; (2) they expand the utterance in some way; (3) the central meaning of the utterance is kept, and (4) recasts immediately follow the ill-

formed utterance.” (pp. 396-397). A similar description was provided by Nicholas, Lightbown and Spada (2001) who summarized recast features as acknowledging content, providing positive affect, and modeling the correct form. Recasts are an implicit form of feedback, but also provide positive evidence in the reformulation and are claimed to promote noticing through the contrasting of the ill-formed utterance and the reformulated target language utterance (Saxton, 1997). The interpretation presented here claims that recasts are negative evidence (see also Doughty & Varela, 1998; Long & Robinson, 1998; Oliver, 1995), as they are used to indicate to the learner that a mistake was made. In this study, investigating the use of corrective feedback by teachers, it is assumed that teachers use recasts intentionally to correct their students’ utterances. In contrast, Lyster (1998b), for example, considers recasts to be more like positive evidence than negative evidence because they do not reveal the error. Even if one disagrees with Lyster and argues that recasts are negative evidence, the further question becomes whether recasts are implicit feedback. Recasts can be marked with overt signals such as change in intonation, gestures, or, in the case of writing, with some written symbols, and then could arguably be considered explicit negative feedback (Nicholas, Lightbown, & Spada, 2001). Ene et al. (2005) found that teachers and students used a “*” symbol to mark any form of correction during online chat. From this example, the question then arises whether or not implicit feedback moves become explicit once they are marked with such a symbol, especially since this appears to be an established tradition in the messaging and chatting community. The challenge then is to determine, when a signal is overt enough to qualify a corrective feedback move as explicit.

When looking at corrective feedback one also has to consider what happens after the correction. Uptake is seen as one possible reaction to corrective feedback. Panova and Lyster (2002) define uptake as "...different types of student responses immediately following the feedback, including responses with repair of the non-target items as well as utterances still in need of repair" (p. 574). Lyster and Ranta (1997) also differentiated between two forms of uptake: uptake with repair and uptake which needs repair. Uptake with repair is an utterance following the correction that no longer contains errors. Uptake which needs repair is the unsuccessful attempt made after a correction to correct one's own ill-formed sentence. In addition, in Lyster and Ranta's, definition acknowledgment of the corrective feedback, repetition by the learner, and self-repair are considered uptake if they immediately follow the feedback. Mackey and Philp (1998) argue against this narrow definition of uptake, suggesting that change often does not occur until later in the conversation, suggesting a redefinition of uptake to include instances of repair or attempt to repair later within the same conversation. But even with this wider definition, it is still possible that the effect of a correction may occur even later, hence causing some methodological issues for using uptake as a measure of effectiveness. Thus, the challenge from a research analysis standpoint is to determine how long after received feedback acknowledgment of the corrective feedback, repetition by the learner, and self-repair may be considered as uptake. One must also acknowledge that while uptake can be seen as a successful corrective feedback move, it would be wrong to assume that a corrective feedback move that is lacking evidence of uptake was not successful, since some learners or some discourse contexts may make it unnecessary, or even linguistically awkward, to

provide any proof of uptake, as it may interrupt the flow of the conversation. Therefore, more than one measure of the effectiveness of corrective feedback must be used in such research.

2.3.3 Research Results

Panova and Lyster (2002) summarized corrective feedback applications and research as follows:

(1) Teachers have at their disposal a wide variety of corrective strategies to focus on learner errors. (2) Choice of feedback type can be dependent on type of error. (3) Recasts are the most widely used type of feedback in the observed classrooms. (4) The discourse functions of recasts may lead classroom learners to confuse recasts with positive feedback moves. (5) Learner repair immediately following feedback can be either repetition or learner-generated repair, depending on the type of feedback used. (6) In comparison with other feedback types, recasts do not promote immediate learner repair, which, in the case of recasts, involves repetition. (7) Recasts that reduce the learner's utterance and add stress to emphasize the corrective modification are more effective at eliciting repetition of the recast and are more likely to be identified by learners as corrective feedback. (8) The corrective techniques of clarification requests, elicitation, metalinguistic feedback, and repetition of error correlate more positively with learner uptake and immediate repair, and, in these cases, the repair is learner generated. (9) Learners claim to notice forms that they are pushed to self-repair more than forms that are implicitly provided by teachers (p.577-578).

Nicholas, Spada and Lightbown (2001) identified similar features of successful error correction: (1) there has to be consistency in feedback patterns, (2) feedback has to be recognizable as such, and (3) additional cues such as non-verbal cues may be necessary to better mark corrective feedback.

The effectiveness of corrective feedback has been measured in several ways. Some studies have investigated improvement in language proficiency or developmental

stages in relation to the corrective feedback received. Others have evaluated the effectiveness of corrective feedback through an analysis of the discourse in which they focused on self-repair. Still others have used noticing measures such as uptake, repetition, stimulated recall, or private speech as evidence for potential language development and development opportunity.

Lyster and Ranta (1997) did not consider uptake evidence for learning, but they did suggest that uptake with repair was beneficial for second language development. Generally speaking, although repetition, self-repair, and uptake may be considered measures for noticing, or even evidence for second language development, it is possible that they may not be present, if the discourse may be made linguistically awkward should the utterance be repeated (Lyster, 1998a; Oliver, 1995, 2000), thus failing to show that the utterance was noticed, and failing to show sign of these measures. Hence, while uptake and evidences of noticing have been used as evidence for language learning opportunities, their effectiveness has not been established and additionally their absence may not mean a lack of learning opportunities.

In addition to understanding which evidence has been used to measure effectiveness of corrective feedback, it is also important to understand what feedback types are used by teachers and interlocutors. Early research on corrective feedback was descriptive in nature, and found that teachers employed varied forms of corrective feedback, some of which were not always easy to identify by learners. Doughty (1994, as cited for example in Nicholas, Lightbown & Spada, 2001) found that 40% of students' utterances, whether correct or incorrect, received feedback from the teacher. The most

common feedback forms were clarification requests, repetitions, and recasts. If the utterance was correct, it was likely repeated. In utterances in which there was a single error, 68% received a recast, and 23% received a clarification request. This frequency ranking was confirmed by Oliver (1995), and by Lyster and Ranta (1997), who found that 62% of the erroneous student utterances received feedback. Lyster and Ranta (1997) also found that recasts were the most commonly used feedback move with three of the four teachers considered, while the teacher instructing an advanced class used fewer recasts. Oliver (1995) studied corrective feedback in NNS-NS dyads of teenagers, and found that NSs used recasts, repetition, clarification requests, and comprehension checks. Similar to the other studies mentioned here, 65% of errors received implicit negative feedback, although recasts were not the most frequent. Therefore, forms of feedback that impact the flow of the conversation minimally appear to be preferred by teachers and interlocutors. This preference does not mean that implicit feedback is more effective.

The effectiveness of different feedback types have been investigated. Since recast appears to be the most frequently used feedback form, it is important to review the research on its effectiveness. Empirical research studies have also investigated the effectiveness of recasts for language learning, and they have been shown to be of benefit in L2 instruction (Doughty & Varela, 1998; Long, Inaki & Ortega, 1998; Mackey & Philp, 1998). Long, Inaki and Ortega found recasts to be more effective than models of the correct structure in the short term, although their study did show much individual difference. In a study of young adults, Doughty and Varela (1998) found that students receiving corrective recasts, these being repetitions followed by recasts, achieved better

progress on accuracy and development than did a control group. The developmental stages were evaluated through an interlanguage analysis of pre- and post-tests design to force subjects into using the past tense. The analysis investigated participants' abilities to produce the past tense, specifically to determine at which interlanguage stage the students were at for this specific structure. The problem with research studies focusing on developmental stages is that little is known about them, especially in the acquisition of languages other than English. In addition, some researchers caution that recognizing the recast as a correction may be necessary for language development, in that the difference in learner utterance and recast may not be noticed by the learner. Saxton (1997) claimed that first language learners would be able to notice corrective feedback because of the difference between the recast and the original sentence; he referred to this as the direct contrast hypothesis. Long and Robinson (1998) also stressed the importance of attention to form for adult language learning, and thought that recast would be ideal for such a focus. Nicholas, Lightbown and Spada (2001), however, argue that recasts are difficult to identify in L2 contexts, even though recasts can be more effective if the focus of instruction is on form. Doughty & Varela (1998) found that repetitions and recasts did not interfere with a focus on meaning in the classroom, and thus they were an unintrusive, low affective filter form of corrective feedback. However, they were skeptical in regard to the effectiveness, and suggested that recasts are best utilized as corrective feedback when focusing on one form at a time, especially when the recast is emphasized with additional cues. Long, Inaki and Ortega (1998) further cautioned that effectiveness of recasts may be dependent on the language structure. In conclusion, while

recasts appear to be the most frequently used form of feedback, research has not confirmed their effectiveness.

A partial explanation for the possible ineffectiveness of recasts is that recasts could be interpreted by learners as a conversational reply, confirming the content of the message rather than expressing a disapproval of the structure of the message (Schachter, 1981). In Lyster and Ranta's (1997) study, only 5% of the recasts following a correct utterance led to uptake, versus 31% of the recasts following incorrect utterances, suggesting that learners may have perceived the difference between the recast with correction and recast without correction. This is based on the assumption that only recasts to incorrect sentences require uptake in the discourse. However, this suggested ability to differentiate between corrective moves and non-corrective moves does not necessarily result in improvement. This is true especially since Lyster and Ranta (1997) also found recasts to be the least effective of various forms of corrective feedback, and Panova and Lyster (2002) found little uptake following recasts. Lyster (1998b) agreed that recasts were hard to perceive by the learner, explaining that recasts to grammatically correct or incorrect utterances seemed to have the same frequency, which is different from L1 contexts. Hence, the learner may not understand the difference between a recast used as a form of negative evidence and a recast used as positive evidence, creating ineffective correction for the learner. Lyster also found that recasts were often accompanied with approvals of the meaning, further complicating the identification process of recasts as corrective feedback, especially since learners do not know if the meaning is being approved or if their language is being corrected. Accordingly, Lyster (1998b) also argued

that recasts are hard to identify due to their ambiguity and similarity with repetitions of well-formed student utterances. In conclusion, the unintrusive nature of recasts, which may make it the preferred choice by teachers, may be the reason for the difficulties in proving their effectiveness.

Before discussing the effectiveness of all feedback forms, it is important to review relevant definitions. Lyster's (1998b) definitions of corrective feedback types are often used or referred to in related studies as follows:

(1) Explicit correction: teacher supplies the correct form and clearly indicates that what he student has said was incorrect; (2) Recast: teacher implicitly reformulates all or part of the student's utterance; (3) Elicitation: teacher directly elicits a reformulation from students by asking question such as "comment ça s'appelle?" or "How do we say that in French?" or by pausing to allow students to complete teacher's utterance, or by asking students to reformulate their utterance; (4) Metalinguistic clues: teacher provides comments, information, or questions related to the well-formedness of the student's utterance such as "ça ne se dit pas en français" or "C'est masculin?"; (5) Clarification request: teacher uses phrases such as "Pardon?" and "I don't understand"; (6) Repetition: teacher repeats the student's ill-formed utterance, adjusting intonation to highlight the error (p. 4).

Looking at corrective feedback types in general, several studies compared corrective feedback types and their effectiveness in SLA, as well as the relationship between error type and feedback type. In regard to implicit and explicit feedback, Morris (2002) found 70% to be implicit, while Seedhouse (1997) confirmed a low percentage of explicit feedback. In conversations only little explicit feedback is expressed (Chun, Day, Chenoweth, & Luppescu, 1982). Williams and Evans (1998), however, argued that the explicit treatment of structures would be effective for simple forms for which the learners were ready. However, explicit feedback seems to be rare in today's classrooms.

Seedhouse (1997) argues that the absence of such explicit feedback may make it harder for learners to perceive the feedback.

During my review of studies performed in the field, it became apparent that corrective feedback is confusing at the least. While the definitions offered appear to be clear, actual data categorization is not always as clear. Two of the issues in the review of the literature are that (1) applications of the definitions differed and (2) applications of the definitions were not always provided. Especially the division of negative feedback into implicit and explicit feedback seems troublesome. Any form of implicit feedback can be used in an explicit way by using intonation, gestures, or written tools. For example, a teacher can repeat a student's utterance and then write the incorrect form on the board, maybe even circling the error in red. While most people would classify such a correction as explicit, if only the incorrect form is written on the board in addition to the verbal repetition the definition becomes more challenging.

Within the options of implicit feedback, it appears that forms that engage the learner more actively, such as negotiation moves, are more successful. Doughty (1994, as cited in for example Nicholas, Spada, and Lightbown, 2001) reported that 61 out of the 284 recasts, i.e., 21%, resulted in learner repetition, here considered as evidence of noticing, with no difference between recast with or without emphasis. In this case, one must consider whether a recast with emphasis is still implicit feedback. Also, a mere four of the 173 repetitions resulted in learner repetition. Doughty saw these findings as evidence that learners are able to perceive the difference between a repetition and a recast, although she is cautious about the effectiveness of recasts due to the low repetition

rate. Similarly, Lyster and Ranta (1997) questioned the effectiveness of recasts, since in their study these forms had the lowest uptake rate. Morris (2002) found an overall low repair rate, yet did find negotiation moves more effective than recasts. Lyster and Ranta (1997) found recasts to have the lowest, and elicitation and metalinguistic feedback to have the highest rate of uptake (Lyster & Ranta, 1997). Lyster and Ranta measured effectiveness of error correction by the opportunity to negotiate forms, and hence considered metalinguistic feedback, elicitation, clarification request, and repetition of errors beneficial, whereas recasts and explicit correction were not. Lyster (1998a) triangulated the results in a later study, and found that the corrective feedback forms that promote negotiation of forms resulted in more immediate repair than those that did not. This claim is based on the assumption that if learners have to actively work on retrieving the correct utterance, they are more likely to remember it. It appears that it is easier for learners to notice forms that they were pushed to self-repair, rather than those simply provided by the teacher.

After this general discussion of effectiveness, one must also consider the relationship between the error type and the corrective feedback type. Studies investigating this relationship suggested that speakers familiar with NNSs create patterns of correction. Morris (2002) analyzed peer feedback in dyad work in a beginning Spanish class and found that morphosyntactic errors were followed by recasts and lexical errors by negotiation moves. Lyster (1998a) found that recasts were used in response to grammatical and phonological errors, while negotiations of form, such as elicitation, metalinguistic feedback, clarification requests, and repetitions, were used for lexical

errors. Mackey, Gass and McDonough (2000) investigated the types of feedback and their correlation with error type in ESL and Italian-as-a-foreign-language (IFL) dyads. Recasts were found to be the preferred form of corrective feedback for morphosyntactic errors (i.e., 75%). Phonological errors on the other hand received negotiation moves, especially clarification requests, as feedback in the ESL group, but recasts in the IFL group. Learners were able to perceive the feedback on phonology and lexis as evidenced in stimulated recall. However, they were unlikely to perceive the feedback on morphosyntactical errors, further suggesting that recasts are difficult to perceive. There appears to be a relationship between the error type and the feedback type. It is, however, not clear whether the dominant feedback type used in response to a certain error type is the most effective feedback type for such errors.

The largest concern with corrective feedback is that learners do not repair all mistakes after corrective feedback (Day, Chenoweth, Chun, & Luppescu, 1984; Lyster, 1998; Lyster & Ranta, 1997; Oliver, 1995, 2000) and may not even recognize corrective feedback as such (Mackey, Gass, & McDonough, 2000). This means that it is impossible to use only one measure of effectiveness to determine the outcome of certain corrective feedback moves. Yet, the following questions remain and cause problems for research design: (1) If a learner does not show evidence of recognizing that he/she was corrected, does that always mean that he/she in fact did not recognize the correction? (2) Even if a learner does not recognize corrective feedback as such consciously, does this necessarily mean that it can never lead to language learning? (3) Even if there is evidence of uptake,

does this mean that as a consequence the learner's language has improved or will improve?

The trouble with research on corrective feedback in SLA is that researchers do not seem to agree on the terminology or methodology, hence it becomes difficult to make any claims that the majority of researchers will accept. In reviewing the literature, it is apparent that more research needs to be done with a clear definition of the corrective feedback, measuring development over time, as well as noticing in various forms such as private speech, stimulated recall, and uptake (in Lyster and Ranta's definition, 1997).

2.3.4 Gaps in the Literature

While corrective feedback has been studied extensively in face-to-face (F2F) conversation, it has not been given much consideration in the CMC environment. Most research has been conducted in either ESL or immersion contexts, creating the necessity for more studies investigating the role of corrective feedback in the FL classroom, especially in a CMC context. Further studies are also needed on dyads between NNSs, as these have been less common than studies of dyads of NNSs and NSs. Finally, variations in findings and outcomes among studies suggests the need for further systematic and detailed research on corrective feedback including detailed descriptions of applied settings, methods, and terminology.

2.4. CMC

As described in chapter one, CMC is communication mediated through the computer and can take asynchronous (Email, Message Boards) as well as synchronous forms (Local Area Network (LAN)/Internet Relay Chat (IRC) chats, Multiple User Dimension (MUD), Object Oriented (MOO)s). In practical and research applications it has been used both within in the same physical space and also through distant learning set-ups. CMC forms share the following features: anonymity, written form of communication, slower than spoken, can be used spontaneously, editing capabilities, options to re-read messages, and the option to post messages simultaneously. Furthermore, as a written medium, pronunciation is not an issue. Although CMC is written, CMC, especially synchronous CMC, shares many aspects with the oral genre of communication such as a conversational style, spontaneity, and informality (e.g., Böhlke, 2003; Gonzalez-Bueno, 1998; Kern, 1995). Yates (1996) argues that CMC is closer to written than the oral modality. CMC shares features of both a typical written and a typical oral form of communication (Chun, 1994; Kern, 1995; Warschauer, 1996). CMC has been argued to be a transitional step between the two (Chun, 1994).

In the absence of paralinguistic features, everything has to be expressed in written words (Donaldson & Kötter, 1998). Over the course of the years, separate conventions to make up for the lack of paralinguistic signs have been developed, such as emoticons, all CAPS, or extensive punctuation (Kern, 1995). The advantage of computer-mediated communication is also that emphasis can be portrayed visually and without distractions of gestures and intonation.

Most of the early research and use of CMC in the classroom was utilizing the Daedalus Integrated Writing Environment's synchronous discussion feature: InterChange (see Kern, 1995; Ortega, 1997). Today, language teachers can choose a variety of different software programs affording them the opportunity for remote as well as local CMC, both synchronous as well as asynchronous, and also with or without picture, video, and voice capabilities.

2.4.1 Problems in Research Design:

A review of previous CMC research sheds light on several investigative challenges. Research design and theoretical grounding were problematic, especially in early CMC research. Early studies compared the benefits of using CMC with the benefits of classroom instruction, although some studies did not even provide comparison values. Other studies simply did not compare similar enough contexts to be considered valid evidence, such as a teacher-fronted regular class with CMC pair work. In addition, as with any language learning activity, the confounding variables are numerous and diverse. Most studies, however, either ignored or failed to report variables that may have had an impact on findings, such as activity design, task type, learner profiles, group size, and lab set-up. Many studies only consulted the transcripts as data for their study, which only gives a partial picture of the actual interactions and learning occurring in online chatting. As Smith (presentation at CALICO, 2005) has indicated, for CMC research to be valid, information about what happened in the physical environment must be considered.

Although Smith focused specifically on chatting in his study, his methodological recommendation was made for all forms of CMC research.

One of the greatest flaws in CMC research has been the lack of comparability, due to the lack of information about details of the studies, such as factors that influence learner interaction. The following section describes some of these factors.

2.4.2 CMC and Language Learning

Operating within an interactionist framework, the mere fact that learners have the opportunity to process input, produce output, negotiate meaning, notice, and receive conversational feedback would suggest that CMC is beneficial for learning. However, due to the nature of the communication medium, such conclusions cannot easily be drawn without empirical evidence.

Most of the earlier studies in CMC compared classroom face-to-face interaction with CMC contexts, and investigated the effects each had on various aspects of language learning. Beauvois (1992, 1997, 1998), Chun (1994) and Kelm (1992) all argued that CMC encourages more target language use. The accountability, i.e., the fact that the student is faced with his or her own language production on the computer screen, the presence of transcripts as evidence of conversation, and the slower speed of the interaction may all be considered contributing factors for the increase in target language use. Ene et al., although not comparing CMC with face to face (F2F) interaction, also found a high percentage of target language use.

Kelm (1992) argued that CMC improves reading comprehension. Since CMC is a written medium of conversation even when used synchronously, this argument stands to reason. The same logic, then, can be applied for writing ability. Chun (1994) found that CMC furthered the writing ability of FL learners, and Donaldson and Kötter (1999) argued that the absence of paralinguistic features and the consequential need to express everything in written words would benefit language development.

Many of the enthusiastic early researchers in CMC argued that CMC can benefit language development in general (Beauvois, 1992; Chun, 1994; Kelm, 1992; Kern, 1995; Warschauer, 1996). However, caution was expressed in regards to complexity of language production (Chun, 1994) and accuracy of postings in CMC (Beauvois, 1992; Kern, 1995). Gonzalez-Bueno (1998) found that the CMC learner language in an Email context exhibited higher quality of language in terms of accuracy, but in a later study, Gonzalez-Bueno and Perez (2000) found that the electronic journals had fewer lexical but more grammatical errors than the paper-and-pencil entries. Abrams (2003) found synchronous CMC beneficial for increased language quantity, but not necessarily quality.

It has also been a concern that perhaps error uptake would be more dramatic in the CMC environment than in F2F interactions. However, Ene et al. found little evidence of error uptake in comparison to the number of errors produced, and determined that a percentage of the error uptake by the interlocutor may have been a reflection of a similar interlanguage stage.

Kelm (1992) voiced caution in regard to the transferability of skills from a written CMC communication to oral communication. However, Kost's (2005) quasi-

experimental dissertation research on overall language development in CMC versus face to face (F2F) role-plays found no significant difference in oral and written proficiencies. Encouragingly, Payne and Whitney (2002) found CMC beneficial for oral proficiency. Although more research is needed, these results suggest that CMC is not harmful for language development, even oral language development, and may prove beneficial in language learning overall.

2.4.3 CMC vs. Classroom

As mentioned, early studies of CMC claimed to compare the benefits of CMC in contrast to classroom settings, even though such comparisons were not always justified. Yet, many of the results correlated with each other, and in this sense they validate the research results of the individual studies.

The following benefits of CMC over classroom discussion were suggested by early CMC research: CMC (1) provides a voice to those who do not have one (Batson, 1988); (2) increases language productivity (Beauvois, 1992, 1998; Kern 1995); (3) decreases teacher dominance (Beauvois, 1998; Kern, 1995 though he views that negatively); (4) equalizes participation especially for shy and minority students (Beauvois, 1992, 1998; Bump, 1990; Kelm, 1992; Kern, 1995; Warschauer, 1996); (5) increases willingness to discuss topics openly and honestly (Beauvois, 1992, 1998); (6) increases student motivation (Batson, 1988; Beauvois, 1992; Bump, 1990; Donaldson & Kötter, 1999; Kelm, 1992); (7) decreases anxiety (Beauvois, 1992, 1998; Donaldson & Kötter, 1999); (8) encourages target language use (Beauvois, 1992, 1997, 1998; Chun,

1994; Kelm, 1992); (9) improves reading comprehension (Kelm, 1992); (10) improves writing ability (Chun, 1994); (11) increases language output (Darhower, 2000; Sullivan & Pratt (1996); (12) increases interactive discourse (Abrams, 2001; Chun, 1994); (13) improves attitude towards language learning in general (Blake, 2000; Kern, 1995; Warschauer, 1996); (14) improves attitude towards cultural studies (Fraser, 1999; Schneider & von der Emde, 2000); (15) provides a great range of language functions through discourse (Abrams, 2001; Chun, 1994); and in general (16) can benefit language development (Beauvois, 1992; Chun, 1994; Kelm, 1992; Kern, 1995; Warchauer, 1996). The features of CMC described earlier (reduced speed, editing capabilities, reading options, etc.) are possible explanations for such benefits.

Beauvois (1997) found that a group of learners utilizing CMC outperformed a group utilizing F2F in an oral exam on pronunciation, grammatical accuracy, lexical choice, accuracy, and content. In the same study, Beauvois also argued that the syntactic complexity, the lexical sophistication, and the amount of speech were good during CMC for the language level of the students. Warschauer (1996) made a similar argument.

The challenge of comparing F2F classroom to CMC interactions, is that usually only small group or pair work is utilized in the CMC portion of the class, while these as well as other interaction forms are used in the classroom. Hence, in order to generate reliable findings, one would have to either compare pair and small group work in the F2F portion of the class with that in CMC, or find ways to also include teacher-fronted, whole group, and individual work in CMC. Moreover, computers and the internet offer learners the opportunity to utilize various kinds of resources, which again changes the way the

learners are able to and will interact. It should be noted that computer and internet access for all students may be of concern, as well as that the teacher's or institutional knowledge of technology and its options influences this availability.

2.4.4 CMC as Part of Class vs. Independent of a Language Class

Most research studies to date investigated the use of CMC in an intact language classroom, even though, in many cases, the CMC component of the class was an add-on for research purposes and not an integral, normal portion of the course. Many research studies do not mention if the CMC component of the class was (a) graded and part of the course grade and/or (b) seen by the course instructor. One can assume that students participated in varying degrees of effort depending on both the significance of the task for their course grade and their relationship with the course instructor.

The approach of CMC to language learning, whether presented as an independent component or as part of a course curriculum, naturally changes the requirements of the task design and the nature of the interaction. To this researcher's knowledge, the only study investigating CMC that was not part of a curriculum was a study by Klocke and Görtler (presented at CALICO, 2003). In this study, the researchers investigated the use of a commercial ESL chat server for further independent study, and found that successful use of such opportunities requires persistent, almost aggressive behavior by the ESL learner, as well as the willingness to take risks. Understandably then, one of the major indicators whether or not the independent engagement with CMC was successful was the personality of the learner.

2.4.5 CMC Asynchronous vs. Synchronous

Like the manner in which CMC is presented in the language learning environment, the context of synchronous versus asynchronous CMC is a factor that changes the activity. While some instructors use asynchronous CMC software, such as message boards, for synchronous communication, it remains an asynchronous tool. Although there might be simultaneous postings, they are not seen as the message is written. Often these programs require the user to hit the “refresh” button or tab in order to update the screen communication rather than automatically updating. Also, the physical presentation of the program usually encourages longer responses than the layout of a small chat window which often only has space for one line. Abrams (2003) summarizes the similarities and differences between SCMC and APMC, all of which could arguably influence the amount and the complexity of the language produced, as follows:

Similarities: Extensive learner-to-learner (or learner-learner-teacher) negotiation of meaning; more ‘talk’ time per learner than oral classroom communication; increased amount of output results in richer and more diverse lexicon; written code; register between those of written and oral styles of communication. Differences: Relatively immediate responses in SCMC vs. extended planning, encoding, decoding time in APMC; Use of outside resources cumbersome in SCMC versus use of outside resources not limited in APMC; Social immediacy of interlocutors in SCMC versus interactants not ‘immediately’ present (p. 159).

Some of the differences in findings about the effects of using CMC can be explained by the use of different research tools. For example, Chun (1994), when looking at chat, noted a lack of language complexity, while Gonzales-Bueno (1998), on the other hand, found an increase in complexity when using email for journaling rather than paper and pencil. This difference can be explained by the use of synchronous CMC by Chun

versus asynchronous CMC by Gonzales-Bueno. Based on the summary of similarities and differences by Abrams, this discrepancy can be expected.

Abrams (2003) contrasted different media of CMC in respect to some of the benefits identified by numerous CMC researchers as previously discussed. She found that the asynchronous CMC treatment group produced less output than the synchronous group or the F2F control group in regards to lexical richness and density and syntactic complexity. This finding is surprising, considering that a message board, standard to asynchronous CMC, is visually more inviting for larger postings. However, the tasks observed were designed as discussions, and a synchronous form of communication is more natural for discussions than an asynchronous form, which may explain why Abrams (2003) came up with seemingly counterintuitive results.

Perez (2003) compared asynchronous and synchronous CMC for their effect on language productivity. In her within-subject design study, she measured language productivity through new words used and found no significant difference between the two media. The preference of one medium over the other was also similar between the two groups. However, it should be noted that students produced more words in chat than in email messages. And though the activities are poorly explained, it can be assumed that this difference can be attributed to the instructions given to the students. Specifically, email messages were to be at least 90 words long, whereas chatting took place over the course of an hour. It is easily arguable that even a beginning student can write more than 90 words in an hour.

2.4.6 CMC from the Same Location/Time vs. CMC from Different Locations/Times

Some research studies have investigated CMC activities occurring in the same physical space, whereas others have reported on CMC in which the participants were not in the same physical space. When using CMC in different locations, students may be required to participate at the same time, or may be allowed to participate at their convenience with time differences. If the chat occurs outside of class time, students may be less likely to participate because it requires extra effort. In addition, if chat occurs at different times, the teacher's role changes due to the diminished likelihood that any or all groups will be observed, especially when using synchronous CMC. It must also be taken into consideration that computer quality may affect the interaction, as some students have slower, dial-up connections while others are using high-speed internet connections. The sense of community will change depending on where the CMC happens; and, if the chatting occurs outside of the class, the students are no longer able to ask each other and the teacher questions during the chatting in the physical space, affecting the CMC dynamics.

Donaldson and Kötter (1999) reported that technical difficulties that some students experienced, due to the CMC component occurring at different times and locations, minimized the benefit for some students. They also reported that the teacher was viewed as an intruder in a synchronous CMC activity that was to occur outside of class.

2.4.7. CMC Non-Native Speaker & Native Speaker Dyads vs. Non-Native Speaker Dyads

Also challenging in comparing CMC studies is the attempt to compare results from different dyads and small groups. Some CMC projects investigated the interaction between NNS and NS, while others attended to the interaction between NSSs. As mentioned earlier in the discussion of the negotiation of meaning, a dyad consisting of NNSs is likely to negotiate more than a NNS and NS pair. On the other hand, a NNS interacting with a NS has more opportunity to receive correct and premodified input. Additionally, many of the NS/NNS pairs are set-up as a tandem learning project which also changes the dynamic. More code-switching appears to occur in such contexts, if, for example, one compares the results of code-switching in Donaldson and Kötter (1999) with Ene et al. (2005).

2.4.8 CMC Group-Size

It has also been found that group-size has an effect on CMC in the classroom. Böhlke (2003) revisited the issues of participation and language quality in chat versus F2F discussions. He focused on differences according to group-size and language stage. His cross-over design study measured participation in c-units (a communication unit: “a word, phrase, or sentence that in some way contributed pragmatic or semantic meaning to a conversation” (Crookes, 1990, p.184), and adopted the five language stages (1: Canonical word order: subject-verb-complement; 2: Adverb preposing: Adverbial phrase-

subject-verb-complement; 3: Verb separation: subject-finite verb-complement-nonfinite verb; 4: Inversion: adverbial phrase-verb-subject-complement; 5: verb end (final verb) in subordinated clause) developed by Tschirner (1996). The five-member groups showed no equalizing effect, while the four-member groups did, suggesting that smaller group sizes are necessary to benefit from CMC. However, these findings could also suggest that an even number of students per group works better than an odd number of students. Based on anecdotal evidence, it appears that small group sizes such as two or three are effective, since students are forced to talk to each other; no student can stay silent without the other students noticing and most likely commenting on the fact.

2.4.9 CMC and Task Type

Smith (2001) in his dissertation explored task-based CMC in an ESL context. He concluded that task type and characteristics are important for interactive discourse, negotiation of meaning, and consequential language acquisition. On one hand, he found that more closed tasks produced more incidental negotiation, which is similar to findings from Pica et al. (1993) and also a study by McBride (conversation at CALICO, 2005). On the other hand, Smith found that guided tasks that were more open allowed for more negotiation in general, especially in the way of new lexical items, the direction of the task, and language structures. This difference in research findings may be a result of the open tasks being guided and not open discussions. It appears that students will negotiate in any case, but the more guided they are, the more they have the ability to negotiate as they all know the direction of the task. However, too many restrictions may inhibit the

variety of items that can be negotiated. The problem with this research is that the definitions of task types are still problematic, and that outcomes likely depend on the implementation and the introductions provided by the teacher.

2.4.10 CMC and Measurements of Language Quality

As mentioned previously, CMC has been found both beneficial and detrimental for language development. The pessimistic view is that CMC leads to lower levels of accuracy (Beauvois, 1992; Kern, 1995), more error uptake, lesser language complexity (Böhlke, 2003; Chun, 1994), and the use of medium-specific non-standard language, such as the use of the medium-specific acronyms like “LOL” (laugh out loud) and “BRB” (be right back). I have observed German native-speakers using the same acronyms based on the English language when chatting with each other. The optimistic view is that CMC is beneficial for language development (Beauvois, 1992; Chun, 1994; Kelm, 1992; Kern, 1995; Warschauer, 1996), and that the negotiation of meaning promotes language learning. Several studies have shown that it improves reading comprehension (Kelm, 1992), improves writing ability (Chun, 1994); increases language output (Darhower, 2000; Sullivan & Pratt, 1996); increases interactive discourse (Abrams, 2001; Chun, 1994); exhibits a great range of language functions (Abrams, 2001; Chun, 1994; Smith, 2001), improves or maintains oral proficiency (Kost, 2005; Payne & Whitney, 2002); provides lexical choices (Beauvois, 1997); allows for syntactic complexity (Beauvois, 1997); provides lexical sophistication (Beauvois, 1997); increases language quantity

(Abrams, 2003; Beauvois, 1997); and improves accuracy (Böhlke, 2003; Gonzales-Bueno, 1998).

The research findings about the effect of CMC on language learning have been mixed across measurements, studies, and sometimes even within a study. The underlying questions are what language improvement means and how it is measured. This challenge has been explored previously in regard to effectiveness of corrective feedback. The measurements that have been applied include improvement on tests, discourse analysis, word counts, number of errors, and analysis of lexical density and syntactic complexity. While all of these measures are important and can provide insight into the effectiveness of teaching tools, they only paint a partial picture, especially in the case of CMC, where the medium itself may encourage or discourage certain behaviors. For example, in a fast moving chat conversation, it will most likely seem unnatural to use complex sentence structures that demand lengthier completion times. Also, due to problems with typing and the lack of chat spell check, there might be more errors in a CMC delivery, which may or may not indicate actual knowledge of the language.

2.4.11 CMC and the Role of the Teacher

The role of the teacher has rarely been considered in a CMC context. In fact, many studies often do not mention what the teacher was doing during the chat sessions. In a rare mention, Donaldson and Kötter (1999) discussed the role and influence of the teacher in their analysis of a tandem MOO project, in which they found that the teacher was seen as an intruder (Donaldson & Kötter, 1999 & Kötter, 2003). In this case, the

students were engaged in MOO exchanges with tandem partners from a partner class (German – English) outside of class time, which appears to have been a required component of the class. Since this was a tandem CMC project occurring outside of class, it seems logical that the teacher was seen as an intruder, as there is no role for him or her in such an activity design. Furthermore, since CMC provides a learner-centered learning environment, the role of the student becomes more active and potentially decreases the need for a teacher. In addition, Beauvois (1998) noted that students as well as teachers introduced new topics in the chat environment, which was confirmed by Gonzalez-Bueno (1998) in an email context. This can be considered as further evidence that the teacher is not as necessary in CMC as in a F2F classroom context. In general, participation is claimed to be more equal among students in the CMC environment, but also between teachers and students. However, as stated previously, poor research descriptions have presented unclear teacher roles or tasks during the CMC activities. In some studies, it seems that the teachers did not participate at all (e.g., Abrams, 2003).

Ene et al. initially intended to explore that the effect the teacher's absence versus presence has on focus on task, target language use, corrective feedback, and error uptake. What they found was that two teachers who, in the regular classroom, have similar teaching styles engaged with their students in different ways during CMC. One teacher provided mostly explicit feedback, while the other provided mostly implicit feedback. Whether the teacher was present or not made almost no difference in general. However, the teacher who used mostly explicit feedback appeared to have a silencing effect on the students compared to a teacher using implicit feedback. On-task behavior and target

language use were high with both teachers in both conditions. Hence, even though students produced less words in the presence of the teacher using explicit feedback, they still were on task and using the target language most of the time.

2.4.12 CMC and Error Correction

Research on corrective feedback during CMC has been limited. Sotillo (2005) reported that corrective feedback was available to learners participating in both NNS-NNS and NS-NNS dyads. Interestingly, she found that NNSs provided more explicit feedback to their interlocutors than the NSs. The errors responded to were grammatical and lexical. She also found instances of successful uptake in both dyad forms.

In addition to the silencing effect of an explicit feedback style, Ene et al. also found that explicit feedback led to more learner uptake. However, they suggested that due to the medium, the learners who received implicit feedback may not have felt the need to show evidence of their noticing and understanding of the feedback they received, whereas the explicit feedback was more inviting. In a survey, students receiving implicit feedback reported that they noticed the implicit feedback, but did not feel that they should respond to it. Error uptake was low considering the number of errors made in both classes under both conditions. Furthermore, self-correction and peer-correction were also low, suggesting that students relied on the teacher for corrective feedback. In the survey, the students generally reported appreciation of the corrective feedback received, although some negative comments were received from students taught by the instructor using explicit feedback. The difference in corrective feedback style can be attributed to the

teacher's different interpretation of the medium. The teacher utilizing implicit feedback viewed the chat activities as spontaneous interaction which should not be corrected on the spot in an explicit form, but, if at all, rather with the help of the transcripts. The teacher utilizing explicit feedback viewed the medium as a written form of communication entailing the risk of error uptake, and hence considered it important to provide immediate explicit corrective feedback.

2.5 Gaps in the Literature

CMC research has increased over the last two decades and has addressed many diverse issues. However, the field is still working on finding appropriate research methodologies that allow for a fair investigation of the medium as well as recommendations for implementation of the tools in a language classroom. Most studies do not consider the events in the physical space in their investigation of CMC, which leaves a great deal of important information unconsidered. Furthermore, many studies do not provide details about how the CMC activities were implemented, which further challenges the possibility of comparing research results between studies. This lack of information makes it impossible to provide concrete recommendations for the implementation of CMC activities in language programs for teachers, administrators, and students.

To date to this researcher's knowledge, the only studies that have investigated the role of the teacher and corrective feedback in CMC have been this dissertation and the study discussed earlier by Ene et al. More research on the way in which teachers are

participating in CMC activities, both in the virtual and in the physical space, is needed to provide specific recommendations for implementation, and more research on the use and effectiveness of corrective feedback during CMC must be compiled.

2.6 Methodological Issues

As has been discussed throughout this chapter, the investigations into CMC and into the effectiveness of corrective feedback faces several methodological challenges relating to measurements, terminology, instruments, and procedures. The field has not yet agreed on effective measures of gains due to either CMC or corrective feedback. In the case of CMC, improvement on language tests, lexical density, syntactical complexity, amount of language produced, instances of negation of meaning, and error counts have been used to measure effectiveness. In the case of corrective feedback, instances of uptake, improvement on language tests, analysis of learner language in regards to specific elements and their stages on the interlanguage, and noticing (i.e., stimulated recall, acknowledgement of receiving feedback in transcripts) have been used as measures of effectiveness. New research needs to use multiple measures of effectiveness to contribute to be able to triangulate the data and contribute to the field.

An additional problem in research on corrective feedback and CMC is the issue of terminology. Researchers have used varying definitions of terminology which lead them to differing research results. For example, whether one defines uptake as an instance of correcting oneself immediately following the correction or within the same conversation will have an effect on the number of instances of uptake a researcher includes in his or

her findings. Furthermore, such definitions may require differences depending on the context and the medium. For example, since chatting often has disjointed negotiation routines (Smith, 2001), uptake may be harder to identify.

Instruments and procedures have also been of concern. Since, as discussed above, the context can have an impact on the research results, it is important to describe the context and the procedures in detail. Language learning is a complex phenomenon, and the more we know about the factors involved in subjects' language learning processes, the better we can assess what triggered an improvement or lack thereof. Additionally, general proficiency tests are often ineffective to measure improvement on language skills in single semester studies, which account for the majority of studies reported. More specific instruments must be designed in order to understand the physical and the virtual interactions and their effects on the analysis of data.

2.7 Summary

In conclusion, more research is needed, and more precise and multi-faceted research studies must be designed. Currently, research suggests that input, output, interaction, and the negotiation of meaning are beneficial for language learning. Corrective feedback, when noticed and engaging for the learner, benefits the language learning process. However, the research community is still conflicted as to the type of feedback that is effective and in which instances, as there may be a relationship between error type and feedback type, or student and feedback type. Research methodologies used make it difficult to evaluate the effectiveness of corrective feedback unless used in

combination. In regards to CMC, many benefits have been found, although the issue of language quality is still viewed skeptically. Furthermore, most research has not provided enough information about the implementation of the CMC activities to fully understand the beneficial and the detrimental aspects of using CMC in the classroom, and it is clear that there are medium-specific issues. Thus, it is important to revisit issues that may or may not have been researched or analyzed sufficiently in F2F conversations in the CMC context. More specific recommendations for teaching must be identified and provided in terms of the role of the teacher, corrective feedback, and the use of CMC from a remote location.

As will be described in the next chapter, this study investigates the role of the teacher in both the physical and the virtual environment, the corrective feedback used, and its relations to error type and language improvement. These issues are important to the field, since they have not been sufficiently explored in the CMC context, and are still considered controversial in the F2F context. A multi-faceted research design was chosen to allow for multiple measurements of effectiveness. In addition, since this study aims to allow for comparison of research findings, and since this study strives to provide recommendations for implementations, the procedures and the events in both physical and virtual environment will be described from multiple perspectives using multiple instruments.

CHAPTER III: METHODS AND PROCEDURES

3.1 Introduction

This dissertation is a descriptive multiple-case study utilizing a mixed design. It investigates the role of the teacher and the use of corrective feedback, and their relationship with these have on classroom chatting and language learning. The classroom chatting considered occurred in three third-semester German classes taught by two different instructors. The data sets stem from a variety of instruments, and are analyzed both quantitatively and qualitatively.

Much of the literature discussed in Chapter II forms the basis for this study in terms of its theoretical framework and research design. Most prior studies within the interactionist framework have focused on non-native speaker – native-speaker (NNS-NS) dyads rather than on learner-learner interactions, and were not a required component in a foreign language class. Studies investigating the benefits of learner-learner interactions in a CMC context have generally focused on differences in language learning opportunities and contexts between CMC and F2F interactions. The changed role of the teacher in a CMC setting and its relationship with students' learning opportunities have not been sufficiently considered. Few studies of corrective feedback and CMC within an interactionist framework have investigated a variety of data sets to provide a more detailed view of the nature and the potential outcomes of interaction, especially with CMC that involves the teacher. And fewer studies still have been conducted on the

interactions that occur and the resources that are consulted in the physical environment while chatting as part of a lab session of a foreign language course.

The purpose of this study is multifaceted, and since research on this topic is limited, it is also explorative in nature. First and foremost, this study seeks to explore the role of the teacher during CMC both in the physical and in the virtual environment. As a pioneer study, I sought the most natural setting for the teacher. As discussed in Chapter two, asynchronous CMC or any form of CMC involving tandem learning does not generally encourage an active role of the teacher. Therefore I decided to conduct this study in a SCMC environment in which students chatted with other students in the presence of the teacher. I also decided to use in-class activities to ensure that students would participate. Furthermore, I observed the classes to analyze the kinds of interactions in the physical environment in order to make suggestions for changes in activity design if used from remote locations, i.e., distance learning, in the future.

The focus of the investigation is on the teachers' use of corrective feedback and its effect on the learners. Traditional frameworks of error categorization and corrective feedback categorization are challenged. Since this study aims to understand the choices made by the instructor, I decided to use an error categorization system that is often used by teachers for the correction of essays, so that errors are coded from the perspective of the teacher rather than from the perspective of a linguistic analysis (see Appendix 1 for Error Correction Sheet). The use of CMC may make a new categorization of feedback moves necessary. As discussed in Chapter two, delayed conversation and the option of multiple simultaneous conversation threads may encourage different and even new forms

of feedback. In addition, as a written yet spontaneous medium, chat may encourage new corrective feedback conventions such as a repetition marked with a special symbol to indicate an error. As discussed by Smith (2001) and by Fernandez-Garcia and Martinez-Arbelaiz (2002), the negotiation of meaning sequence that had previously been identified by Gass and Varonis (1985) may not require all steps during CMC. The analysis of this dissertation data will, on one hand, attempt to revise the current analysis practices of error correction, and, on the other hand, provide recommendations for effective use and implementation of CMC activities by the teacher for teacher training.

This research study is further intended to explore relationships between error type and corrective feedback type, and between corrective feedback type and instances of uptake. Since research on corrective feedback remains controversial, it is important to understand which errors receive what kind of feedback and whether or not such feedback is effective.

I will also analyze the teachers' turns to better understand their purpose in the discourse. Since few studies have reported if and how the teacher interacts with the students during CMC activities, it is important to understand the teachers' postings. Information about the timing, the purpose, and the nature of teachers' postings can provide recommendations for teacher training and the implementation of CMC in language programs.

Finally, this study aims to describe the events in the physical space that accompanied the virtual interactions in order to provide recommendations for curriculum and activity design utilizing CMC through remote access.

3.2 Methodological Overview

The study includes five phases (see table 3.1.). First, data from a background study which collected chat transcripts in similar classes over a period of three years were analyzed to find effective ways of categorizing errors and corrective feedback in chat transcripts (see sample chat transcript in Appendix 2). The chat transcripts under investigation were samples from five teachers chatting in German-as-a-foreign-language classes at the University of Arizona. The primary purpose of this phase was to categorize and identify participation and corrective feedback styles used by a variety of teachers using chat as part of their German classes. This information was then used in the training of teachers involved in the semester-long study of this dissertation project as will be discussed later. The courses in the main study were similar to the classes in the background study, providing relevant examples which could be used for training purposes.

The second phase was the development and the piloting of research instruments. During the summer semester prior to data collection, the surveys, the activities, and the tests were piloted with a group of students similar to the target audience. After a first round, all of the instruments were revised, but after a second round, only the survey was revised. The purpose of the pilot study was to ensure that the questionnaire was easy to understand and elicited authentic answers according to students' perspectives. Furthermore, the pre- and post-test had to be reliable, needed to assess students' usage of the major grammatical structures covered in third-semester German classes, and had to

take no more than one hour to administer. This phase also helped to ensure that the instructions of the activities were easy to follow, and that the students were engaged for 20 minutes while completing the chat activities.

The third phase was the administration of the pre-survey (see Appendix 3) and the pre-test (see Appendix 4) at the beginning of the semester of the main study during one fall semester. The purpose of the pre-instruments was to establish a baseline of the students' language ability, as well as their experience with and their attitude towards corrective feedback, language learning, and technology. During this phase, the teachers were also trained on the technology used and instructed on how to implement the activities. The purpose of the training was to familiarize the teachers with the software so that they would be in the position of handling the implementation of the activities from a technological standpoint. They were also provided with a manual (see Appendix 5) that outlined instructions for the daily procedures, instructions on using the software, sample teacher interactions, descriptions of all activities (see Appendix 6), a copy of all instruments, worksheets for trouble-shooting the server, and important contact information to refer to in case problems should occur during chatting. Since the purpose of this study was to explore how teachers use chat in the classroom, no specific guidelines on participation or corrective feedback style were given. Examples from the chat transcripts from the background study were presented to the teachers, such as:

“<S1> Die Uhr ist über dem Sofa.
<S2> Ich JA
<S2> bitte
<S2> ja
<Teacher> Was meinst du? “

The fourth phase of this study was the chat phase, during which the teachers and the students engaged in weekly 20-minute chat sessions, completing self-report forms after each session. During this phase I observed each of the two classes once a month. The purpose of the observation was to capture the student-student and student-teacher interactions in the physical space, and to learn more about the use of resources by the students during these sessions.

The fifth phase was the post-instrument phase, during which the post-survey (see Appendix 7) and the post-test (see Appendix 8) were administered. The post-test was administered to measure gain in language skills of the structures under investigation. The survey's purpose was two-fold—to measure change in attitude, and to allow the students to evaluate the experience. Also during this phase, I conducted several informal conversations with the teachers. The purpose of the conversations was to help me understand the motivation behind the interaction patterns they chose to implement.

Table 3.1 Overview of Procedures

	1	2	3	4	5
Phase	Background Study	Pilot Study	Training/ Pre-instruments	Chatting	Post-Instruments
Duration	Data from three years	Summer semester	two class periods	12 weeks (20 minutes per week)	one class period
Activity	categorization of errors and corrective feedback	piloting activities and instruments	Teacher training with software; administration of pre-test and pre-survey	implementation of activities and chatting; classroom observations once a month	administration of post-survey and post-test; informal conversations with teachers on multiple occasions

3.3 Research Questions

Since the role of the teacher in CMC has not been previously explored, my research questions are broad in scope, addressing various facets of the teacher's role in classroom-based CMC. The research questions have already been stated in Chapter I, and are briefly reviewed at this point:

(1) How do two case study teachers participate in foreign language classroom chatting?

(a) What appears to be the teacher's definition of her role, as evidenced by participation styles?

(b) What form does corrective feedback take during chatting in this study?

Question 1 was addressed with the help of the chat transcripts. In the background study, a chat sample was examined to establish common participation and corrective feedback patterns. Then, the styles were categorized (more details in section 3.8.3.c), and those categories were applied in the analysis of the chat transcripts for the fourth phase. The teacher's definition of her role was taken from the chat transcripts and the informal conversations. Feedback style patterns were then established for the teachers involved.

(2) What influence do corrective feedback styles have on students' learning, as perceived through:

(a) language production during the chat as measured through word count;

(b) learner uptake as measured by evidence of correction uptake within the same transcript;

- (c) and improvement of the structures taught during third-semester German classes as measured by a achievement pre-/post-test?

The second question was addressed with the help of the transcripts and pre- and post tests from phases three to five. The question explores if possible which type of corrective feedback is most effective. Since opportunities for output have been found to be beneficial for language learning, analyzing the amount of language produced in relation to teacher style is important. Ene et al. (2005) found that an explicit feedback style had a silencing effect, i.e., decreased opportunity for student output, but also led to greater uptake, presenting both detrimental and beneficial effects. Uptake in this study, is defined as self-correction within the same transcript. It is assumed that the correct use of a form after receiving correction on that form is an indicator of learning. However, as previously mentioned, caution must be expressed in relation to the long-term effect of such learning, I also utilized the gain scores of the achievement tests to measure effectiveness of feedback styles. One of the issues in corrective feedback studies has been the lack of agreement on what can be considered evidence of language learning. To address this, I decided to utilize several common forms of evidence for this study. Dominant teacher feedback styles were identified and differences (or lack thereof) in gain scores on the tests, word counts, and uptake measures between the groups were established using statistical analysis where possible.

- (3) What patterns occur in the data:
 - (a) between error type and error treatment?
 - (b) between error type and error uptake?

(c) between source of error and error uptake?

To answer the third question, the transcript data from the main study were used to identify patterns between errors and consequential moves in the SCMC. From each class six case study subjects were selected based in the total amount of time chatting. In the transcripts of these students, first, all errors were categorized. Then, I analyzed which error types were treated, how they were treated, and which error types resulted in error uptake by others.

The fourth question investigates the learners' and teachers' perceptions about the teacher's role and how well they match with actual practice.

(4) (a) How do students perceive the teacher's role in the chat room and in the physical space? (b) How do these perceptions correspond with actual practices?

In this phase, comments from the surveys and from the informal interviews were analyzed in relation to the qualitative analysis of the transcripts and the classroom observations.

The fifth question is particularly interesting for program administrators wondering if SCMC activities could be scheduled outside of class time and/or from remote locations.

(5) (a) Which parts of the interaction are happening in the physical space and not in the virtual space? (b) What modifications would have to be made when moving SCMC activities to a remote location?

With the help of the self-report form, conversations, and classroom observations, physical moves were recorded to develop ideas for modifications of the SCMC activities should they be moved into a distance learning environment. When students and teachers

are in the same physical space while they are engaged in a chat activity, they have more opportunities to help each other and ask for help than if they are only in the same virtual space. The opportunity to look over each other's shoulders and talk to each other while chatting may be an important bonding and community-building component of classroom-related chat activities. In addition, understanding what electronic and non-electronic resources students are utilizing during chatting can provide recommendations as to what resources need to be linked from a chat server if chatting is performed remotely. For example, some students may feel that they are not allowed to use online dictionaries, but if they see other students using them, they might try it themselves. If however, they cannot see their classmates, then a link from the server may be necessary to encourage them to use such resources they otherwise might not try. Most importantly, if the teacher is in the same room as the students, he/she can see if students need help, look confused, or are engaged in off-task activities. The level to which teachers and students take advantage of the physical proximity can provide recommendations as to what modifications need to be made when moving chatting from the classroom to remote locations.

3.4 Setting

This study was conducted in three sections of third-semester German during one fall semester at the University of Arizona, a large land-grant research I institution. Third-semester German was chosen for the following reasons: (1) students are able to engage in simple conversations in the target language; (2) students are still presented with language

structures systematically through their instruction; and (3) there are several sections of this level. These three sections of German language instruction integrated one 20-minute chat session per week into their syllabus. Two classes took place in the morning and were taught by the same teacher, while the third class was an evening class taught by a different teacher. The morning classes met for four 50-minute periods per week, of which one was conducted in the lab facility. The evening class met twice a week for 110 minute periods, with both class sessions held in the computer lab. Not all the time in the computer lab was utilized for chatting in neither class.

The lab classes were held in the collaborative lab facility of the College of Humanities (COH) at the University. This lab facility has a unique layout, designed to encourage learner-centered collaborative teaching (see Illustration 3.1.). The room contains three pods of eight workstations. The monitors are lowered into the desk so that the students can see each other while they are working on the computer. Although there is a teacher station in the room, there is no ideal teaching position. That is, no matter where the teacher stands, some students will always have their backs to the teacher. Unfortunately, the same concept also applies to the computer projection screen, which means that some students will always have their backs to any projected materials. The teacher's computer is equipped with Net Support, allowing the control of the student stations if necessary. The computers' hard drives are loaded with standard Microsoft Office products, access to the internet, and voice recording software. The lab also is equipped with multisystem DVD and VCR players connected to the LCD projector. This lab was assigned to these classes by COH Instructional Computing Services. Several labs

are available for instructional purposes, and lab assignment is based on availability of the labs, level of instruction, and whether or not a class is participating in a research project. Of the available labs, this lab was considered the most appropriate lab facility on campus for the following reasons: (1) availability of tech support, (2) central location on campus, (3) reliability of computers, (4) access to the chat server, (5) collaborative, student-centered layout of the facility; (6) equipment, and (7) visibility of students.

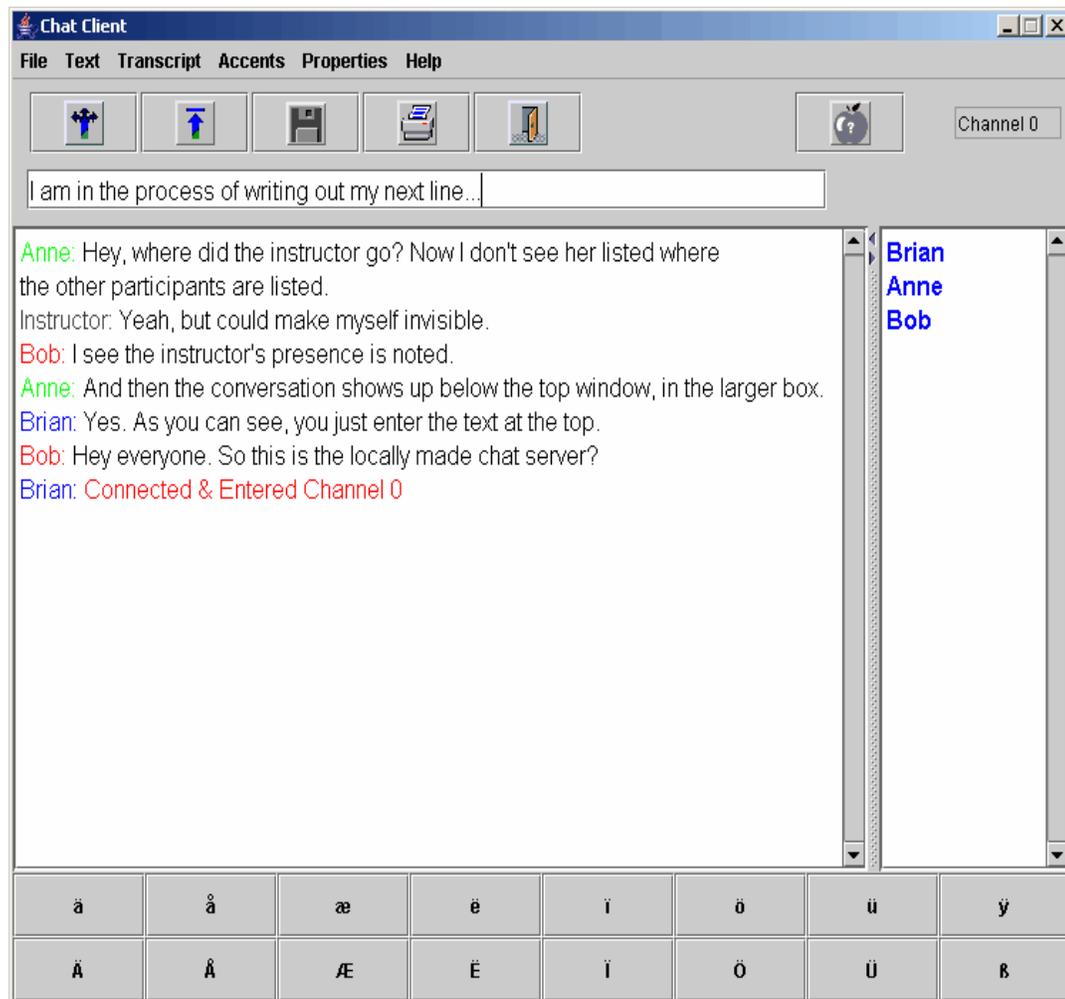
Illustration 3.1. College of Humanities Collaborative Computer Lab



The program used for this study was a Java-based chat program developed locally for research and teaching purposes. The chat server is housed beneath the teacher's station. The chat program (see Illustration 3.2.) allows the teacher to set up different channels for students to use. Both the teacher and the students can switch channels if they want to, although the process for students is different than that for teachers. The students must disconnect from one channel and then connect to another, while the teacher will see tabs on the chat window for all channels in use, and can simply click on the tabs to go from channel to channel. Both teacher and student chat window shows the participants in a channel. The teacher, however, can choose to be "invisible," at which point the

teacher's name no longer shows in the list of participants, even though he or she can still post visible messages. Language-specific characters, such as the German *Umlaute*, are listed at the bottom of the window and can easily be utilized.

Illustration 3.2. Screen-Shot of Chat Server



Participant entries only show if he/she hits the enter key on the keyboard to post the message online. For the students, the window shows the script of the conversation since he/she logged onto any particular channel, but for the teachers, a conversation is

always shown in its entirety. The teacher also has the option of running an analysis, providing information about the number of words, the number of unique words, the number of turns, and the lexical density by taking into consideration the number of words per turn of each student. At the end of the chat session, the students and teachers can choose to save or print the script. Regardless of the students' decision, the transcripts (see Appendix 2) will automatically be stored on the instructional computing server for any teacher in the College of Humanities to access.

Transcripts are time-stamped for each posting. Each posted message is preceded by the time of the posting and the screen name of the participant. The transcript also indicates when participants logged in or out of the channel (see appendix 2 for a sample).

Several chat software systems and servers were reviewed to identify the best match for this study. This chat software was chosen for several reasons, most importantly because it time-stamps each posting. This is important for the analysis of the data for several reasons. For example, sometimes chatters post almost simultaneously, giving the transcript reader the impression that chatters are not responding to each other appropriately. Sometimes there are long pauses between postings, also worth noting. Another advantage to this chat software was its easy access to the German *Umlaute* so that students would not fall into the habit of using the international spelling in this medium. The chat server was ideal because it allowed the teacher to easily see and communicate with several chat rooms, i.e., pairs or groups of students, at once. This server also provided automatically saved and stored transcripts with easy access for research purposes, so that I did not have to rely on the students and teachers to remember

to save the chat as electronic or paper files. A final, important consideration in server selection was that the chat server was closed to only the students in the classroom. This was crucial not only to protect the students' identity, but also to ensure professional conduct and discourage chatting with outside parties while in class. A bonus feature that was not a requirement for this study was the capability of the teacher to choose to be virtually invisible or visible to the students during chatting. Since this study investigated the role of the teacher, this was an interesting feature to investigate. In addition, this chat program also had a "To all" function for the teacher and a "whisper" function for the students. With the "to all" function the teacher is able to send a message to all chat rooms at the same time. The whisper function allows students to send private messages to the teacher.

One of the problems with the chat client, which is a problem with almost any Java-based program at this point, is that if participants do not follow a set protocol in logging in, then several chat sessions will be started simultaneously, often resulting in overloading of the server and eventually crashing the system. Of course, this presents a problem for instruction, but it is also problematic for the researcher as transcripts are then lost. Even if the transcripts can be rescued, they can still be problematic. Often during these overload situations the computer freezes on a student and his or her postings no longer post. When looking at the transcripts, it can appear as if the student was linguistically not able to or not willing to participate. Therefore, the self-report forms were important to indicate when servers overloaded for students. Since all Java-based

software react in this situation in the same way, this chat server remained the best option considering all other factors.

3.5 Subjects

As mentioned earlier, the three classes under investigation in this study were taught by two instructors with different levels of technological support. Based on the technology support available, the classes have been labeled the No-Support Class (NSC), Some-Support Class (SSC), and Expert-Support Class (ESC). NSC and SSC were taught by the same instructor, called MorningTeacher. ESC was taught by the EveningTeacher.

Teachers and students were asked to select a screenname at the beginning of the semester to hide their identities. Since during the course of the semester it was possible to find out other people's screennames, it was decided for further protection of the subjects to exchange their self-selected screenname with a pseudonym.

3.5.1 Teachers

MorningTeacher is an experienced Graduate Teaching Associate who is studying language pedagogy on the doctoral level. She has been teaching in the program for five years, and has used the chat server before in her teaching, but does not like using computer technology in her classes. She has experienced frequent crashes with the chat program, including during this dissertation research project. Outside of teaching, however, she has a generally positive attitude towards technology. Also after reviewing students' comments at the end of the semester, she expressed a more positive attitude

towards chatting in the classroom. MorningTeacher is a non-native speaker of German and a native-speaker of Russian.

EveningTeacher is an experienced Graduate Teaching Assistant completing a teacher certification program to be a German high school teacher. She has been teaching in the program for three years, and was also teaching high school German by day during the semester this study was conducted. She was under a lot of pressure due to her schedule at the time of this study, which may have influenced her ability to prepare classes. She is very comfortable with technology and uses computers and computer software on a regular basis in her teaching. She had no previous experience using chat in the classroom or with the software used for this class. She is a non-native speaker of German and a native-speaker of English.

3.5.2 No-Support Class

The NSC taught by the MorningTeacher received its name from the lack of technological support during lab sessions. Normally, all classes taught in the instructional lab facilities have a Lab Assistant present at all times; however, this class was never visited by a Lab Assistant. The teacher was given the cell phone number of the Program Developer, and was urged to call if there were problems. Other instructors have taken advantage of this offer, although MorningTeacher did not.

The class started out with 25 students, but had decreased its enrollment to 20 students by the end of the semester. Due to the incomplete data sets from some students, only 12 students from this class are included as subjects in this study, even though all

students provided consent to be part of this study. The 12 participants included 6 women and 6 men ranging in age between 18 and 23 with an average age of 19.17, with a median age of 19. Except for two students, all students were either 18 or 19. All students were native English speakers. All students but one student identified German as a second language, five indicated Spanish as a second language, one indicated American Sign Language, and one French.

MorningTeacher described this class as disruptive and unmotivated. During observations, the students were quiet and hardly ever spoke with each other during the chat sessions. The chat activities were not introduced in this class, i.e., the teacher put up the instructions to the chat activity on the projector screen without providing a context to the activity, explaining unknown words, or providing examples. The chatting during the observed lessons often took up more than the intended 20 minutes. Group assignment was given by the teacher by leaving cards with a channel and an activity number on each desk. Since students arrived at different times and some chairs were never taken, this left some students alone in channels for longer periods of times.

3.5.3 Some-Support Class

The SSC was also named for its level of technological support, and was also taught by MorningTeacher. Although there was a Lab Assistant present for this class, he did not always notice that students were having technological problems. When he did see a problem or was called to a student station for assistance, he was often unable to resolve the problem.

In the beginning of the semester, 25 students were enrolled in the class, but only 20 remained by the end of the semester. Of these 20, 16 completed all data and were included in this study. The 16 participants included 11 women and 5 men ranging in age from 18 to 40 with an average age of 21.06 and a median age of 20. Except for the one 40-year old student, all others were between the ages of 18 and 22 (3 students 18, three students 19, six students 20, and three students 22). All students indicated English as their native language, however, one student indicated Farsi as an additional first language. The participants had also learned other languages such as German (15), Spanish (7), French (3), and Korean (1). Again, one student did not identify German as a second language.

MorningTeacher described this class as more likeable than the NSC. The class atmosphere and the implementation of the chat was similar to the NSC, although the students seemed to interact a little more with each other in the physical space. In a more detailed look at the chat situations in the two classes, one may find a difference due to the teacher's preference of classes.

3.5.4 Expert-Support Class

The ESC, also named for the technological support available, was taught by EveningTeacher in the evenings. In this class, the Lab Assistant was also the software developer. Knowing the program as well as he does, he was able to immediately catch instructor or student errors in using the program, and was able to take appropriate measures to fix problems. Furthermore, the teacher put the Lab Assistant in charge of administering the chat session, i.e., he assigned groups and instructed students on the

login and logout procedures during the observed chat session. These instructions were given in English as the Lab Assistant does not speak German. The activities were introduced by the teacher, explaining all necessary vocabulary. The teacher was also clearly comfortable with using the technology. Technological problems were less frequent in this class than in any other class.

In the beginning of the semester, 26 students were enrolled in the class, with 22 remaining at the end. Of the students enrolled, 18 completed all necessary assignments and were considered as part of this study. They ranged in age from 18 to 46 with an average age of 24.67 and a median age of 21. As can be expected, there were more older students in this evening class than in regular daytime courses since it was an evening classes. Only three students were between 18 and 20, six students were 21, five students were between 23 and 27, three students between 30 and 32, and one student was 46. This class also included several graduate students. Only 14 of the 18 participants indicated English as the first language, while the other four indicated either Spanish, Turkish, Chinese, or Navajo. Only 10 of the 18 students indicated German as a second language. Other languages reported included French (3), American Sign Language (1), English (4), and Spanish (1).

The atmosphere in this class was very different from the other two classes. In each observed class period, there was a lot of laughter, yelling across the room, and talking in the physical space. The teacher often yelled things into the room as well. Students looked over each other's shoulders to read the parts where the neighbor laughed. However, there was one pod in the middle that was clearly quieter and less active. The

teacher often played German music during the chat sessions. Chatting was usually done in the last twenty minutes of class, with the teacher introducing all unknown words and setting a context for the activities, though that context was not always identical to that intended by the materials developer and researcher.

3.6 Student Participants' Background

Students in third-semester German classes can usually be divided into three categories: (1) students who took the second-semester German class at the University of Arizona or its equivalent at another recognized institution, (2) students who placed into third semester German using the computer-adaptive placement examination (CAPE) developed by Brigham Young University, and (3) students who self-selected the course. Most students are enrolled to fulfill the fourth semester language ability requirement for BA degrees from the University of Arizona. Typically, the minority of students have selected German as their major or minor. Students in the German classes have often intentionally selected German as the language to fulfill the language requirement specifically to be different from the masses taking Spanish, due to German family heritage, or because of an interest in German history, culture, and/or language as expressed in at the beginning of the semester surveys. Third-semester students typically are able to have some simple conversations using simple sentences, often relying on learned chunks. In the pre- and post-surveys, students described their German language ability as weak, limited or okay. Several students commented that they could write and speak simple German, but were lacking more complex language.

Typically, in the University's German language courses, error correction is limited and presented in the form of implicit corrective feedback, suggested by the teaching approach of the selected textbook. Most students reported having received corrective feedback from their previous teachers (for an over view see table 3.2.). When asked about corrective feedback of spoken language, 50% of the NSC class reported having received feedback from previous teachers, while 33.3% reported that they received none. Of the SSC students, 50% reported having received feedback, while 0% reported having received none. Of the ESC students, 88.9% had received feedback on spoken errors, and 5.56% had not. Similar reports were given for corrective feedback by previous teachers in response to written errors. In response to having received corrective feedback in the past, 66.7% of the NSC students, 87.5% of the SSC students, and 94.4% of the responded positively, while only 16.7% of NSC students and none of the SSC or ESC reported having received no feedback at all. Since not all students had previously taken German classes, the percentages reported do not add up to 100%. Of the few students who had previously used chat, about half reported that they did and half reported they did not receive feedback in the chat context.

Table 3.2 Reported Feedback Received from Previous Teachers

Class	N	+ Spoken	- Spoken	+ Written	- Written
NSC	12	50%	33.3%	66.7%	16.7%
SSC	16	50%	0%	87.5%	0%
ESC	18	88.9%	5.56%	94.4%	0%

Most of the students had not had prior experience with chatting in the classroom. Two of the participants, one from SSC and one from ESC, had chatted in their first

semester course as part of the study conducted by Ene et al. The majority of students had previously used messaging software (see 3.3) to communicate with friends (88.3% in the NSC, 87.5% in the SSC, 77.5% in the ESC). However, fewer students had previously used messaging software for academic or professional purposes (50% in NSC and SSC, and only 38.9% in ESC). The percentage of students who had previously used chatting in a foreign language classroom was lower yet (0% in NSC, 18.8% in SSC, and 16.7% in ESC).

Table 3.3 Previous Messaging Experience

Class	With Friends	For Job/School	In Fl Classes
NSC	88.3%	50%	0%
SSC	87.5%	50%	18.8%
ESC	77.5%	38.9%	16.7%

Overall, students described their language skills as limited, thought that their teachers always corrected mistakes, and reported approval of teacher correction. Students generally had some experience with CMC tools, but only limited experience with using such tools in the classroom. The general consensus of the use of technology in the classroom was positive.

3.7 Tasks

This study was intended to have students participate in 20-minute chat sessions per week with their instructor. The activities (see Appendix 6) were information-gap, role-plays, web quests, and guided discussions I developed. All activities were intended to be 20 minutes long, and focused on the structures and vocabulary presented in relevant

chapters of the textbook. Most activities were adapted from activities presented in the book, allowing the teacher to skip those activities and instead use the chat version. All activities were labeled in the same fashion as the sections they resembled in the textbook. The activities were available to the instructor in hard copy in the Instructor Manual and also in soft copy on the course management web site. All activities were piloted and revised in a class at the same level the semester prior to the actual study. All activities are listed in Appendix 6.

During third-semester German, chapters 9 through 12 in the *Kontakte* textbook are discussed. Usually, about four weeks of the semester are spent with one chapter, each concluding with a chapter exam. Since all exams were scheduled for the day after lab day, one lab session every four weeks was dedicated to reviewing for the test and usually did not include a chat session. EveningTeacher, who had the lab facility available for all of her class sessions, sometimes compensated by having the students chat on another day. This option was not available to MorningTeacher. There were 17 chat activities developed, although it was estimated that teachers would only hold a maximum of 13 chat sessions. Therefore, teachers were to choose an appropriate activity that fit the rest of that week's materials. Both teachers were instructed to introduce the activities and present any unknown words (see Instructor Manual in Appendix 5).

All activity descriptions were labeled with the corresponding section number in the textbook. In the Instructor's Manual (Appendix 5), the labeling also included the activity type, the ideal group size, and the structures under investigation. Both teachers chose the online version for task selection. All activities included a picture for schema

activation, and the online version of the activities included links to the chat server tutorial. While this was intended to help the students, it actually appeared to confuse them, since many of them initially interpreted the instructions to mean that they had to complete the tutorial, rather than that they could complete the tutorial if they needed additional assistance with the software as was observed in the first month.

Table 3.4 Overview of Activities.

	Chapter 9	Chapter 10	Chapter 11	Chapter 12
1	Childhood <i>als</i> -clauses 2-3 per channel role-play	travel plans prepositions (<i>aus, bei, von, nach, zu</i>) 2 per channel information-gap	sickness accusative reflexive pronouns 2 per channel role-play (assigned)	families genitive 2-3 per channel guided discussion
2	Youth simple past tense of <i>werden</i> and modals 2-3 per channel role-play	Directions imperative prepositions 2 per channel information-gap	body parts/ hygiene reflexive pronouns 2-3 per channel guided discussion	family life subjunctive 2-3 per channel guided discussion
3	Youth <i>als, wenn, wann</i> 3-5 per channel role-play (assigned)	beach vacation subjunctive of modal verbs 2-3 per channel role-play		multicult. Germany causal connectors 2-3 per channel guided discussion
4	school stories simple past tense 2-3 per channel role-play		hospital indirect questions 2 per channel role-play (assigned)	art and literature cases 2 per channel information gap
5		pets passiv 2-3 per channel role-play	accidents dependent/independent clause word order 2-3 per channel role-play	
6		German history passive 2-3 per channel web quest		

As listed in the chart above (table 3.4), the activities covered the following topics: childhood, youth, school, travel, directions, beach vacation, pets, history, sickness, body hygiene, hospital, accidents, family, multicultural Germany, and art and literature. *Als/wenn/wann*-clauses, simple past tense, prepositions, imperative, subjunctive, passive, reflexive pronouns, indirect questions, word order in dependent and independent clauses, causal connectors, and cases were the structures practiced in the activities. The 17 activities consisted of three information-gap activities, nine role-plays (three of them with assigned roles), one web quest, and four guided discussion. The intended group size was two for five activities, two to three for 11 activities, and three to five for one activity.

3.8 Procedures

Prior to the main study, a sample set of teachers' chat transcripts (see Appendix 2) was analyzed to determine their participation and corrective feedback styles. No research could be found about typical feedback and participation styles during chatting, making this portion of the study necessary in order to place the two participating teachers in a larger context. During the background study, I found that often the teachers did not participate in chat at all. When they did participate, each used a variety of corrective feedback strategies and participation styles, although individual teachers had strong tendencies towards either a conversational participation style, using implicit corrective feedback, or an authoritarian participation style, using explicit corrective feedback. From the transcripts, samples were taken to give the two teachers involved in the study an idea of how to communicate with their students during chat (see Instructor Manual in

Appendix 5). However, the examples were not labeled or introduced in any form. When the teacher asked how to participate, they were instructed that they should interact with the students however they felt was best suited. It was more important to witness the choices they as experienced teachers made without specific instructions, since each may have different ideas than the teachers in the background study, and because there are no best-practice recommendations available yet.

The teachers were assigned to the classes by the Director of Basic Languages based on departmental needs. Knowing the TAs well, I had made recommendations for the ideal teachers for my study. However due to many other constraints these recommendations could not be accommodated. Once the Director of Basic Languages shared his decision on teaching assignments with me, the teachers had been recruited four months prior to the start of the study. They were told that the study was investigating student-teacher interactions and given an overview of the time commitment required by the class for the study. Once the teachers agreed to participate, the chatting became a required part of their syllabi. During the department's general in-service training, a special session was reserved for the two instructors involved in this study. They met with me and could ask any questions they still had, to take care of all logistical issues, and to receive the Instructor's Manual. The Instructor's Manual (see Appendix 5) included the above discussed sample interactions, all of the above discussed activities, a tutorial for the chat program, a set of trouble-shooting guidelines for the chat program, their consent form, a copy of each instrument used, a tutorial for the course-management site, and a

sheet with daily procedural instructions. During the first chat session in each class, I was in attendance to help with the set-up of the program.

In the first week of the semester, the pre-survey (Appendix 4) and the pre-test (Appendix 3) were administered. In the last full week, the post-survey (Appendix 7) and post-test (Appendix 6) were administered. After each chat session, the students completed a self-report form (see Appendix 9) indicating the interruptions and problems that had occurred and the resources they had consulted. Throughout the semester and during the data analysis phase, informal conversations were conducted with the teachers involved in the study to better understand their motivation behind their teaching choices and their level of awareness of some of their decisions.

3.8.1 Implementation of Chatting

As discussed, the chatting was intended to be used for 20 minutes each week during the lab session in the collaborative lab. Most activities were designed for pairs or small groups, the ideal chat room size as suggested by Boehlke (2003). However, only the two teachers had been told of this requirement, and the lab assistant in the evening class sometimes made larger groups than had been intended.

The chat activities were supposed to have been chosen according to the current topic discussed in the class. MorningTeacher selected appropriate topics, EveningTeacher, however, did not always do so. Even though EveningTeacher introduced the topics well, she did not always introduce them as they were intended. This resulted in student confusion, as some of them actually understood the intended meaning

and then were confused by the teacher's explanation. The result was often that students were then not required to use the structure that was supposed to be practiced. MorningTeacher on the other hand, did not introduce the activities, which also often resulted in student confusion. On these occasions, students asked each other what to do, and the teacher walked up to them when she saw them talking. She then explained the activity to the students individually in the physical space. MorningTeacher appeared to have set up the guidelines that when chatting was in progress there was to be as little oral communication in the physical space as possible. EveningTeacher, on the other hand, showed by example that talking and yelling across pods when chatting was acceptable behavior in her class, and even added music to the sessions.

Both teachers participated with the students in the chat. MorningTeacher chose to be invisible to the students most of the time, but used her real name when logged on. EveningTeacher appeared to be visible all the time, though she logged in with her screenname. MorningTeacher appeared to be watching the students in the virtual and the physical environment, and responded to students with issues in both. EveningTeacher only walked around in the classroom at the beginning of the session when she introduced the activity. For the rest of the time, she sat at the teacher's desk, usually typing and appeared to be typing more than the MorningTeacher.

3.8.2 Data Collection

Several types of data were collected to better analyze the student and teacher behaviors exhibited, teacher participation styles, and resources utilized in physical and

virtual contexts. In the background study, it was determined that some teachers choose to not participate at all, some focus on having an engaging conversation with the students, others only participate to provide corrections, and still others use a mixture of these. It was hypothesized that how the teacher interacts with the students during chatting will have an effect on their attitudes, and potentially on their language development. As mentioned, in the Ene et al. (2005) study, one of the teachers perceived her role to be the rule enforcer, and most of her turns were corrections, whereas the other teacher saw her role to be a conversation partner, and therefore her turns were often conversation starters or questions eliciting additional information. The first style appeared to have a silencing effect, discouraging students from participation. While this study discussed the role of the teacher, none of the studies addressed the teacher's physical interaction with the students, or the students' use of resources or each other in the physical environment. Therefore, different data sets were collected for different purposes, and several of them were analyzed in relation to each other to provide more insight into both the teacher's role in CMC activities and issues of activity design.

3.8.2.1 Pre- and Post-Test

A pre-and post-test (see Appendix 4 and 8) was administered to calculate gain scores. It was hypothesized that the gain scores in relation to feedback forms could reveal patterns of effective teacher interaction. Students took the pre-test, which was described to them as a placement exam, in the second week of the semester, and the post-test, or exit exam, during the last full week of the semester. Neither of the tests was a graded

component of class. The tests were the same, except that the pre-test included a speaking section. In the post-test, the speaking section was eliminated in the interest of time. The written portion of the test could be completed in a 50-minute period, and focused on the structures taught during third-semester German classes, such as case endings, word order, reflexives, directions, and simple past tense. Other structures are also taught during this semester, but they are not the focus of instruction, and thus were not included.

The test was piloted and revised in classes of similar level of the main study. The activities were adapted from existing activities in the test bank that accompanies the course textbook. I decided to focus on the structures covered in these chapters in order to assess students' progress over the period of one semester. Since the chat activities also focused on these structures, the goal of this portion of the research was to explore the relationship between feedback received and improvement on the test.

The pre-test consisted of five sections: a listening comprehension activity focusing on following directions, a reading comprehension section focusing on simple past tense, a grammar section including four activities (reflexive pronouns, accusative and dative case word order, word order in dependent and independent clauses, and article case endings with the gender provided), a writing section focusing on complex sentence structure and simple past tense, and a speaking component focusing on indirect questions and the subjunctive. The speaking portion was very intimidating to the students according to their own reports and took a great amount of time to administer, and was therefore eliminated from the post-test. All other parts remained the same (see Appendix 4 and 8).

The test was not a graded component of the course, and was only scored for research purposes by me. Interrater reliability was not established for the test, and rather a detailed scoring system was used to ensure objectivity. I scored the pre-tests, and compiled notes on the language used and the errors corrected (see scorecard in Appendix). The listening comprehension exercise was worth 10 points: one point for arriving at the correct destination, 1.5 points each for drawing the line exactly as it was described, and one point if the lines were correct in general. All mistakes were noted for later comparison and analysis.

The reading comprehension contained 10 questions, with each question valued at one point. Half a point was rewarded for correct information, and half a point was given if the answer was presented in the form of a complete sentence containing a correctly conjugated verb in the simple past tense form. On the scorecard, the correct and incorrect verb forms were noted, as well as the errors in reading comprehension for later comparison and analysis.

As discussed, the grammar section included four parts worth 10 points each for a total of 40 points. The reflexive pronoun section consisted of five reflexive pronoun phrases, allotting half a point each for the correct verb, the correct verb conjugation, the correct word order, and the correct reflexive pronoun. Again, errors and correct forms were noted on the scorecard for later comparison. The accusative and dative case word order section was made up of five sentences, each also worth a total of two points. In this case, one point was awarded for the correct word order of the accusative and dative object, and one point was awarded for the overall sentence word order. Sentence word

order mistakes and their origin were noted on the scorecard. The section on word order in dependent and independent clauses was also made up of five sentences worth two points each, one for the correct placement of the coordinating or subordinating connector, and one for the correct placement of the conjugated verb. Unrelated errors may have also resulted in point deduction, such as unexpected word order mistakes. The type of mistake was noted on the scorecard for later analysis and comparison. The section on article case endings had thirteen article endings that were to be correctly assigned. One of them erroneously did not include the gender, and sentences four and five were asking for the same principle, one in plural and one in masculine. Again, for any mistake made, the type was noted on the scorecard for later comparison and analysis.

The writing section of the exam was worth 10 points: 5 points for content and organization of the essay, 5 for language structures (accuracy, complexity, vocabulary range and choice). The scores were used for later comparison and analysis.

The listening comprehension portion of the pre-test was only consulted for informational purposes, since not all students recorded an audible speech sample, and the speaking portion was eliminated for the post-test for reasons already mentioned.

3.8.2.2 Pre-and Post-Survey

Pre- (Appendix 3) and post-surveys (Appendix 7) were administered (a) to measure changes in attitude, (b) to establish background experience with corrective feedback and technology, and (c) to learn about perceptions of the chat experience. The surveys were then analyzed to potentially identify an attitudinal change in relation to

teacher style, as well as to compare perceived experience with actual events. The survey utilized a four-point Likert scale to ask the students to comment on their language learning, technology background, and attitudes about corrective feedback and technology. The pre- and post-surveys varied slightly because, at the end of the semester, some questions became irrelevant while others became necessary substitutes (see appendix 11 combined survey).

Each survey contained four sections: a general information section, an agree/disagree Likert-scale section, a frequency Likert-scale section, and a guided questions section. Each Likert scale item was followed by a line encouraging students to explain their choice, a feature found valuable in Ene et al. (2005). Each section contained statements formulated positively and statements formulated negatively. For analysis purposes, the survey was divided into seven parts: general information about the person, information about prior experience with technology, information about prior experience with corrective feedback, information about attitudes towards technology, information about attitudes towards corrective feedback, information about the experience with chatting during the semester in question, and information about the experience with corrective feedback in the semester in question. Some of the questions could be applied to more than one category, and are thus discussed from those different perspectives. The pre- and the post-tests were not identical, as, for example, questions about the experience in the ongoing semester were not applicable at the beginning of the semester, and questions about prior experience were irrelevant at the end. For labeling purposes, the two surveys were combined into one numbering system (see appendix 11 for items and

corresponding numbering). Furthermore, those items that were followed by an added explanation were labeled “a,” and the explanation itself was labeled “b.” The Likert scale items were assigned a number value with negatively formulated items assigned reverse numbering. In this way, an answer of strongly agree for a positively formulated item received a score of four, but for a negatively formulated item received a score of one. The surveys were then analyzed using ANOVAS to determine significant differences between teachers and courses.

The section regarding general student information asked participants for their screenname, class section number, age, gender, and native and foreign languages. It also asked students whether German was the first foreign language they had learned in a classroom or even in general. Students were then asked to describe their German language proficiency in their own words. These items of the first section were labeled items 1-6. This section was intended to receive general background information on the students. In cases where a student did not fit the general profile of the class, these factors were consulted to find a possible explanation. For example, one hypothesis was that older students would be less likely to have a positive attitude towards chatting.

The second set of items concerned the participants' prior experience with technology. In items 27, 28, and 29, students were asked about their experiences using chatting for pleasure, business, and academic purposes, the latter pertaining specifically to the foreign language classroom. The open-ended question from the pre-survey, item 39, allowed the students to provide more information about their technological background if they so desired. One possible factor that was thought as influencing

students benefiting from the use of CMC, was their prior experience with technology, hence it was important to know their background experience.

The third section dealt with information about prior experience with corrective feedback. During the piloting phase of the survey, it was found that, when survey takers were only provided with a few statements on error correction, they tended to agree with all of them without differentiating between different forms of feedback. Items 30 through 35 asked students to report how frequently they received corrections in different kinds of contexts by their previous teachers. Here again, item 39 served as means to allow students to express more details on this topic if they so desired. Since corrective feedback was under investigation, one possible factor was their prior experience. It was hypothesized that students may become used to one form of feedback and prefer it.

The fourth group of items dealt with information about attitudes towards technology. During piloting, it was found that students were easily able to indicate their attitude towards technology, so only two items were included. Furthermore, the focus of this study is on corrective feedback, so the attitudes towards technology only played a minor role. Items 13 and 17 questioned the students' attitude toward the use of technology in the language classroom, 17 being formulated negatively. During the piloting of the survey, the negatively formulated items were not problematic for the survey takers, although some of the participants in the study seemed to contradict themselves between items 13 and 17. Again understanding the students' attitude towards technology may interfere with their ability to benefit from technology-enhanced teaching.

Furthermore, the different implementations and levels of support may have resulted in changes of attitudes.

The fifth group of questions dealt with students' attitudes towards corrective feedback. I attempted to provide a variety of items that forced students to make a choice for preference between implicit and explicit forms of feedback by the teacher (items 11, 12, and 14). Students were also asked about their attitudes towards corrective feedback from peers (items 7 and 18). In total, there were eleven items asking students to express their attitude towards corrective feedback (7, 8, 9, 10, 11, 12, 14, 15, 16, 18, and 19). The students' attitude towards corrective feedback may influence their willingness to receive a certain type of feedback, or their comfort level in the class.

The sixth group of questions asked students to describe their experience in chatting only during the semester this dissertation was conducted. Items 22 and 26 asked them to share their attitudes about chatting. Item 22 referred to chatting as fun, and 26 to chatting as beneficial for language learning. Items 21 and 25 asked students to share their own behavior during the chatting experience, with item 21 asking them about talking in the physical environment, and 25 about the noticing of errors by self or peers. In item 20, students were asked to express their attitude towards the teacher's active participation in the chat room. Since it was observed that both teachers were participating with the students, it was appropriate to pose this statement as an attitude statement rather than a frequency statement. Items 36 through 38 asked students to describe their teacher's role during chatting and whether they liked that behavior. In order to match students' perception with actual practice this section was necessary.

The seventh group of questions dealt with the students' experience with corrective feedback during the semester the study was conducted. Items 23 and 32 asked students to express their attitude towards corrective feedback from the teacher during chatting. In item 24, students were asked if they corrected other students during chatting. Item 25, also considered with group six above, asked students if they noticed their own mistakes during chatting. Items 30 and 31 asked students to report the frequency of corrective feedback expressed by the teacher in the classroom and during chat. And finally, items 36 through 38 were intended to provide any additional information the student wished to share. This section was intended to provide information to compare actual practices with perceived practices.

3.8.2.3 Transcripts

Transcripts (see sample in Appendix 2) of the chat sessions were collected to be able to (a) code errors, (b) code teacher turns, (c) code feedback moves, (d) code instances of uptake, (e) code instances of error uptake, and (f) establish a word count. The information was then used to determine the effectiveness of error treatment, to provide quantitative data to prove or disprove the fear of error uptake, to establish patterns between feedback type and uptake as well as between error type and feedback type, and to learn more about the teacher's role during chat. The chat software automatically generates chat transcripts, showing the name of the channel and the date of the interaction. Each posting is preceded by the screenname of the student and the time of posting including hour, minute, and second of posting. Participants logging in or out of

the channel are noted by “XYZ entered” or “XYZ exited.” Chat transcripts were retrieved from the instructional lab server after each chat session. The chat transcripts, however, do not indicate key strokes that did not result in a posting. In this sense, the chat transcript shows the same information that the participants saw at the time of chatting.

The chat transcripts were used for several purposes: (1) to identify and categorize student errors; (2) to identify and categorize corrective feedback by self, peers, and the teacher; (3) to identify moments of correction uptake; (4) to identify moments of error uptake; (5) to establish the amount of student language production; (6) to compare the students’ perceived role of the teacher and the one exhibited in the transcripts; (7) to identify successful corrective feedback moves and their nature; (8) to correlate corrective feedback received with improvement on the pre-and post-tests to see if more teacher feedback results in more improvement; and (9) to identify the purpose of teacher turns.

In order to code the data, the transcripts were first transferred into Word Documents. The files (sample of processed transcripts in Appendix 12) were then labeled with the screenname of the subject, the course name, and the date of the chat session. Each chat channel had two or more participants, so transcripts were created for each student from the time he/she logged on until he/she logged out. This means that transcripts from two students chatting in the same channel will be slightly different, as one may show more turns in the beginning and/or in the end. After transferring the transcripts into Word and labeling them with the name of the student, all turns by that student were highlighted in yellow and all turns by the teacher in green. Turns by peers

remained on white background. This coloring system made coding easier and allowed for a quick visual indicator of the amount of teacher, student, and partner turns.

After this initial processing, language use was coded (sample of coded transcript on Appendix 13). First, the teacher turns were coded for their purpose. The categorizing and labeling of the teacher turns was taken from the students' words in the survey. In the survey students were asked to label their teacher's role. The words they used were then turned into the categories of teacher turn such as corrector, conversation starter, model, expansion question, task-keeper, conversationalist, and distracter. A table with examples for these teacher turn functions is provided below in table 3.5.

A correction turn is a turn in which the teacher corrects the students either implicitly or explicitly. A conversation starter turn is a turn in which the teacher, after observing that the students are not able to continue the conversation, gets the conversation started again through additional questions or comments. Modeling is when the students have difficulty understanding what they are supposed to do, and the teacher provides a model. Expansion question turns are when the teacher asks additional questions on the topic to allow the students to produce more language. Task-keeping turns are turns, in which the teacher reprimands the students for unacceptable behavior such as off-task conversations, rudeness, use of English, or inappropriate language. Conversationalist turns are turns in which the teacher is simply being an equal participant in the conversation. Distractor turns are turns in which the teacher posts messages that are only partially or not all related to the topic.

Table 3.5. Overview of Teacher Turns

Type	Example
Correction	NSCDanielle: 2006 wurde die Fussball-WM in Deutschland austragen. MorningTeacher: Jawohl, im Jahre 2006 wird die FWM in Deutschland ausgetragen!
Conversation starter	SSCEmily: Also, ws wurde 1871 gemacht? (1 minute 40 second silence) MorningTeacher: 1871 wurde vielleicht das Zweite Deutsche Reich gegeründet. Was denkt ihr?
Modeling	SSCEmily: Also, ws wurde 1871 gemacht? (1 minute 40 second silence) MorningTeacher: 1871 wurde vielleicht das Zweite Deutsche Reich gegeründet. Was denkt ihr?
Expansion	(in this information-gap activity students had to ask each other information in their charts, even though according to the charts Svetlana and Jochen go to different places, EveningTeacher decided to twist the activity) EveningTeacher: Wo bleiben Svetlana und Jochen? Ich DENKE sie bleiben in Barcelona zusammen.
Task-keeper	NSCGeorge: total abgefuckt MorningTeacher: Hey, seid bitte nett!
Conversationalist	Emily: Di hast eine Schwester, ja? MorningTeacher: Ja, ich habe eine Schwester, sie ist 20 Jahre alt und wohnt in Moskau mit meinen Eltern.
Distractor	(students are discussing what they would do differently from their parents if they had children) EveningTeacher: Wenn ich mein Leben ändern könnte, würde ich XAVIER NIDOO HEIRATEN!!!!

Next, errors were coded. They were labeled according to the person making the error, i.e., self, partner, or teacher, and according to the type of error. During the analysis of the background study data, it was found that using traditional forms of error coding was not efficient for this research project; hence a new form of categorization was created, and errors were categorized from a teacher's perspective (see Appendix 1 for list of errors and examples). These error categorizations were adapted from several available error-coding guides for essay grading, and it was assumed that teachers would view the errors in these categories. In contrast to grading an essay, typing errors including

capitalization were ignored for the purposes of this study, since it was unclear whether such errors were truly errors or simply evidence of poor typing skills. The error categories consisted of endings, plural forms, word choices, subject verb agreements, verb forms, past participles, tenses, word order, missing words, unidentifiable errors, pronouns, prepositions, and unnecessary words. (A coding sheet with explanations and examples is included in the Appendix 1) Errors were also marked to indicate whether they received feedback or resulted in error uptake by another person.

Next, corrective feedback moves were labeled according to whom they were given by and whom they were given to: the teacher, the student (i.e., self), or a partner (if there was more than one they were numbered). If the corrective feedback moves resulted in uptake by the person corrected or correct usage by another student within the same transcript, they were marked accordingly. The corrective feedback moves identified were clarification request, modeling, rule explanation, marked correction, and repetitions (see table 3.6. for examples).

Table 3.6 Corrective Feedback

Corrective Feedback Move	Example
Clarification Request	NSCJennifer: manchmal, esse ich zweimal morgens. NSCGretchen: was ist dass, auf english?
Modeling	SSCSamantha: Meine Computer ist kaput. SSCEmily: Mein Computer war auch kaputt.
Rule Explanation	ESCJames: Mein Vater hat mit Carla eine Schildung und Meine Mutter hat mit Paul ein Schieldung also. EveningTeacher: also (auf Englisch) = auch (auf Deutsch)
Marked Correction	SSCEmily: Wenn wir an den Strand gehen, sollen wir einen Sonnenschirm tragen. SSCEmily: tragen whoops ... bringen.
Repetition	NSCGeorge: Wissen Sie, was sollte ich ihm nicht geben. NSCGeorge: *Wissen Sie, was ich ihm nicht geben sollte.

Word count was established by using the tool in Microsoft Word, and then manually subtracting English words, posting time information, and log-in and log-out information. The duration of the chat sessions in minutes and the number of words produced by the student per minute were recorded. In addition the number of words per minute by each student in each transcript was calculated. Averages for each student and each class were then calculated.

3.8.2.4 Analysis Sheets

After each chat session, the teachers were supposed to print the analysis sheet described earlier. This sheet provides information on the student's amount of language produced and the lexical density. However, most of the time, the teachers did not print or turn in the analysis sheet. Hence, word count was assessed using the electronic version of the transcripts and the word count feature of Microsoft Word as mentioned above.

3.8.2.5 Self- Report Forms

As has been suggested by other researchers, transcripts alone do not provide enough information about what actually happens during a chat session. In an attempt to learn more about the factors in the implementations of the chat sessions and chat activities which are not reflected in the transcripts, self-report forms (see Appendix 9) were administered. After each chat session, students and instructors were asked to complete a short self-report form, available on the course management web site, about the resources they utilized and the difficulties they experienced. This web site was also

where teachers and students accessed the chat activities descriptions. Yet, most of the time, the teachers did not complete these forms, and neither did all students. First they were asked to report their screenname and the date. The submission of the survey was set to be anonymous in the course management system, so as to not reveal the subjects' real names. However, in order to be able to use the information provided in the self-report forms during the analysis of the chat transcripts, it was important to be able to match the self-report form with the chat date and the participant. In the next section, the students were asked if they used any resources, such as an online dictionary, internet translator, or paper dictionary, during chatting, and the reason why. The resources they were questioned about were resources that I had observed students using in the past. In the next section, students were asked about technological problems with the chat server, the necessary web sites, and the details of such problems. In addition, they were asked if there were any distractions in the lab during chatting. Examples of possible distractions experienced in earlier semesters vary: sometimes teachers play music in the lab, sometimes instructional technology staff walks through the lab to check or fix equipment, or sometimes other instructors come to the lab to prepare their next class. Then, students were asked about their interaction with other students in the physical and chat environments, particularly how they liked working with their partners. It was assumed that if they did not like working with their partners, they would produce less language. They were also asked about their teacher's participation and corrective feedback during chatting. Lastly, they were asked about the task, specifically if they liked it and how much time they had to complete it.

The information from the self-report form where available was used to help explain patterns occurring in chat transcripts that seemed unexplainable by looking at the transcripts alone. For example, if a student who usually produces a lot of language suddenly alters his/her production in one transcript, it may be due to the activity, the partner, technological problems, or a lack of time. In addition, self-report forms were used to triangulate data from the surveys and classroom observation notes.

The self-report forms were collected by the course management system and organized by question. Within each question, they were organized by time submitted. The program allows the survey results to be organized by date to make data analysis easier.

3.8.2.6 Classroom Observations

For the same reason that the self-report forms were administered, I conducted monthly chat classroom observations for each class during approximately every third chat session. During that time, I took detailed notes about the interactions in the physical space, and also about the resources students consulted. Since I did not know the identities of the students and only created nicknames for them for the purpose of my data collection, the observations do not match perfectly with the transcripts. For example, one sample note is, "Girl who never types is just staring at her screen again." While I know what the girl looks like, I do not know which screenname is hers, preventing me from identifying her in the chat transcripts in order to try to understand why she never typed. Naturally, over the course of my observations, I learned some of the screennames, but not

all of them. This issue could have been avoided by setting up different requirements with the Human Subjects Board.

The focus of the observations was to understand how much assistance the teacher was providing in the physical environment and how much the students were relying on each other's help in the physical environment. With the help of the observations, I was also able to assess how many students used online resources, such as online dictionaries and internet translators, and how many students relied on their dictionaries or textbooks for assistance with the vocabulary.

The design of the lab encourages student collaboration and provides easy access for the teacher to assist students. These special features of the lab most likely influenced the interactions in the physical environment.

During the observations, it became apparent that it was important to note when the students called for the Lab Assistant rather than the teacher for help. The intended role distribution between the two is that the teacher is in charge of all teaching-related issues, while the Lab Assistant assists the teacher in using the technology if she needs it, and assists students with technological problems when necessary. Some of the teachers who use this lab explicitly state this role assignment to their students at the beginning of the semester. To my knowledge there was no such explanation made to the students by either EveningTeacher or MorningTeacher.

During my observations, I sat at the end of the room so that I had the opportunity to see a few screens on all three pods, all students, the teacher, and the Lab Assistant. I usually sat down right to the Lab Assistant when present which resulted in the students

associating me as part of the tech team. When students asked me for help, I usually directed them to the teacher or the Lab Assistant. When the teacher asked me for help, I did provide assistance, but only when the teachers made mistakes in starting the technology did I intervene. No interventions were made as a result of incorrect interpretation of the activities or teaching decisions considered inappropriate by me from a teacher trainer perspective.

3.9. Summary

In summary, this research study consisted of a background study and the main study. The background study informed the coding of the data of the main study, and provided information for the Teacher's Manual. The main study is intended to understand the role of the teacher during chat and its effect on the students' experience and learning. For this study, three third-semester German courses taught by two teachers with varying levels of technological support were investigated. Due to their differing comfort levels in using computers for instructional purposes, the teachers were named MorningTeacher and EveningTeacher. The courses were labeled according to the technical support, with MorningTeacher's courses being No-Support-Class and Some-Support-Class, and EveningTeacher's course being Expert-Support-Class. Over the course of a semester, students and teachers engaged in almost weekly chat activities closely connected to the materials used during regular class time.

To find information about the participation and feedback styles of the teachers, and the students' attitudes, learning, and experience, the following data sets were

collected: pre-and post tests, pre-and post-surveys, self-report forms, classroom observation notes, chat transcripts, and chat analysis sheets. The data were analyzed in quantitative and qualitative fashions. Gain scores on the test were calculated. Pre- and post-surveys were analyzed, looking at numerical trends as well as a categorization of comments. Information from the self-report forms and classroom observation notes were used to describe the implementation more thoroughly. Chat transcripts were used for quantitative and qualitative analyses to identify patterns between the teacher's participation and the students' learning, and between error type and feedback type.

In this chapter, the research questions were presented along with the analysis procedures and the instrument descriptions (for a quick overview see table 3.7.). In the following chapter, the research results from each instrument will be presented along with a discussion of the results in relation to each other in order to answer this study's research questions.

Table 3.7. Data Types and Collection Methods

Research Question	Method of Data Collection	Analyses
(1) How do two case study teachers participate in foreign language classroom chatting?	Transcripts, classroom observation notes	Coding of teacher moves, feedback, target language use; teacher output Chi squared; ANOVA
(a) What appears to be the teacher's definition of her role, as evidenced by participation styles?	Transcripts, informal conversations, observation notes	Coding of teacher moves
(b) What form does corrective feedback take during chatting in this study?	Transcripts	Error coding – Chi squared
(2) What influence do corrective feedback styles have on students' learning, as perceived through:		

Research Question	Method of Data Collection	Analyses
(a) language production during the chat as measured through word count;	Transcripts	Word count; feedback coding; ANOVA
(b) learner uptake as measured by evidence of correction uptake within the same transcript;	Transcripts	Error coding, uptake coding, feedback coding
(c) and improvement of the structures taught during third-semester German classes as measured by a achievement pre-/post-test?	Trancripts, pre- and post-tests	Feedback coding; repeated measures ANOVA
(3) What patterns occur in the data:		
(a) between error type and error treatment?	Transcripts	Error coding, feedback coding
(b) between error type and error uptake?	Transcripts	Error coding, error uptake coding
(c) between source of error and error uptake?	Transcripts	Error coding, error uptake coding
(4) (a) How do students perceive the teacher's role in the chat room and in the physical space?	Surveys, self-report forms	
(b) How do these perceptions correspond with actual practices?	Transcripts, classroom observations,	
(5) (a) Which parts of the interaction are happening in the physical space and not in the virtual space?	Transcripts, classroom observations	
(b) What modifications would have to be made when moving SCMC activities to a remote location?		

CHAPTER IV: RESULTS

4.1 Introduction

In the previous two chapters, the theoretical background, the previous research, the research methods, the subjects and the instruments in this study were discussed. In this chapter, the results from the research in response to the research questions will be discussed. As has been mentioned in chapter three, the research questions are answered using multiple data sets, and the data sets are used to answer different questions. Therefore, in this chapter, the research results from each data set will be discussed in detail in the first question they apply to, and later will be referred back to when appropriate, as to avoid repetitive information. Some questions will only address the results from the six case study subjects selected, and others from all students. In the discussions it will be pointed out which data set is considered. In cases where all subjects are discussed, the case study subjects' results will be highlighted by underlining them in the appropriate tables.

As mentioned before, this study employs a mixed design and multi-faceted data sets. The 46 study participants and the two teachers were expected to engage in weekly 20-minute chat sessions over the course of one semester. However, due to other curriculum constraints and technological problems, chat sessions and chat transcripts were fewer than had been anticipated.

NSC (No Support Class): Students were engaged in 2 to 9 chat sessions, with a median of 7 sessions and an average of 6.5 sessions (see table 4.1. below). Chat sessions

lasted between 9 minutes and 16 seconds and 36 minutes and 20 seconds and an average of 24 minutes 43 seconds. On average students were engaged in 2 hours 44 minutes and 49 seconds of chatting over the course of one semester. This chat time is part of approximately 50 total hours of instruction over the course of the semester. As recorded in the classroom observations, a typical chat session in NSC can be described in the following manner: the teacher puts pieces of paper on the table that describe a chat activity and assign a channel; students walk in one after the other and sit down at a self-selected seat; students log into the program; due to students' and teacher's improper following of the procedures, computer problems are experienced often; since students come in at different times, some students are alone in chat rooms for a while; no Lab Assistant is present, hence the teacher assists in the physical space; students use online dictionaries, the textbook, and paper dictionaries as resources; students hardly ever talk to each other and if they do, the teacher comes over and asks them if they need help. This is a summary statement of the implementation of the chatting. Direct quotes from the classroom observations are in a following section.

SSC (Some Support Class): Students were engaged in 2 to 8 chat sessions, with a median of 6 sessions and an average of 5.88 sessions (see table 4.1. below). Chat sessions lasted between 6 minutes and 16 seconds and 43 minutes and 21 seconds and an average of 23 minutes 21 seconds. On average students were engaged in 2 hours 19 minutes and 4 seconds of chatting over the course of one semester. This chat time is part of approximately 50 hours of instruction over the course of the semester. Based on the classroom observations, a typical chat session in SSC can be described similarly to the

NSC. There were only two differences observed: the students seemed to interact a little more with each other in the physical space, and a Lab Assistant was present. However, the Lab Assistant was often unable to fix the problems experienced.

ESC (Expert Support Class): Students were engaged in 3 to 10 chat sessions, with a median of 9 sessions and an average of 8.28 sessions (see table 4.1. below). Chat sessions lasted between 8 minutes and 32 seconds and 31 minutes and 8 seconds and an average of 19 minutes 58 seconds. On average students were engaged in 2 hours 46 minutes and 12 seconds of chatting over the course of one semester. This chat time is part of approximately 50 hours of instruction over the course of the semester. As noted in the classroom observations, the following represents a typical ESC chat session: EveningTeacher puts up the activities on the projector screen and explains the activity and unfamiliar words; but with occasional inaccuracies; group assignment is done by the Lab Assistant by handing out pieces of paper with a channel number, but he often assigns more students to a channel than was intended by the activity design; Lab Assistant instructs students in log-in and log-out procedures; students start chatting with each other; students laugh and comment in the physical space; students read over each other's shoulders; teacher sits down when chatting starts, and chats also, and comments out loud; students calling for help are not always responded to; teacher plays music.

Table 4.1 Summary of Time Spent on Chat Activities by Class and Subject

Class/Subject	Sessions	Length Range	Average Time	Total Chat Time
NSCDanielle	<u>8</u>	<u>20:49 – 32:42</u>	<u>27 min 14 sec</u>	<u>3 h 37 min 55 sec</u>
NSCDamion	8	20:00 – 27:44	23 min 10 sec	3 h 5 min 23 sec
NSCGeorge	6	20:01 – 31:08	24 min 20 sec	2 h 26 min 1 sec
NSCGretchen	7	24:32 - 36:20	28 min 7 sec	3 h 16 min 52 sec
NSCFrancis	8	17:51 - 35:49	26 min 23 sec	3 h 31 min 1 sec

Class/Subject	Sessions	Length Range	Average Time	Total Chat Time
<u>NSCJennifer</u>	<u>9</u>	<u>23:02 – 31:33</u>	<u>26 min 58 sec</u>	<u>4 h 2 min 43 sec</u>
NSCLaura	2	18:14 – 24:56	21 min 35 sec	0 h 43 min 10 sec
NSCMarkus	4	9:16 – 24:01	19 min 7 sec	1 h 16 min 28 sec
NSCMike	7	23:38 - 32:29	27 min 3 sec	3 h 9 min 19 sec
NSCMichelle	8	21:03 – 31:05	26 min 19 sec	3 h 30 min 35 sec
NSCSteve	6	18:02 – 31:54	21 min 32 sec	2 h 9 min 13 sec
NSCJames	5	20:39 – 29:50	27 min 6 sec	2 h 6 min 9 sec
<u>NSCAverage</u>	<u>6.5</u>	<u>21:32 – 28:07</u>	<u>24 min 43 sec</u>	<u>2 h 44 min 49 sec</u>
SSCAdrienne	7	7:05 – 36:14	21 min 56 sec	2 h 33 min 30 sec
SSCBrenda	4	23:23 – 29:52	25 min 46 sec	1 h 43 min 5 sec
SSCBob	6	8:24 – 28:39	20 min 56 sec	2 h 5 min 36 sec
<u>SSCEmily</u>	<u>8</u>	<u>19:35 – 39:50</u>	<u>26 min 46 sec</u>	<u>3 h 34 min 5 sec</u>
SSCLinda	6	23:46 – 43:21	29 min 0 sec	2 h 53 min 58 sec
SSCMartin	7	7:52 – 41:13	25 min 27 sec	2 h 58 min 7 sec
SSCNigel	5	15:43 – 29:22	22 min 51 sec	1 h 54 min 16 sec
SSCOpehlia	8	18:11 – 35:10	25 min 48 sec	3 h 26 min 21 sec
SSCPhilip	2	19:25 – 24:08	21 min 47 sec	0 h 43 min 33 sec
SSCSamantha	8	6:16 – 34:57	20 min 6 sec	2 h 40 min 48 sec
<u>SSCGina</u>	<u>8</u>	<u>21:24 – 37:08</u>	<u>26 min 53 sec</u>	<u>3 h 35 min 1 sec</u>
SSCTina	8	6:37 – 37:20	21 min 38 sec	2 h 13 min 2 sec
SSCVeronica	5	20:11 – 24:12	22 min 41 sec	1 h 53 min 24 sec
SSCWilma	4	7:27 – 24:27	15 min 51 sec	1 h 3 min 25 sec
SSCGraham	5	20:45 – 28:04	23 min 56 sec	1 h 59 min 38 sec
SSCKen	3	13:56 – 29:37	23 min 24 sec	1 h 7 min 11 sec
<u>SSCAverage</u>	<u>5.88</u>	<u>15:51 – 29:00</u>	<u>23 min 21 sec</u>	<u>2 h 19 min 4 sec</u>
<u>ESCAmanda</u>	<u>10</u>	<u>13:29 - 30:47</u>	<u>20 min 9 sec</u>	<u>3 h 21 min 26 sec</u>
ESCBarbara	7	12:52 – 30:12	22 min 2 sec	2 h 34 min 15 sec
ESCChristian	9	11:44 – 29:32	19 min 22 sec	2 h 54 min 15 sec
SCCChristina	10	9:51 – 25:25	18 min 34 sec	3 h 5 min 45 sec
ESCDomonique	9	12:43 – 28:38	20 min 23 sec	3 h 3 min 23 sec
<u>ESCVictoria</u>	<u>10</u>	<u>9:53 – 29:43</u>	<u>19 min 29 sec</u>	<u>3 h 14 min 52 sec</u>
ESCFiona	8	13:37 – 29:02	20 min 39 sec	2 h 45 min 11 sec
ESCGerhard	9	12:34 – 28:45	20 min 9 sec	3 h 1 min 23 sec
ESCIan	8	9:29 – 25:54	18 min 30 sec	3 h 9 min 19 sec
ESCJames	3	14:05 – 30:36	21 min 27 sec	1 h 4 min 21 sec
ESCLance	8	14:56 – 28:45	20 min 34 sec	2 h 44 min 10 sec
ESCLisa	10	11:23 – 28:08	19 min 8 sec	3 h 11 min 20 sec
ESCLarissa	9	12:05 – 28:47	19 min 39 sec	2 h 57 min 52 sec
ESCNina	8	14:09 – 28:44	20 min 31 sec	2 h 44 min 5 sec
ESCPatrick	9	11:55 – 31:08	20 min 0 sec	2 h 59 min 56 sec
ESCSabrina	8	8:32 – 23:43	16 min 49 sec	2 h 14 min 33 sec
ESCTiffany	5	14:43 – 30:58	22 min 48 sec	1 h 53 min 58 sec
ESCVirginia	9	11:15 – 29:23	19 min 5 sec	2 h 51 min 44 sec
<u>ESCAverage</u>	<u>8.28</u>	<u>18:30 – 22:48</u>	<u>19 min 58 sec</u>	<u>2 h 46 min 12 sec</u>

To summarize, chatting was implemented less often in the classes than initially expected. Furthermore, the chatting was implemented differently by the two teachers, with one seemingly encouraging and the other seemingly discouraging interaction in the physical space as modeled by the teacher's behavior. Furthermore, group assignment was handled differently by the two teachers, with both approaches causing some pedagogical implementation problems, i.e., students alone in rooms in the NSC and SSC and too many students in a room in the ESC. Additionally, the three different classes received differing amounts of technical assistance.

To better understand the nature of the chatting, two case study subjects were chosen from each class to acquire an in-depth look at the interaction during chatting. A detailed analysis was undertaken for six transcripts sets, and they were analyzed to identify errors; corrective feedback; uptake; and patterns between errors and corrective feedback, errors and error uptake, and corrective feedback and uptake. The two students from each class were chosen based on their exposure to chatting. Since the chatting was only one small component in the class, it was thought that choosing the students with the maximum exposure to chatting would be the best indicator of how the students and teachers interacted and what potential effects the chatting may have. The following students were chosen: NSCDanielle and NSCJennifer, SSCEmily and SSCGina, and ESCAmanda and ESCVictoria. The names were changed to pseudonyms from their self-selected screennames. Furthermore, the class name was added to the pseudonym for ease of identification.

Table 4.2 Case Study Subjects

	NSC Danielle	NSC Jennifer	SSC Emily	SSC Gina	ESC Amanda	ESC Victoria
Sessions	8	9	8	8	10	10
Time	3:57:55	4:02:43	3:34:05	3:35:01	3:21:26	3:14:52
Words	939	889	1010	786	1038	694
WPM	4.31	3.66	4.72	3.66	5.15	3.56
Teacher Words	89	80	138	134	357	418
Teacher WPM	0.41	0.33	0.65	0.62	1.77	2.15
Gender	F	F	F	F	F	F
Age	19	18	19	20	20	21
Pre-Test Score and Rank	46.75 – 4 th	43.75 – 5 th	36 – 15 th	40 – 7 th	37.5 – 11 th	11.25 – 44 th
Post-Test Score and Rank	52.75 – 14 th	60.25 – 3 rd	57.75 – 5 th	62.25 – 1 st	49.25 – 22 nd	36.25 – 41 st

WPM = Words per Minute

NSCDanielle participated in 8 chat sessions for a total of 3 hours 37 minutes and 55 seconds during which she produced 939 words (i.e., 4.31 words per minute) and was exposed to a total of 89 words by the teacher (i.e., 0.41 words per minute). She is 19 years old and has studied Spanish in addition to German. She rates her German ability as “limited.” On the pre-test without the writing section, she received 46.75 points which ranked her 4th across classes, and on the post-test she received 52.75 points which ranked her 14th across classes. In her survey she reported appreciating the teacher’s feedback, but was critical towards peer feedback. Towards technology in the classroom she was favorable; however, she expressed caution in regards to the benefits of chatting for her spoken language ability. Furthermore, she stressed that chatting is only beneficial if the partners are accurate and fast.

NSCJennifer participated in 9 chat sessions for a total of 4 hours and 2 minutes and 43 seconds during which she produced 889 words (i.e., 3.66 words per minute) and was exposed to 80 words by the teacher (i.e., 0.33 words per minute). She is 18 years old and has studied Spanish and American Sign Language in addition to German. She rates her German ability as “decent.” On the pre-test without the writing section, she received 43.75 points which ranked her 5th across classes, and on the post-test she received 60.25 points which ranked her 3rd across classes. In her survey she indicated appreciating all kinds of feedback, and saw feedback by the teacher as a way of the teacher expressing that he or she cares about the students. In addition, she was favorable towards the computers in language classroom, as technology and learning feel like an inevitable part of the future. She also pointed out that she would be more likely to communicate with someone in Germany via the computer than in person.

SSCEmily participated in 8 chat sessions for a total of 3 hours and 34 minutes and 5 seconds during which she produced 1010 words (i.e., 4.72 words per minute) and was exposed to a total of 138 words by the teacher (i.e., 0.65 words per minute). She is 19 years old and has studied Spanish and French in addition to German. She rates her German ability as “that of a beginner.” On the pre-test without the writing section, she received 36 points which ranked her 15th across classes, and on the post-test she received 57.75 points which ranked her 5th across classes. In her survey she indicated appreciating all kinds of feedback. She pointed out that sometimes other students may be able to provide better explanations than the teacher. While she felt that corrections could be humiliating, she thought that they were the only way to learn. She was favorable towards

computers in the language classroom and reported having used chatting in Spanish classes before. She reported that chatting was beneficial both in her prior Spanish classes and in the German class.

SSCGina participated in 8 chat sessions for a total of 3 hours and 35 minutes and 1 second during which she produced 786 words (i.e., 3.66 words per minute) and was exposed to 134 words by the teacher (i.e., 0.62 words per minute). She is 20 years old and has studied only German as a foreign language. She rates her German ability as that of a “beginning” to “intermediate” learner. On the pre-test without the writing section, she received 40 points which ranked her 7th across classes, and on the post-test she received 62.25 points which ranked her 1st across classes. In her survey she was favorable towards error correction and technology in the classroom. She did not explain her answers. In the guided question section she mentioned that the chat sessions were sometimes too long, leaving her without something to say.

ESCAmanda participated in 10 chat sessions for a total of 3 hours and 21 minutes and 26 seconds during which she produced 1038 words (i.e., 5.15 words per minute) and was exposed to a total of 357 words by the teacher (i.e., 1.77 words per minute). She is 20 years old and did not indicate having learned any foreign language prior to the class. She rates her German ability as including good comprehension skills but limited productive skills. On the pre-test without the writing section, she received 37.5 points which ranked her 11th across classes, and on the post-test she received 49.25 points which ranked her 22nd across classes. In her survey she indicated mixed feelings about corrective feedback, often answering a 2 or a 3 on the 4-point Likert scale. She had a

positive attitude towards technology and felt that she learned during the chat and that it was fun. Furthermore, she liked EveningTeacher's participation style. The only caution she expressed was that chatting does not work if there is a mismatch in partners.

ESCVictoria participated in 10 chat sessions for a total of 3 hours and 14 minutes and 52 seconds during which she produced 694 words (i.e., 3.56 words per minute) and was exposed to a total of 418 words by the teacher (i.e., 2.15 words per minute). She is 21 years old and has studied only German as a foreign language. She rates her German ability as "improving." On the pre-test without the writing section, she received 11.25 points which ranked her 44th across classes, and on the post-test she received 36.25 points which ranked her 41st across classes. In her survey she was favorable towards accuracy focused teaching. Her attitudes towards technology in the classroom changed slightly to the negative. However, her opinion of chatting was that it is a fun and beneficial activity. She described her teacher's role during chatting as "God". This comment was interpreted as meaning that EveningTeacher was omnipresent and had all the answers.

After the above introduction to the nature of chat sessions and the case study subjects, the following sections will provide discussions of data analyses undertaken to address each of the research questions. Analyses for some research questions will use the data for all students in the classes, and others only use the data from the case study subjects. While it would be ideal to be able to use all students' data for all research questions, simple time constraints did not allow for an in-depth analysis of all students' chat transcripts. At the beginning of each discussion, it will be stated which data sample produce the results.

4.2.1 Research Question 1

The first research question stated: How do two case study teachers participate in foreign language classroom chatting? This research question emerged after the review of the computer-mediated communication literature. Many studies do not mention what the teacher was doing during the chatting. Furthermore, during the background study, when sample teacher turns were sought for the Instructor Manual (see Appendix V), it was discovered that chat transcripts in which the teacher was participating were hard to find. Therefore, the qualitative analysis of teacher participation in foreign language chatting was considered an important component to investigate. However, only two teachers were analyzed, making this a case study which cannot be generalized beyond the two teachers involved. Rather, it provides two in-depth examples of teacher interaction during chatting.

As a reminder, the two teachers involved in this study carry the pseudonyms MorningTeacher and EveningTeacher. Both teachers are comfortable using technology, including chatting, on their own time according to their own reports. However, MorningTeacher expressed some reservations about using chatting in the classroom. On the other hand, MorningTeacher had experience with the chatting and this chat server in the classroom, while EveningTeacher did not. Furthermore, EveningTeacher was supported during her teaching by the developer of the chat program as her Lab Assistant, whereas MorningTeacher had no Lab Assistant in the No-Support Class (NSC) and a Lab Assistant who was not always able to help in her Some-Support Class (SSC). These may

be the reasons for more frequent computer problems experienced by MorningTeacher than EveningTeacher. These computer problems resulted in partial and complete transcript loss in the NSC and SSC, which most likely affects the results of this study.

To answer the research question, the transcripts and the observation notes were consulted. First the results from the observation notes will be discussed. It should be mentioned here that the observation notes can only reflect the behaviors exhibited by the teachers while being observed, and cannot accurately state the behavior of the teacher while not observed, for there might be a difference.

The MorningTeacher spent some time walking around and assisting students in the physical space, which consequentially did not allow her to participate as much in the chat, as if she were at her keyboard at all times. Furthermore, the MorningTeacher appeared to be reading postings carefully, and posted her own messages often using the invisible function, i.e., she did not show up in the participant list, but could still post messages visibly. Here are some excerpts from the observation notes of each of MorningTeacher's courses to illustrate her participation, though she interacted similarly with both classes:

NSC – Observation Notes Observation 1

- "... MorningTeacher is reading....
- MorningTeacher started walking around looking over students' shoulders and reading with them. She did assist some students with the chatting. "

SSC – Observation Notes Observation 1:

- "...MorningTeacher explained the activity to SSCSamantha in English.
- MorningTeacher is reading something on the computer
- MorningTeacher is chatting by being invisible.
- Some students just figured out that the teacher can type something and not be visible, because a message from MorningTeacher popped up, but she was not in

the participants list. They commented this occurrence with “Hey, you ARE here!”....

- One channel with SSCSamantha and SSCBob crashed and they had to be moved to another channel. What they were typing did not show up on the screen. For all of them. ...
- MorningTeacher is reading again but I am not sure if she is reading the transcripts. I can’t see her anywhere in the channels next to me. But then again, she set it to invisible.”

EveningTeacher spent most of her time after introducing the activities in her seat at the computer. As far as I know, she did not use the invisible function. She typed frequently and she also commented out loud in the physical space. Furthermore, she used the “to all” function, sending one message into all chat rooms simultaneously. Here are some excerpts from the ESC Observation notes:

ESC Classroom Observation Notes Observation 1:

- “EveningTeacher broke off everybody and told them out loud that they need to talk about “Kinder” and not to chat about “where are you from”
- Then she asked them more questions for the chat activity. ...
- EveningTeacher keeps commenting out loud on the stuff students write in class. ...
- EveningTeacher is typing....”

ESC Classroom Observation Notes Observation 4:

- “... Lab Assistant sets up chat from teacher station. Lab Assistant moves away from the teacher station and EveningTeacher finally sits down....
- EveningTeacher apparently wrote something to all, and students laughed. One student said out loud that her daughter would not approve. ...
- EveningTeacher laughs out loud ... at something that one of the students at pod 1 wrote. One of the students at the middle pod rolls her eyes....”

To summarize, during the classroom observations it appeared that the MorningTeacher was typing less and reading more than EveningTeacher. While MorningTeacher laughed sometimes also, she did not laugh as much as EveningTeacher.

MorningTeacher walked up to individual students to assist with problems and questions. EveningTeacher did not walk around the classroom, once she sat down. Furthermore, EveningTeacher shouted across the room to provide further instructions or to comment on the conversation in a chat room.

In reviewing the transcripts, differences between the teachers were also found. To discuss the nature of the teacher participation in the chat room, the following factors will be presented: teacher word count, teacher words per minute, teacher error rate, teacher target language use, teacher feedback moves, and teacher moves. Teacher word count and teacher words per minute will be discussed using data from all transcripts, whereas teacher error rate, teacher target language use, teacher feedback moves, and teacher moves will be discussed using the transcripts from the case study subjects only.

First, it was measured how much teacher output the students were exposed to. The rationale for this measure stems from several sources. First, research on CMC has claimed that CMC exhibits an equalization or democratization effect in participation (see for example Beauvois, 1998). Furthermore, when talking with colleagues opposed to CMC in the classroom, one argument that is often presented is that the students are exposed to so much non-target like language from their peers and less target-like language from their instructors. Therefore, investigating the number of teacher words was important. Words in German excluding names were counted as words. For comparability purposes the words per minute produced by the teacher were established. These teacher words include words addressed to the subject as well as those that were not. Furthermore, since one teacher turn most likely appeared on more than one transcript, especially in the

case of EveningTeacher who used the “to all” function, teacher turns were counted multiple times. Teacher words were counted from the perspective of the student, i.e., how many words per minute was each subject exposed to by the teacher, whether addressed to him or her directly, or not.

Table 4.3 Teacher Word Count and Teacher Words per Minute

Class/Subject	Teacher Words¹ Total	Teacher Words Range²	Teacher Words per Minute Total	Teacher Words per Minute Range	Teacher Words/ Student Words Total
<u>NSCDanielle</u>	89	0-33	0.41	0-0.94	0.10
NSCDamion	100	0-40	0.54	0-1.44	0.20
NSCGeorge	42	0-19	0.29	0-0.80	0.10
NSCGretchen	69	0-29	0.35	0-0.80	0.14
NSCFrancis	78	0-32	0.37	0-1.06	0.12
<u>NSCJennifer</u>	80	0-25	0.33	0-0.94	0.09
NSCLaura	12	3-9	0.28	0.17-0.36	0.09
NSCMarkus	56	6-27	0.73	0.5-1.12	0.33
NSCMike	101	0-31	0.53	0-1.21	0.12
NSCMichelle	65	0-30	0.31	0-0.97	0.06
NSCSteve	98	0-30	0.76	0-1.45	0.20
NSCJames	70	1-40	0.55	0.03-1.48	0.09
NSCAverage	71.67	12-101	0.45	0.29-0.76	0.12
SSCAdrienne	133	0-65	0.87	0-1.68	0.25
SSCBrenda	79	13-27	0.77	0.44-1.10	0.25
SSCBob	36	0-19	0.29	0-0.66	0.09
<u>SSCEmilv</u>	138	0-46	0.65	0-1.73	0.14
SSCLinda	67	0-27	0.39	0-1.02	0.15
SSCMartin	54	0-25	0.30	0-0.96	0.14
SSCNigel	91	0-74	0.80	0-4.01	0.51
SSCOphelia	155	0-58	0.75	0-1.95	0.21
SSCPhilip	32	8-24	0.74	0.41-1.00	0.13
SSCSamantha	131	0-74	0.82	0-4.79	0.24
<u>SSCGina</u>	134	0-65	0.62	0-2.19	0.17
SSCTina	135	0-74	0.78	0-2.66	0.34
SSCVeronica	75	4-30	0.66	0.18-1.28	0.13
SSCWilma	57	0-57	0.90	0-2.33	0.29

¹ Only German words are counted

² The range was derived by counting the German words in each transcript.

Class/Subject	Teacher Words¹ Total	Teacher Words Range²	Teacher Words per Minute Total	Teacher Words per Minute Range	Teacher Words/ Student Words Total
SSCGraham	51	0-21	0.43	0-0.81	0.13
SSCKen	15	0-8	0.22	0-0.57	0.09
SSCAverage	86.44	15-155	0.62	0.22-0.90	0.19
ESCAmanda	<u>357</u>	<u>0-73</u>	<u>1.77</u>	<u>0-3.90</u>	<u>0.34</u>
ESCBarbara	356	10-79	2.31	0.47-3.65	0.54
ESCChristian	395	7-95	2.27	0.60-4.38	0.67
SCCChristina	404	0-77	2.18	0-5.58	0.32
ESCDomonique	341	0-74	1.86	0-2.72	0.44
ESCVictoria	<u>418</u>	<u>0-84</u>	<u>2.15</u>	<u>0-3.65</u>	<u>0.60</u>
ESCFiona	355	16-80	2.15	0.73-3.49	0.63
ESCGerhard	448	15-89	2.47	0.68-4.13	0.59
ESCIan	311	10-80	1.64	0.40-3.48	0.37
ESCJames	133	0-85	2.07	0-3.41	0.58
ESCLance	354	0-79	2.16	0-3.24	0.74
ESCLisa	410	0-78	2.14	0-3.63	0.92
ESCLarissa	431	18-83	2.42	0.94-3.64	0.47
ESCNina	327	2-76	1.99	0.11-3.62	0.39
ESCPatrick	397	0-86	2.21	0-3.94	0.74
ESCSabrina	242	0-58	1.80	0-3.40	0.30
ESCTiffany	283	0-96	2.48	0-4.11	1.22
ESCVirginia	375	11-71	2.18	0.52-5.66	0.85
ESCAverage	352.1	242-448	2.12	1.64-2.48	0.52

Table 4.3 shows the descriptive statistics for exposure to teacher output as measured in word count, words per minute, and ratio between teacher and student words per minute. All subjects except for ESCTiffany produced more words per minute on average than their teacher. Students in NSC were exposed to an average number of total teacher words of 71.67 ranging from 12 to 101 words. For comparability between classes and teachers, the numbers were also presented as words per minute and teacher/student output ratio. Students in NSC were exposed to an average of 0.45 words per minute from MorningTeacher ranging from 0.29 to 0.76. The class average teacher-to-student output ratio is 0.12. This means that for every word produced by a subject, he or she was

exposed to 0.12 words from the teacher. Students in SSC were exposed to an average number of total teacher words of 86.44 ranging from 15 to 155 words. Students in SSC were exposed to an average of 0.62 words per minute from MorningTeacher ranging from 0.22 to 0.90. The class average teacher to student output ratio is 0.19. Students in ESC were exposed to an average number of total teacher words of 352.10 ranging from 242 to 488 words. Students in ESC were exposed to an average of 2.12 words per minute from EveningTeacher ranging from 1.64 to 2.48. The class average teacher to student output ratio is 0.52.

Analyses of Variance (ANOVAs) were used to establish potential significant differences between student groups and between teachers, as ANOVA is the statistical procedure that can determine if there is a statistically significant difference between group means. First the data were analyzed using a one factor between subjects ANOVA, with teacher as the factor with the levels MorningTeacher and EveningTeacher. Since no student had both teachers, a between subjects procedure was chosen. The dependent variable is the average words per minute of teacher output seen by the individual student. The main effect of teacher is significant ($F(1,44)=357.98, p<.001$) (see also table 4.4.).

Table 4.4 Test of Between-Subjects Teacher Effects of Teacher Input (Dependent Variable: Words per Minute (Input))

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	26.287(a)	1	26.287	357.983	.000
Intercept	79.936	1	79.936	1088.61	.000
Teacher	26.287	1	26.287	357.983	.000
Error	3.231	44	.073		
Total	93.804	46			
Corrected Total	29.518	45			

a R Squared = .891 (Adjusted R Squared = .888)

The average words per minute for the MorningTeacher was 0.55 and for the EveningTeacher was 2.12, which means that the students who had MorningTeacher received significantly more words per minute input from their teacher. This could mean that the students in the ESC were exposed to more target-like language, hence increasing their opportunity to learn. On the other hand, an increase in teacher input, may decrease the opportunity for student output.

Although one might assume that the teacher would interact similarly in the two classes, due to the different levels of support, further investigation was necessary and a second analysis was done. The data were thus analyzed using a one factor between-subjects ANOVA, with class as the factor and NSC, SSC and ESC as the levels. The dependent variable is the average words per minute of teacher output seen by the individual student. The main effect of class is significant ($F(1, 43)=199.26, p<.001$) (see also table 4.5.). NSC students on average were exposed to 0.45 words per minute from the teacher, the SSC students 0.62, and the ESC 2.12. The significant difference means that the more support the teacher received the more words the students were exposed to by the teacher. One possible interpretation is that the teacher who is busy with assisting students with technological problems cannot produce as many words as the teacher who has a Lab Assistant to take care of such problems. This, in turn, may mean that the students in classes with less technological support are exposed to less target-like input.

Table 4.5. Test of Between-Subjects Class Effects of Teacher Input (Dependent Variable: Words per Minute (Input))

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	26.643(a)	2	13.321	199.262	.000
Intercept	52.274	1	52.274	781.908	.000
Class	26.643	2	13.321	199.262	.000
Error	2.875	43	.067		
Total	93.804	46			
Corrected Total	29.518	45			

a R Squared = .903 (Adjusted R Squared = .898)

Since there was a difference between both levels of support as a variable and between teachers as a variable, it is difficult to say which difference is more salient. However, the difference may be greater between the teacher than between the levels of support based on the differences in means and also the difference in the F value. Since there was a significant difference between levels of support (see table 4.5.) and between teachers (see table 4.4.), an additional comparison (see table 4.6.) was done for further insight.

Table 4.6 Planned Comparison of Teacher Input between NSC and SSC

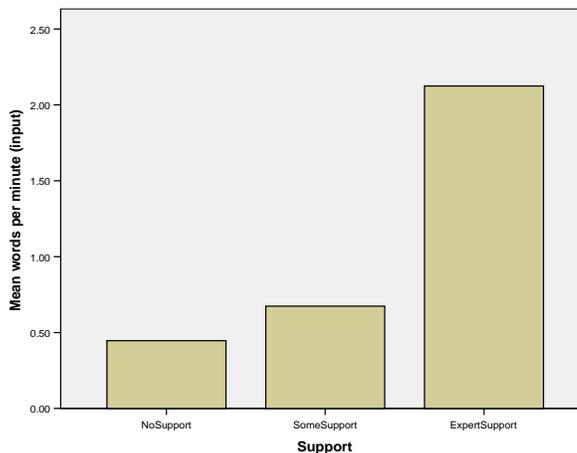
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	.356(a)	1	.356	4.841	.037
Intercept	8.595	1	8.595	116.815	.000
Filter_\$.356	1	.356	4.841	.037
Error	1.913	26	.074		
Total	11.561	28			
Corrected Total	2.269	27			

The comparison between the NSC and SSC revealed that there is a significant difference between the two classes ($F(1,26)=4.84$, $p.<.05$), both taught by

MorningTeacher, suggesting that level of support has an impact on how many words the teacher can produce per minute due to the additional technological support duties. The SSC received significantly more input from the teacher than NSC (see also table 4.6).

In conclusion, the level of support resulted in a statistically significant difference in teacher output. While there was also a significant difference between teacher output for students taught by MorningTeacher and students taught by EveningTeacher, and since there was also a significant difference between groups, it cannot be determined whether the difference between the teachers is truly significant or simply due to varying levels of support. Looking at Illustration 4.1 and remembering that the NSC and SSC were taught by the same teacher, one can argue that the factor teacher had an important influence on the words per minute produced by the teacher. However, multiple explanations for these differences are possible.

Illustration 4.1. Teacher Output Comparison



Besides the explanation that support may be a differentiating factor between classes, one other possible explanation may be that MorningTeacher communicated more with the SSC because she had a better rapport with these students according to her own comments (during informal conversation which was not recorded). The difference between the combined NSC/SSC and the ESC in terms of input was clearly due to a teacher difference. Furthermore, the use of the “to all” function by EveningTeacher is a possible explanation for the difference between teachers. In conclusion, while a significant difference in teacher output according to teacher and group could be established, multiple explanations for such differences are possible. However, it can be concluded that in all cases but one, the teachers in this study produced over the course of the semester fewer words per minute than the students, suggesting that (a) students receive more input from peers than the teacher, and (b) that teacher dominance decreases in a context where chat is used as compared to what one might expect from a typical context (see for example Beauvois, 1998). It must be made clear, however, that “teacher dominance” was not investigated in a classroom context not using chat.

Besides understanding how much input the students received from the teacher, it is even more important to understand the nature of that input. For the qualitative comparison of the two teachers, the transcripts of the six case study subjects were analyzed establishing (a) teacher target language use, (b) teacher error rate, (c) teacher feedback moves, and (d) teacher moves in general.

The third semester German textbook’s approach strongly encourages exclusive use of the target language during teaching. As has been mentioned before,

MorningTeacher did not introduce the activities, and handed out pieces of paper for group assignment during the observed lessons. When students called her over for explanations of the activities or to solve technological problems, she did so mostly in English. EveningTeacher let the Lab Assistant assign groups, which due to his lack of German knowledge, meant that group assignment was done in English. Furthermore, EveningTeacher often introduced the activities using English to explain unclear words and problematic grammar points. For the use of the target language in the virtual space, the total number of words excluding names was counted, and the number of German words excluding names was subtracted, to establish the number of English words (also excluding names) used. Then, the percentage of target language use was established (see table 4.7). In all of MorningTeacher's case study subjects' transcripts, her target language use was 100%. However, in other transcripts, she was occasionally observed using English, therefore it cannot be concluded that MorningTeacher used 100% German with all students at all times. EveningTeacher used an average of 93.65% German in the transcripts of the two case study subjects investigated. While this target-language use is lower than that of MorningTeacher, it is still high. Since there is no normal distribution among the six case study subjects, a non-parametric procedure had to be used for statistical analysis. The small number of subjects also lends itself to non-parametric procedures, therefore the chi squared analysis is used here instead of the ANOVAs previously used with the higher number of subjects and normal distributions. Using the chi squared statistical analysis, there was a significant difference between the teachers as illustrated in table 4.8.

Table 4.7 Teacher Target Language Use

	German Words	English Words	Target-Language Use
NSC Danielle's transcripts	89	0	100%
NSC Jennifer's transcripts	80	0	100%
<i>NSC Average</i>	<i>169</i>	<i>0</i>	<i>100%</i>
SSC Emily's transcripts	139	0	100%
SSC Gina's transcripts	134	0	100%
<i>SSC Average</i>	<i>273</i>	<i>0</i>	<i>100%</i>
MorningTeacher Average	442	0	100%
ESC Amanda's transcripts	357	28	92.73%
ESC Victoria's transcripts	418	24	94.57%
EveningTeacher/ESC average	775	52	93.65%

Table 4.8 Teacher Target Language Use – Chi Squared

	MorningTeacher	EveningTeacher	Total
German Words	442	775	1217
English Words	0	52	52
Total	442	827	1269

Degrees of freedom: 1 Chi-square = 28.98 $p < 0.001$.

Table 4.9 Teacher Error Rate

	German Words	Errors	Error Rate
NSC Danielle's transcripts	89	0	0%
NSC Jennifer's transcripts	80	2	2.5%
<i>NSC Average</i>	<i>169</i>	<i>2</i>	<i>1.18%</i>
SSC Emily's transcripts	139	3	2.16%
SSC Gina's transcripts	134	0	0%
<i>SSC Average</i>	<i>273</i>	<i>3</i>	<i>1.10%</i>
MorningTeacher Average	442	5	1.13%
ESC Amanda's transcripts	357	23	6.43%
ESC Victoria's transcripts	418	25	5.98%
EveningTeacher/ESC average	775	48	6.19%

The second measure of quality of teacher language was the percentage of errors (as illustrated in Table 4.9). Again for this comparison, only the transcripts from the case study subjects were analyzed, and generalizations to the teacher's pattern with all students in the class cannot be drawn. In the transcripts analyzed, MorningTeacher's average error rate was 1.13% (5 errors total), whereas EveningTeacher's average error rate was 6.19% (48 errors). Since EveningTeacher liked using the "to all" function, most errors were probably counted twice, once in Amanda's and once in Victoria's transcripts.

Table 4.10 Difference in Teacher Error Rate

	MorningTeacher	EveningTeacher	Total
Words	442	775	1217
Errors	5	48	53
Total	447	823	1270

Degrees of freedom: 1 - Chi-square = 16.10 - $p < 0.001$.

For the same reason as discussed in the previous section, a chi squared analysis was used to identify differences between teachers in regards to teacher's error rate. There was a statistically significant difference between EveningTeacher's and MorningTeacher's error rate according to a chi squared analysis as illustrated in table 4.10.

The error rate only paints a partial picture about the non-target like language produced by the teachers. Hence, the nature of the errors should be described here. MorningTeacher's errors, in the transcripts analyzed, appeared to be mistakes, rather than systematic errors. For example, one activity asked students to ask and answer questions

about historic events in the passive voice. All examples except for one used past tense passive voice. In SSCEmily's transcript MorningTeacher used past tense passive to ask about the upcoming soccer world cup. The asterisk indicates the errors in the examples. This was also the only incident found by MorningTeacher of an incorrect correction.

SSCEmily: Was wird 2006 gemacht werden?

MorningTeacher: Ja, was *wurde 2006 gemacht? (yes, what was done in 2006)

SSCEmily: *In 2006 wird die Fußball-WM in Deutschland ausgetragen werden.

NSCDanielle: 2006 wurde die Fussball-WM in Deutchland *austragen.

MorningTeacher: Jawohl, im Jahre 2006 wird die FWM in Deutschland ausgetragen.

This incorrect use can be argued to be a mistake rather than a systematic error, because as you can see above, MorningTeacher used the tense correctly in other transcripts. EveningTeacher, however, made several systematic errors. One of those systematic errors was the repeated use of accusative pronouns instead of nominative pronouns.

EveningTeacher: Was musstet *euch *für Hausaufgaben machen? Hattet *euch viele *Hausaufgaben? Waren die *Lehreren böse oder nett?, interessant oder langweilig? (What did you (accusative) have to do for homework? Did you (accusative) have a lot of homework (spelling error)? Were the teachers (wrong plural ending) mean or nice?, interesting or boring?)

In conclusion, both the quantity and the quality of errors differ between the two teachers. EveningTeacher made significantly more mistakes in the transcripts analyzed. In addition, those mistakes were systematic errors, rather than unsystematic mistakes that even native-speakers make.

The next qualitative and quantitative comparison between the participation of the two teachers was the number and kind of feedback moves used by the teachers in

response to errors made by the case study subjects or any other subject who was chatting with the case study subject. First, I will provide examples of the types of feedback used by the different teachers and the number of occurrences (see also table 4.11.). Next, I will discuss the rate of corrective feedback to the case study subject's own and observed errors (see table 4.12). Finally, I will discuss quantitative (see table 4.13.) and qualitative differences in teacher feedback between the two teachers.

The MorningTeacher mostly used repetitions with correction (13) and models (9) as corrective feedback. She also used translation requests, explicit error correction, marked partial repetition, marked models, and clarification requests. The EveningTeacher used a variety of different feedback forms, with all forms only once: repetition with correction, marked partial repetition, clarification request, translation, marked repetition with correction, and partial repetition with correction.

Table 4.11 Teacher Feedback Styles

Feedback Style	Morning Teacher	Evening Teacher	Examples
Repetition with correction	13	1	NSCDanielle: 2006 wurde die Fussball-WM in Deutschland *austragen. MorningTeacher: Jawohl, im Jahre 2006 wird die FWM in Deutschland ausgetragen.
Model	7	0	NSCMike: 1945 wurde die Mayer *öffnen?... MorningTeacher: Wann wurde die Mauer gebaut?
Translation request	2	0	NSCKlaus: Ich hatte *Persian, deutsch, *political science, *geo science, und *history... MorningTeacher: Wie nennt man diese Faecher auf Deutsch?

Feedback Style	Morning Teacher	Evening Teacher	Examples
Explicit error correction	1	0	NSCGeorge: Mein Vater *hat *mit Carla eine *Schildung und Meine Mutter *hat *mit Paul *eine Schieldung *also. MorningTeacher: also (auf Englisch) = auch (auf Deutsch)
Marked partial repetition	1	1	ESCVictoria: Was *ist ihre *nemes ... EveningTeacher: NAMEN
Marked model	1	0	SSCKlaus: von wo Ihre Familie ist? SSCEmily: Ich verstehe nicht... MorningTeacher: woher kommt die Familie, ist es vielleicht die Frage?
Clarification request	1	1	NSCHeidi: du musst Aloe nehmen MorningTeacher: nehmen ☺?
Translation	0	1	EveningTeacher: places = Orte
Marked repetition with correction	0	1	ESCVirginia: sie wohnt ihrer Gastfamilie. ... EveningTeacher: ESCVirginia sie wohnt BEI einer Gastfamilie.
Partial repetition with correction	0	1	ESCVictoria: Melanie fährt Barcelona. EveningTeacher: fährt nach Barcelona

Table 4.12. illustrates the percentage of errors that received feedback in the case study subjects' transcripts. The errors were divided into own errors and observed errors. Corrective feedback by the teacher in relation to the errors made was generally low, not to exceed 3%. The only difference were the transcripts of SSCEmily who received teacher feedback on 10.42% of her errors, and observed feedback (feedback given to a peer of the case study subject in the case study subject's transcript) to the observed errors at a rate of 5.04%. Overall, MorningTeacher provided feedback to 26 of the 817 errors made in the case study subjects' transcripts (3.18%). EveningTeacher provided corrective feedback to 6 of the 800 errors made in the case study subjects' errors (0.75%).

Table 4.12 Corrections Made by Teacher

	Own Errors	Own Errors Corrected	Observed Errors	Observed Errors Corrected	Errors Corrected
NSC Danielle's transcripts	105	0.95%	106	2.83%	1.90%
NSC Jennifer's transcripts	114	2.63%	130	2.31%	2.46%
<i>NSC Total</i>	<i>219</i>	<i>1.83%</i>	<i>236</i>	<i>2.54%</i>	<i>2.20%</i>
SSC Emily's transcripts	48	10.42%	119	5.04	6.59%
SSC Gina's transcripts	57	1.75%	138	2.90%	2.56%
<i>SSC Total</i>	<i>105</i>	<i>5.71%</i>	<i>257</i>	<i>3.89%</i>	<i>4.42%</i>
MorningTeacher Total	324	3.09%	493	3.25%	3.18%
ESC Amanda's transcripts	154	0.65%	253	0.4	0.49%
ESC Victoria's transcripts	135	2.96%	258	0%	1.02%
EveningTeacher/ESC Total	289	1.73%	511	0.20%	0.75%

Again, due to the low number of subjects, a chi squared analysis, i.e., a non-parametric procedure, was used to analyze differences between the amount of feedback received by the students from the teacher. In a chi squared analysis (see table 4.13), it was found that the difference between the amount of feedback given by the two teachers in the transcripts analyzed was significant, with the MorningTeacher providing more feedback than the EveningTeacher. Since SSCEmily's transcripts set showed more feedback by the teacher than the others, the same statistics were also run without her transcript set and the difference between the teachers remained significant ($p < 0.025$).

Table 4.13 Differences in Errors Receiving Teacher Feedback

	MorningTeacher	EveningTeacher	Total
Errors	817	800	1617
Corrections	26	6	32
Total	843	806	1649

Degrees of freedom: 1; Chi-square = 11.86; $p < 0.001$.

In conclusion, it was found that the two teachers employed different feedback styles in the transcripts of the case study subjects. MorningTeacher used more feedback and with a higher frequency rate for repetitions with correction and models.

It could be guessed that given the fact that EveningTeacher used significantly more words per minute, yet used significantly less corrective feedback, that in general teacher moves differ between the two teachers. In the following section, the teacher moves will be described and examples will be given (see also table 4.14.).

As can be seen in the table, MorningTeacher utilized the following teacher moves in the case study subjects' transcripts: corrective feedback moves, modeling of activity and language, language policing (i.e., she told students to use the target language when they were code-switching), bringing students back on task, praise, conversing, topic policing, and providing words. EveningTeacher used some of the same and some different teacher moves in the case study subjects' transcripts: error correction, modeling of language and activity, conversing, providing words, procedural help, sharing, and expanding the topic. In contrast to MorningTeacher, EveningTeacher provided procedural help in the chat transcripts rather than just in the physical environment. MorningTeacher kept the conversations more limited to demands of the task by commenting on the language, the topics of discussion, and off-task behavior. EveningTeacher, on the other hand, used teacher turns to expand the tasks. Based on my qualitative analysis of the teacher moves in the case study subjects' transcripts, I argue that the MorningTeacher kept the tasks more narrowly focused, while EveningTeacher made them broader.

Table 4.14 Teacher Moves

	MorningT	EveningT	Examples
Error correction	√	√	NSCDanielle: 2006 wurde die Fussball-WM in Deutschland austragen. MorningTeacher: Jawohl, im Jahre 2006 wird die FWM in Deutschland ausgetragen!
Modeling	√	√	SSCEmily: Also, ws wurde 1871 gemacht? (1 minute 40 second silence) MorningTeacher: 1871 wurde vielleicht das Zweite Deutsche Reich gegründet. Was denkt ihr?
Language Policing	√		NSCKlaus: Ich hatte Persian, deutsch, political science, geo science, and history. MorningTeacher: Wie nennt man diese Fächer auf Deutsch?
Focus	√		(3 minutes of silence from NSCStefan) MorningTeacher: Hallo, NSCStefan? Wo bist du?
Praise	√		SSCPhilip: Was bedoitet "Maur"? SSCGina: "mauer" bedoitet "wall" MorningTeacher: Genau!
Conversing	√	√	SSCEmily: Di hast eine Schwester, ja? MorningTeacher: Ja, ich habe eine Schwester, sie ist 20 Jahre alt und wohnt in Moskau mit meinen Eltern.
Topic Policing	√		NSCFrancis: total abgefuckt MorningTeacher: Hey, seid bitte nett!
Providing Words	√	√	ESCAmanda: aber ich hat in viele (places) gelebt. EveningTeacher: places = Orte
Procedural Help		√	EveningTeacher: leo.dict.org
Sharing		√	EveningTeacher: Ich könnte ein kaltes Bier so gerne trinken! Was könntet ihr gerne trinken. EveningTeacher: Wer wollte mit mir in der Sonne legen und ein Margarita trinken?
Expanding Topic		√	(in this information-gap activity students had to ask each other information in their charts, even though according to the charts Svetlana and Jochen go to different places, EveningTeacher decided to change the activity) EveningTeacher: Wo bleiben Svetlana und Jochen? Ich DENKE sie bleiben in Barcelona zusammen.

In summary, there were differences between the two teachers in how they participated in the chatting. MorningTeacher experienced more problems than the EveningTeacher. She walked around more in the physical space than EveningTeacher and made less commentary in the physical space. A group difference was found in regards to teacher output, with ESC students being exposed to the most and NSC students exposed to the fewest teacher words per minute. Since there was a difference between groups, it cannot be said whether the significant difference between the two teachers is due to a teacher difference, a group difference, or a combination of the two, MorningTeacher used significantly more target language than EveningTeacher, and had significantly fewer errors in the transcripts analyzed. Furthermore, EveningTeacher's errors were mostly systematic, whereas MorningTeacher's usually were not. In terms of the language addressed to the students, MorningTeacher used significantly more feedback in response to errors in the transcripts analyzed and had a clear highest frequency feedback style. EveningTeacher used less feedback and had no clear feedback style. In addition, MorningTeacher's teacher moves focused on keeping the conversation narrowly defined within the task, whereas EveningTeacher's teacher moves modeled a broad task definition.

While some results were discovered in response to research question 1 a, the data analysis faced limitations. First of all, this study is a case study, and was only investigating two teachers; no generalizations can be drawn from the results. Furthermore, some of the data was only taken from the six case study subjects and not

from the other students in the class. While in reviewing the other transcripts, the same patterns appear to be present, this can only be determined by analyzing all transcripts from all students. Another challenge for this case study was the loss of transcripts in NSC and SSC, which resulted in an incomplete picture. Additionally, as is the nature with observations, the teachers and students may have acted differently in my presence than during the chat sessions, when I was not present. Despite these limitations, the data provided an in-depth impression of how the two teachers interacted in the transcripts of the six case study subjects.

As has been discussed, differences have been discovered between the teachers and also between the different levels of support such as interaction style and student output. However, due to the discussed limitations, it is difficult to identify a definite source for these differences.

4.2.2 Research Question 1b

The research question is: What appears to be the teacher's definition of her role, as evidenced by participation style? As mentioned in response to the previous question, the two teachers employed different feedback and participation styles. Based on these findings, I argue that MorningTeacher saw her role primarily as a teacher, i.e., assisting where necessary, allowing students room to explore, yet holding them accountable to her implied guidelines, and facilitating learning and conversation where applicable. EveningTeacher, on the other hand, appeared to see herself more in the role of

conversation participant, i.e., sharing her own experiences, expanding the topic, and focusing less on limiting the conversation of the students.

This implied definition of the teacher roles poses some problems in consideration of prior research on CMC. One factor discussed in chapter two is the democratization or equalization effect of CMC. One could argue that since MorningTeacher limited the content and language of the students, and served as a source of feedback, she was taking on a teacher role that made use of power relationship usually found in traditional classroom settings. Furthermore, since she used the “invisible” function, essentially “spying” on her students’ chat sessions, she could also be considered to be exerting a type of power granted only to her as a teacher in this context. However, due to her more limited output, she allowed the students to explore their own language, which could be an argument for her working to equalize participation. EveningTeacher on the other hand, could be argued to be equalizing participation, for she primarily was a conversation partner to the students. However, since she produced more output, she may have limited the opportunity for more equalized participation by the students. Furthermore, the use of the “to all” function could also be considered a sign of power for the following reasons: (1) only the teacher can use this function, and (2) messages posted using the “to all” function most likely interrupt the flow of conversation in the chat rooms. Hence both teachers, though in two different ways, had a participation style that on the one hand attempted to equalize participation, on the other hand, still established their authority role in the classroom. The complexity and pedagogical ramifications of these uses of

authority and attempts to equalize participation will be discussed in more depth in Chapter 5.

4.2.3 Research Question 1c

The research question is: What form does corrective feedback take during chatting in this study? To address this research question, I will refer back to the findings of teacher feedback discussed in research question 1 a, and also discuss the findings of peer and self-correction in the transcript sets of the six case study subjects. First, the error sources and the feedback sources are explained. Then the feedback rate by feedback and error source will be presented and discussed. Thirdly, the forms of feedback will be presented with examples, and finally the forms of feedback used by different sources (teacher, self, or peer) will be discussed. All feedback rates are only taken from the transcript sets of the case study subjects.

In a transcript, feedback can be evidence in response to an error made by the case study subject, one of the case study subject's peers, or the teacher. Furthermore, feedback can be given by oneself, another student, or the teacher. Feedback given by other students in response to a peer mistake were divided into feedback given by other peers, and feedback given by the case study subject; the same was true for feedback given to the teacher by a student. Errors made by the teacher or a peer are labeled as observed errors from the perspective of the case study subject. By the same token, feedback given to other students or to the teacher by a peer or the teacher, are labeled as observed corrections from the perspective of the case study subject.

Feedback rates were calculated by counting the number of mistakes, and the number of instances of feedback. Percentages of errors receiving feedback were established. The feedback rates are listed separately according to source of error and source of feedback to provide a more detailed picture (see table 4.15.) and are discussed in the following section.

Table 4.15 Feedback Rates by Transcript Set

Subject	Error Source	Teacher Feedback	Peer Feedback	Feedback by Case Study Subject	Self-Correction	Total Errors Corrected
NSCDanielle	Own	0.95%	3.81%	NA	0.95%	5.71%
	Other students'	2.83%	0%	7.55%	0.94%	11.32%
	Teacher's	NA	NA	NA	NA	NA
NSCJennifer	Own	2.63%	3.51%	NA	2.63%	8.77%
	Other students'	2.31%	0%	7.70%	0.77%	10.77%
	Teacher's	NA	0%	0%	0%	0%
SSCEmily	Own	10.42%	2.08%	NA	16.67%	29.17%
	Other students'	5.04%	0.84%	4.20%	2.52%	12.61%
	Teacher's	NA	0%	100%	0%	100%
SSCGina	Own	1.75%	0%	NA	1.75%	3.51%
	Other students'	2.90%	0.73%	2.90%	2.17%	8.70%
	Teacher's	NA	NA	NA	NA	NA
ESCAmanda	Own	0.65%	0.65%	NA	1.30%	2.60%
	Other students'	0.40%	0.79%	0.79%	0.40%	2.37%
	Teacher's	NA	0%	0%	0%	0%
ESCVictoria	Own	2.96%	2.96%	NA	0.74%	6.67%
	Other students'	0%	2.7%	0%	1.16%	3.88%
	Teacher's	NA	8%	0%	0%	8%

Overall corrective feedback moves were infrequent in comparison to the number of errors. 5.71% of NSCDanielle's errors received corrective feedback (0.95% by the teacher, 3.81% by a student, and 0.95% as self-correction) and 11.32% of her observed student errors received corrective feedback (2.83% by the teacher, 0% by a student, 7.55% by NSCDanielle, and 0.94% as self-correction). 8.77% of NSCJennifer's errors received corrective feedback (2.63% by the teacher, 3.51 by a student, and 2.63% as self-correction) and 10.77% of her observed student errors received feedback (2.31% by the teacher, 0% by a student, 7.70% by NSCJennifer, and 0.77% as self-correction). Neither of the two teacher errors observed by NSCJennifer received feedback.

29.17% of SSCEmily's errors received corrective feedback (10.42% by the teacher, 2.08 by a student, and 16.67% as self-correction) and 12.61% of her observed student errors received feedback (5.04% by the teacher, 0.84 by a student, 4.20% by SSCEmily, and 2.52% as self-correction). 100% of all teacher errors received corrective feedback by SSCEmily. Below is an example how SSCEmily uses modeling to correct her teacher.

MorningTeacher: Wenn ich keine Zeit habe, *haben ich leider auch kein Frühstück.

SSCVeronica: ich auch.

SSCEmily: Ich auch. WENN ich keine Zeit zum Frühstück habe, esse ich ein frühes Mittagessen.

3.51% of SSCGina's errors received corrective feedback (1.75% by the teacher, 0% by a student, and 1.75% as self-correction) and 8.70% of her observed student errors received feedback (2.90% by the teacher, 0.73% by a student, 2.90% by SSCGina, and 2.17% as self-correction) of the time.

2.60% of ESCAmanda's errors received corrective feedback (0.65% by the teacher, 0.65 by a student, and 1.30% as self-correction) and 2.37% of her observed student errors received feedback (0.40% by the teacher, 0.79% by a student, 0.79% by ESCAmanda, and 0.40% as self-correction). None of the teacher errors received corrective feedback. 6.67% of ESCVictoria's errors received corrective feedback (2.96% by the teacher, 2.96 by a student, and 0.74% as self-correction) and 3.88% of her observed student errors received feedback (0% by the teacher, 2.7% by a student, 0% by ESCVictoria, and 1.16% as self-correction). 8% of the teacher errors received corrective feedback from one of the other students.

Overall corrective feedback was infrequent. Teacher feedback ranged from 0% to 10.42%, combined peer feedback (combining peer feedback by other students and the case study subject) ranged from 1.58% to 7.78%, and student self-correction from 0% to 16.67% in the case study subjects' transcripts. Other-initiated feedback (combined peer feedback and teacher feedback) ranged from 1.30% to 12.50%. This means that even in the highest frequency, a subject's errors only received 25 corrective feedback moves for every 200 errors as exhibited in the case study subjects' transcripts.

After discussing the rate to which feedback was given, I now discuss the feedback forms that were given. Table 4.16 illustrates the different feedback forms with examples.

Table 4.16. Corrective Feedback Moves

Type	Explanation	Example
Teacher Feedback	Feedback provided by the teacher	NSCDanielle: 1989 wurde die Mauer öffnen. MorningTeacher: Ja, 1989 wurde die Mauer geöffnet.
Peer Feedback	Feedback provided by another student	NSCLara: Ich mag zu nichts ihr töten. NSCJennifer: Was? Ich verstehe dich nicht.
Self Correction	Successful or unsuccessful attempt at correction made by the student who made the error	SSCEmily: Wenn musste du aufstehen? SSCEmily: *Wann
Repetitions with correction	Repetition of the incorrect sentences with the errors corrected.	NSCDanielle: Weißt du, warum ist er da? NSCJennifer: Warum ist er da?
Repetitions with attempted correction	Repetition of the incorrect sentences with an attempt made to correct one or all initial errors.	NSCAdam: an der Mutters seite NSCAdam: von meine Mutter
Marked repetitions with correction	Repetition with correction marked by * or capital letters or by introductory phrase that made it clear that it was a correction.	NSCGeorge: Wissen Sie, was sollte ich ihm nicht geben. NSCMike: *Wissen Sie, was ich ihm nicht geben sollte.
Partial repetitions with correction	Only the originally incorrect portion of the sentence is repeated with correction.	ESCVictoria: Melanie fährt Barcelona. EveningTeacher: fährt nach Barcelona
Marked partial repetitions with correction	Only the originally incorrect portion of the sentence is repeated with correction introduced by * or an introductory phrase or writing the correction in capital letters.	SSCEmily: Wenn wir an den Strand gehen, sollen wir einen Sonnenschirm tragen. SSCEmily: tragen whoops ... bringen.
Explicit error correction	Student is told that the sentence is wrong and provided with a correct form.	NSCGeorge: Mein Vater hat mit Carla eine Schildung und Meine Mutter hat mit Paul ein Schieldung also. EveningTeacher: also (auf Englisch) = auch (auf Deutsch)
Models	Use of the initially incorrect word or structure in a similar fashion.	SSCSam: Meine Computer ist kaput. SSCEmily: Mein Computer war auch kaputt.
Clarification request	A question formulated to indicate that the sentence was not understood.	NSCJennifer: manchmal, esse ich zweimal morgens. NSCLara: was ist dass, auf english?

Type	Explanation	Example
Translation	The translation of an incorrectly used word.	EveningTeacher: places = Orte
Attempted Correction	Attempt made to correct an error, however, the new word or phrase still contains errors.	NSCJennifer: Gut. könnten Sie mir sagen, du oft erbrecht? NSCJennifer: * erbrechst
Attempted Model	Attempt made to provide a model, however, the model contains errors.	NSCLara: 1945 wurde die zwei deutschen Staaten gründen. NSCJennifer: 1961 wurde die zwei deutschen Staaten gegruenden.
Alternative	An alternative to the incorrect phrase is provided.	SSCEmily: Mein Computer *functiont nicht. SSCEmily: Mein Computer ist kaputt.
Explanation	Explanation of a rule	ESCAmanda: ja, so...Sie muss sich sehr ausruhen. EveningTeacher: (you wouldn't use sehr in this context, use viel)

As can be seen in table 4.16. a variety of feedback forms were used. However, different feedback types were used by different feedback sources (see table 4.17. for an overview). As mentioned in response to question 1a, MorningTeacher used more feedback than EveningTeacher, though still a low amount of feedback considering the number of student errors. Furthermore, MorningTeacher used one feedback style most frequently, which was assumed to be her preferred feedback style (repetitions with correction). EveningTeacher, on the other hand, displayed a larger variety of feedback types and thus did not appear to have a preferred feedback style.

Table 4.17. Feedback Form by Source

Type	Morning Teacher	Evening Teacher	Self-Correction	Peer Feedback	To Teacher
Repetitions with correction	13	1	3	3	0
Attempted marked partial repetition with correction	0	0	7	0	0
Repetitions with attempted correction	0	0	2	1	0

Type	Morning Teacher	Evening Teacher	Self-Correction	Peer Feedback	To Teacher
Marked repetitions with correction	0	1	4	1	0
Partial repetitions with correction	0	1	1	1	0
Marked partial repetitions with correction	1	1	7	0	0
Partial repetition with attempted correction	0	0	1	0	0
Repetitions Total	14	4	25	6	0
Attempted Model	0	0	0	4	0
Models	7	0	0	28	5
Marked Model	1	0	0	0	0
Models Total	8	0	0	32	5
Clarification request	1	1	1	14	0
Translation	0	1	0	1	0
Translation request	2	0	0	0	0
Alternative	0	0	1	0	0
Explicit error correction	1	0	0	0	0
Total (117)	26	6	27	53	5

When correcting themselves, students most frequently used repetitions (25), especially attempted (7) and successful (7) marked partial repetitions. However, when correcting peers students most frequently used attempted (4) and successful (28) models. One way of interpreting these raw numbers from the case study subjects' transcripts is to argue that students want to make sure that others recognize when they have discovered their own mistakes, by marking the correction, usually with the messaging convention of “*,”—asterisk. However, when correcting others they may want to use an unintrusive form of feedback such as models. In reviewing the data, one should point out that not all models may have been intended as corrections by the writer, because the repetitive nature of many of the tasks simply made models likely. For example, the previously mentioned activity of answering and asking questions about historic events in the past tense

required the same structures in each question and answer. Hence, a writer may model the correct form following an error, but it may just be a sign of answering or asking the next or even the same question, rather than providing corrective feedback, as illustrated in Table 4.16 above. Despite this caution, it can be argued that the most frequent form of self-correction is all forms of repetition, but especially marked partial repetition with correction. The most frequent peer feedback form was modeling. These patterns of feedback were the same across all three classes.

In conclusion, rate of feedback from all sides was low considering the number of errors made by the students. However, MorningTeacher provided more feedback than EveningTeacher. In addition, MorningTeacher used repetitions and models more frequently than any other feedback form and is therefore referred to as having a systematic feedback style. EveningTeacher's feedback style, on the other hand, is considered unsystematic, as she used a variety of feedback forms with no one style predominating. Self-corrections were mainly in the form of marked repetitions, while peer feedback was mostly in the form of models. These results have to be viewed with some caution, because only the case study subjects' transcripts were consulted. While the transcripts reflect both feedback given to peers and to the case study subjects, the feedback given to the peers is only a sample and not representative of everyone of their chat transcripts. However, while no quantitative data was taken from the other transcripts, detailed readings from the other transcripts provided the same impression, though it cannot be confirmed with statistical analysis.

4.3.1 Research Question 2a

The research question is: What influence does corrective feedback style have on students' learning, as perceived through language production during chat as measured through word count? To address this research question, the word count from all subjects in all classes is considered in relation to the dominant feedback style used by the teacher. As has been discussed in previous sections, teacher feedback was infrequent in all case study subjects' chat transcripts. While often research discusses difference in feedback style as implicit and explicit styles (see for example Panova and Lyster, 2002), those differences were not found in this study. In the case study subjects' transcripts, the MorningTeacher had a clear preference for one feedback form and the EveningTeacher did not. I will refer to this as a systematic and an unsystematic feedback style. However, again, it needs to be pointed out that this was only the feedback used in the case study subjects' transcripts in response to errors made by any participant in those chat transcripts. Though no feedback count was established for all other transcripts, a read-through of the other transcripts suggested that these feedback styles might be consistent across subjects.

First, I will present the word count and words per minute for all 46 subjects (see table 4.18.), and then discuss a possible difference between groups, or students taught by the two different instructors.

Table 4.18 Student Output

Class/Subject	Student Words Total	Student Words Per Minute	Teacher Words/ Student Words Total
<u>NSCDanielle</u>	939	4.31	0.10
NSCDamion	510	2.75	0.20
NSCGeorge	420	2.88	0.10
NSCGretchen	487	2.47	0.14
NSCFrancis	628	2.98	0.12
<u>NSCJennifer</u>	889	3.66	0.09
NSCLaura	141	3.27	0.09
NSCMarkus	170	2.22	0.33
NSCMike	849	4.49	0.12
NSCMichelle	1032	4.90	0.06
NSCSteve	498	3.85	0.20
NSCJames	745	5.90	0.09
NSCAverage	609	3.64	0.12
SSCAdrienne	536	3.49	0.25
SSCBrenda	314	3.05	0.25
SSCBob	390	3.11	0.09
<u>SSCEmily</u>	1010	4.72	0.14
SSCLinda	440	2.53	0.15
SSCMartin	396	2.22	0.14
SSCNigel	178	1.56	0.51
SSCOPEhlia	740	3.59	0.21
SSCPhilip	242	5.56	0.13
SSCSamantha	548	3.41	0.24
<u>SSCIna</u>	786	3.66	0.17
SSCTina	401	2.32	0.34
SSCVeronica	580	5.12	0.13
SSCWilma	198	3.12	0.29
SSCGraham	392	3.28	0.13
SSCKen	167	2.49	0.09
SSCAverage	457.38	3.32	0.19
<u>ESCAmanda</u>	1038	5.15	0.34
ESCBarbara	664	4.31	0.54
ESCChristian	591	3.39	0.67
SCCChristina	1281	6.90	0.32
ESCDomenique	771	4.20	0.44
<u>ESCVictoria</u>	694	3.56	0.60
ESCFiona	560	3.39	0.63
ESCGerhard	754	4.16	0.59
ESCIan	849	4.49	0.37
ESCJames	228	3.54	0.58
ESCLance	481	2.93	0.74
ESCLisa	447	2.34	0.92

Class/Subject	Student Words Total	Student Words Per Minute	Teacher Words/ Student Words Total
ESCLarissa	909	5.11	0.47
ESCNina	845	5.15	0.39
ESCPatrick	535	2.97	0.74
ESCSabrina	806	5.99	0.30
ESCTiffany	231	2.03	1.22
ESCVirginia	439	2.56	0.85
ESCAverage	673.5	4.01	0.52

Table 4.18 illustrates the student output in the target language. In the NSC students' average words per minute ranged from 2.22 to 5.90 with an average of 3.64 and a median of 3.47. In the SSC students' average words per minute ranged from 1.56 to 5.56 with an average of 3.32 and a median of 3.19. In the ESC students' average words per minute ranged from 2.03 to 6.90 with an average of 4.01 and a median of 3.86.

Table 4.19. Teacher – Student Output: Test of Between-Subject Effects

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	3.295(a)	1	3.295	2.422	.127
Intercept	611.468	1	611.468	449.570	.000
Teacher	3.295	1	3.295	2.422	.127
Error	59.845	44	1.360		
Total	684.619	46			
Corrected Total	63.140	45			

a R Squared = .052 (Adjusted R Squared = .031)

To establish significant differences between the two teachers, the data were analyzed using a one factor between subjects ANOVA, with teacher as the factor with the levels MorningTeacher and EveningTeacher. The dependent variable is the average

words per minute produced by the students. As table 4.19 shows, the main effect of teacher is not significant for amount of student output ($F(1,44)=2.42, p>.05$).

Since there are three classes, and there might be a difference between the three classes, the data were analyzed using a one factor between subjects ANOVA, with class as the factor and NSC, SSC, and ESC as the levels. The dependent variable is the average words per minute produced by the student. As table 4.20 illustrates, the main effect of class is not significant ($F(1,43)=1.44, p>.05$).

Table 4.20 Class – Student Output: Test of Between-Subject Effects

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	3.967(a)	2	1.984	1.441	.248
Intercept	598.243	1	598.243	434.734	.000
Class	3.967	2	1.984	1.441	.248
Error	59.173	43	1.376		
Total	684.619	46			
Corrected Total	63.140	45			

a R Squared = .063 (Adjusted R Squared = .019)

In conclusion, the teacher did not have a significant effect on students' average words per minute, despite the fact that in the case study subjects' transcripts a difference in teacher feedback style was discovered. Furthermore, as was mentioned before, the teacher words per minute showed a significant difference between groups, which did not result in a significant difference between groups in students' words per minute.

However, in reviewing these data, several problems have to be mentioned: (1) due to the partial (and occasionally complete) loss of transcript data in NSC and SSC, the

words per minute measure may not reflect the actual true potential words per minute of each subject, and (2) in ESC, due to the group assignment done by the Lab Assistant, the groups were often larger, which may have influenced the words per minute produced by an individual student. In conclusion, while no effect of teacher feedback style on student output was found in this study, there may have been one present which could not be detected given the problems with human error in implementation of chatting and with the software. In this study no silencing effect of any feedback style could be established, in contrast to the results discussed in Ene et al (2005).

4.3.2 Research Question 2b

The question is: What influence does corrective feedback style have on students' learning, as perceived through learner uptake as measured by evidence of correction uptake within the same transcript? To respond to this research question, again the findings from research question 1 regarding the teachers' feedback styles are discussed in relation to the findings of correction uptake in the transcripts of the six case study subjects. However, uptake is also possible as a result of a peer correction. Therefore, the dominant feedback style by the teacher may not play such an important role. Again, caution has to be expressed, since these findings only represent the findings from the six case study subjects and cannot be generalized.

Even though the transcripts reflected 1670 student and teacher errors, only 91 were followed by other-initiated feedback and 28 by self-correction. In response to the 91 other-initiated feedback moves, only 4 instances of correction uptake were found in the

case study subjects' transcripts. In each of MorningTeacher's case study subjects' transcript sets, one instance of error uptake was found, whereas none were found in the EveningTeacher's case study subjects' transcripts. Table 4.12. summarizes the uptake in each transcript set and provides the quotes from the transcripts.

Table 4.21. Uptake

	Uptake	Feedback Type	Quote
NSCDanielle's transcripts	1 by partner (8.33%)	Clarification request by MorningTeacher and explanation by NSCDanielle	NSCDanielle: Ja, ich habe ein Sonnenbrand. Es ist sehr rot., Und ich habe Magenschmerz. NSCKlaus: du must Aloe nehmen MorningTeacher: nehmen ☺ ? Danielle: Ist das wort "benutzen" (nicht nehmen) NSCKlaus: du must Aloe fuer dein Sonnenbrand benutzen.
NSCJennifer's transcripts	1 by Jennifer (10%)	Translation request by MorningTeacher	NSCJennifer: Ich hatte Englisch, Spanisch, Chemie, Mathe, und History. ... MorningTeacher: Wie nennt man diese Faecher auf Deutsch? NSCJennifer: history=Geschichte
SSCEmily's transcripts	1 by partner (6.67%)	Clarification request by Emily	SSCGeorge: welche facher hast du? ("what subjects are you taking?") activity asked students to discuss their subjects in 8 th grade) SSCEmily: jetzt? Oder in der 8.Klasse? SSCGeorge: oder hatten sie? ("or did you take?")
SSCGina's Transcripts	1 by Gina (50%)	Model by MorningTeacher	SSCGina: Jutta hat *auch sich *erkälten. ... MorningTeacher: Wann hat Jutta sich erkältet?... SSCGina: Jutta hat sich auf der Bootsfahrt erkältet.
ESC Amanda's transcripts	0	N/A	N/A
ESCVictoria's transcripts	0	N/A	N/A

Uptake was even more limited than corrective feedback moves. In EveningTeacher's class there was no instance of uptake in either of the subjects' transcript sets. In MorningTeacher's classes, there was little evidence of uptake. There was one instance of uptake in each of the transcript sets investigated. NSCDanielle's partners received 12 corrections of which 2 (16.66%) resulted in one instance of uptake following a clarification request made by the teacher and an explanation given by NSCDanielle. NSCJennifer received 10 corrections of which 1 (10%) resulted in uptake following a translation request by the teacher. SSCEmily's partners received 15 corrections, of which 1 (6.67%) led to uptake following a clarification request by SSCEmily. SSCGina received 2 corrections of which 1 (50%) led to uptake following a model by the teacher. In the transcripts investigated uptake was low.

No clear patterns between feedback style and uptake can be established from these results, since there were only 4 instances. However, in conjunction with prior research, feedback forms that are more engaging to the learner may be more likely to lead to noticeable uptake (Panova & Lyster, 2002), such as the clarification and translation requests that led to uptake in this study.

It should also be mentioned that in addition to the four instances of uptake, there were also 2 instances of clear noticing of the feedback received from MorningTeacher.

NSCCarsten; Ich hatte Astronomy *Haushaltaufgaben.

MorningTeacher: Ja, du hattest Hausaufgaben.

NSCCarsten: Opps!

Furthermore, one student also provided a description of MorningTeacher's corrections in the self-report forms: "Said "Jawohl" and then wrote my question again. I wrote "habt sie" and MorningTeacher wrote "hat sie." The three instances of uptake following feedback from MorningTeacher, in addition to the two instances of noticing, and the comments on self-report forms, may suggest that MorningTeacher's systematic feedback style was easier to notice than EveningTeacher's unsystematic style. It could, however, also be due to the higher frequency of feedback, or a chance finding.

One issue that has not yet been explored in the data may be another possible explanation for low uptake and feedback rates: pauses could potentially be considered a form of feedback. This was not investigated for this study, but should be investigated in the future. In fact, pauses could be considered a form of clarification request that may have lead to some of the self-corrections in this data. Such self-corrections could then be considered uptake. However, this has not been explored in this study, nor in any other study that I am aware of, making it a point of interest for future research.

Since the amount of uptake is so low no pattern between feedback form and uptake can be established. The infrequent uptake was surprising, since it was assumed that the repetitive nature of many of the tasks would encourage uptake by the participants. However, similarly to Fernandez-Garcia and Martinez-Arbelaiz's (2002) discussion of the change in the negotiation of meaning sequence in chatting due the nature of the medium, uptake may also be considered an unnecessary tool in chatting by the participants. It could be that since participants do not face each other in the conversation, they may not feel the need to acknowledge the correction through uptake.

4.3.3 Research Question 2c

The question is: What influence does corrective feedback style have on students' learning, as perceived through improvement of the structures taught during third-semester German classes as measured by an achievement pre-/post-test? In addressing, this question the pre- and post-test results are considered in conjunction with the results from research question 1. However, caution needs to be expressed since (a) dominant feedback style is based on the case study subjects' transcript sets, yet (b) all students' pre- and post-test scores are considered.

In chapter three a detailed description was given about how the tests were scored. When scoring the tests it was found that several subjects did not complete the writing section of the test, so it was decided for comparability purposes to discuss the test without the writing section.

To establish whether or not there was improvement from pre- to post-test and if there was a difference in improvement between teachers, a repeated measures ANOVA was used. Repeated measures ANOVA allows one to match up pre- and post-test scores of one subject, which limits the amount of variance. In this analysis the between-subject variable factor is teacher and the within subject factor is test, pre-test versus post-test. The test factor was highly significant ($F(1,42) = 162.75, p < .001$) whereas there was no significant effect for teacher ($p = .73$). This means that while students improved from pre- to post-test, the students taught by one teacher did not significantly improve more or less than the students taught by another teacher (see tables 4.22. and 4.23).

Table 4.22 Tests of Within-Subjects Contrasts of Pre- and Post-Test

Source	Gain	Type III Sum of Squares	df	Mean Square	F	Sig.
Gain	Linear	5269.452	1	5269.452	162.754	.000
Gain * teacher	Linear	67.434	1	67.434	2.083	.156
Error(gain)	Linear	1359.823	42	32.377		

Table 4.23. Tests of Between-Subjects Effects of Pre-and Post-Test

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	135181.712	1	135181.712	967.398	.000
Teacher	17.564	1	17.564	.126	.725
Error	5868.972	42	139.737		

The analysis was run again with the between-subject factor of class instead of teacher. The within-subject factor of test score was again highly significant ($F(1,41) = 173.40, p < .001$). Once again, the between subject factor was not significant ($p = .93$) (see also tables 4. 24 and 4.25). Again, this confirmed that students did improve from pre- to post-test, however, the class they were in did not effect their improvement from pre to post-test. This suggests that all students in all three classes taught by either one of the two teachers improved statistically equally.

Table 4.24. Tests of Within-Subjects Contrasts of Pre-and Post-Test – Class Difference

Source	gain	Type III Sum of Squares	Df	Mean Square	F	Sig.
Gain	Linear	5700.634	1	5700.634	173.397	.000
gain * class	Linear	79.332	2	39.666	1.207	.310
Error(gain)	Linear	1347.926	41	32.876		

Table 4.25. Tests of Between-Subjects Effects of Pre- and Post-Test – Class Difference

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	133021.450	1	133021.450	929.571	.000
Class	19.444	2	9.722	.068	.934
Error	5867.093	41	143.100		

In conclusion, there was a significant improvement across all classes from pre- to post-test, however, there was no significant difference in improvement between the teachers or among the classes.

Conclusions drawn from these quantitative results have to be viewed with caution, since the information about dominant feedback style was based on the transcripts of only six case study subjects, and the chatting was only a minor portion of class. Furthermore, during pre-test administration, problems were encountered with the speaking portion which was initially part of the test. Due to these problems, students were not able to complete the test in the allotted 50 minutes. While in ESC the two hour class format allowed me to have students complete the test within the same class period, this was not possible in NSC and SSC.

Using the detailed score card, where I noted kinds of errors in detail and simple test scores, allowed me to observe the development of students' errors from pre- to post-test. While no quantitative or statistical analysis was performed, some patterns were still suggested by the data, which will need further investigation in the future. Not all students showed dramatic improvements in terms of quantitative analysis; yet, in some cases, a decrease in score actually meant improvement, because while students had formed an incorrect hypothesis about the language, they had formed one. Occasionally such hypothesis formation resulted in more errors than the chance performance on the pre-test. A general pattern appeared to be from either incorrect to correct, or from unsystematic error to systematic errors. This means that over the course of the semester, students either developed an incorrect or a correct hypothesis about the formation of the structures under investigation. For example, some students used only independent word order in the beginning, and then only dependent word order when following a conjunction or subjunction in the post-test. Since there were more independent clauses in the exercise than dependent clauses, this meant a decrease in score. In terms of case endings, several stages were suggested by the data: (1) no system, (2) overuse of nominative, (3) overuse of dative, and (4) overuse of genitive. These patterns of error development are qualitative observations only which were not analyzed quantitatively. However, they are a stepping stone for a more detailed quantitative analysis of error development in the future.

4.4.1 Research Question 3a

The question is: What patterns occur in the data between error type and error treatment? Due to the limited number of instances of feedback received, no patterns could be established between error type and treatment type.

4.4.2 Research Question 3b

The question is: What patterns occur in the data between error type and error uptake? One of the fears of CMC is that due to the written format, it may lead to more error uptake. In response to research question 3b, I will first discuss the amount of error uptake in the case study subjects' transcripts and then discuss any potential patterns between error uptake and the error type. Error uptake is defined in this study as instances in which one student uses the same error(s) with the same word within the same transcript as another student or the teacher. For example,

Jennifer: Meine Mutter heist A. und sie hat zwei Kinder. Die Kinder der Mutter sind mich und meinem Bruder N.

Cowboy: Die kinder der Mutter sind mich und meinem brooders J., C. und meiner schwester M.

Table 4.26. Error Uptake

	Subject's Errors	Partners' Errors	Teacher's Errors
NSC Danielle's transcripts	1 – 0.95%	12 - 11.32%	NA
NSC Jennifer's transcripts	7 – 6.14%	4 – 3.98%	0%
SSC Emily's transcripts	1 – 2.08%	1 – 0.84%	0%
SSC Gina's transcripts	4 – 7.02%	9 – 6.52%	NA
ESC Amandas's transcripts	2 – 1.30%	13 - 5.14%	1- 4.35%
ESC Victoria's transcripts	0 – 0%	20 - 7.75%	7 - 28%
Total - 82	15	59	8

Error uptake in this study, while still low, was more than initially expected. In NSCDanielle's transcripts one of her own errors (0.95% of her errors) resulted in error uptake, while 12 observed errors (11.32% of the other's errors) resulted in uptake (10.38% by NSCDanielle, and 0.94% by other students). In NSCJennifer's transcripts 7 of her own errors (6.14% of her errors) resulted in error uptake, while 4 observed errors (3.08% of the other's errors) resulted in error uptake (all by NSCJennifer). In SSCEmily's transcripts one of her own errors (2.08% of her errors) resulted in error uptake, and 1 error by others (0.84% of the other's errors) resulted in error uptake by another student. In ESCAmanda's transcripts 2 of her own errors (1.30% of her errors) resulted in error uptake, while 13 observed errors (5.14% of the other's errors) resulted in uptake (2.77% by ESCAmanda, and 2.37% by other students). In ESCVictoria's transcripts none of her own errors resulted in error uptake, while 20 errors (7.75% of the other's errors) resulted in uptake (5.43% by ESCVictoria, and 2.33% by other students). In reading through the transcripts, it appeared that weaker students are more susceptible to error uptake for they use other people's phrases to provide answers to questions in the conversation and are not able to correct the errors. This is a qualitative observation only and at this point is not confirmed by quantitative findings; however, it should be explored in the future.

None of MorningTeacher's errors resulted in uptake, which can be attributed to the fact that they were not crucial words for the activities. However, 1 of EveningTeacher's errors in ESCAmanda's transcripts (4.35% of her errors) resulted in uptake by a student and 7 of EveningTeacher's errors (28% of her errors) in

ESCVictoria's transcripts resulted in uptake by students (8% by ESCVictoria and 20% by other students). This can be attributed to the fact that EveningTeacher was encouraging the students to use the incorrect words or plural forms that she provided (see example below).

EveningTeacher: Was musstet *(PN) euch für Hausaufgaben machen? Hattet *(PN) euch viele Hausaufgaben? Waren die *(PL) Lehreren böse oder nett?, interessant oder langweilig. ...

ESCVictoria: Meine *(PL)Lehreren *(SVA) war nett.

ESCVictoria: Meine hehreren *(SVA) war interessant auch

ESCVictoria: *(PL) lehreren...

EveningTeacher: *(PL)Lehreren = *(ENG) teachers (plural) ...

ESCVirginia: Meine *(PL) Lehreren *(SVA) war interessant.

Table 4.27: Error Type and Error Uptake

Error Type	Error Uptake	Example
Ending	12	NSCKlaus: hast du *(E) ein Sonnenbrand? NSCDanielle: Ja, ich habe *(E) ein Sonnenbrand.
Wrong Word	11	EveningTeacher: Wer bekam eine *(WW) Kinderzulage? (weekly allowance for children) ESCVictoria: Ich *(WW) habe *(WW) nicht *(WW) kinderzulage .
Plural	11	NSCJennifer: Ich gehe *(Pr) nach *(PL) Schloßen und *(SVA) essen viel. ... NSCDanielle: Ich lerne Deutsch, esse viel und *(T) viele *(PL) Schloßen und Museen.
Missing Word	6	NSCCarsten: Als ich ein Kind *(V//), habe ich *(V//) *(E) meine Schwestern *(Part) gekämpft. NSCDanielle: Wie haben *(PN) siene eltern reagiert, wenn du *(V//) *(E)deine Schwestern *(Part) gekämpft *(SVA) haben.
Verb Form	6	(in an activity what students would/could do, if they had vacation) NSCJennifer: Ich *(VF) konnte sum Strand gehen und ich *(VF) konnte in der Sonne liegen *(WO) auch. NSCDanielle: Ich *(VF) konnte auch zum Strand gehen und in der Sonne liegen, enn ich jetzt nicht lernen *(SVA) müssen.
Unnecessary Word	6	SSCGina: und ja, ich dachte, dass die Mauer *(WO) war *(X) in 1961 gebaut.... SSCPhilip: ah *(E) der Berliner Mauer *(WW) ist *(X) in 1961 geoffnet.

Error Type	Error Uptake	Example
Pronoun	4	NSCJennifer: und liebeskummer? Hat eine Person *(WW) dass gehabt? NSCKlaus: haha, *(PN) mich NSCJennifer: *(PN) mich auch
Participle	3	NSCCarsten: Als ich ein Kind *(V//), habe ich *(V//) *(E) meine Schwestern *(Part) gekämpft. NSCDanielle: Wie haben *(PN) siene eltern reagiert, wenn du *(V//) *(E)deine Schwestern *(Part) gekämpft *(SVA) haben.
Prepositions	3	ESCSabrina: Was machen wir *(Prep) für hohes Fieber? ... ESCAmanda: *(Prep) Für ein Fieber, Sie *(SVA) *(WO) muss sich ins Bett legen.
Number	3	NSCMike: Mein *(E) liebsten *(#) Fächer war Algebra.... NSCDanielle: Ich hate auch Algebra, Englisch und Geschichte: Englisch war *(E) meine *(E) liebsten *(#) Fächer .
Word Order	3	ESCTiffany: ich Klavier *(WO) *(VF) gespielt... ESCVictoria: ich klavier *(WO) *(VF) gespielt auch
Subject Verb Agreement	2	ESCVictoria: Meine *(PL)Lehreren *(SVA) war nett. ... ESCVirginia: Meine *(PL) Lehreren *(SVA) war interessant.
Tense	2	(in an activity about duties one had as a child) SSCNigel: Was *(T) musst du im Haushalt helfen? SSCGina: ich musste mein Zimmer aufräumen, staubsaugen, und den Rasen mähen. SSCGina: und du? Was *(T) musst du im Haushalt helfen?
Total	82	

As table 4.27 illustrates, a total of 82 of the 1670 student and teacher errors resulted in error uptake (4.91%). Since this is a low amount of error uptake, patterns between error type and error uptake are hard to establish. However, based on the case study subjects' transcripts it could be suggested that lexical and morphological errors that are part of German word learning are more likely to lead to uptake, such as plural forms, word choice, noun gender, and verb forms. However, these findings have to be viewed with caution since morphological errors such as the ones discussed above are also determined syntactically (e.g., case), or they are unclassifiable, apparently random,

ending errors. Furthermore, no statistical analysis was performed between error type and corrective feedback, and in the above-mentioned chart, only raw numbers of errors are represented, without consideration of the number of instances of such error type. While no quantitative analysis was performed on the remaining transcripts sets, during the reading the error types discussed above appeared to lead more frequently to uptake than other errors such as word order or subject verb agreement errors. Yet another word of caution is the fact that what appears to be error uptake may simply be signs of learners being at a similar interlanguage developmental stage.

4.4.3 Research Question 3c

The question is: What patterns occur in the data between source of error and error uptake? Since both teachers are non-native speakers of German, it was assumed that both would make errors, which was confirmed in the analysis of the case study subjects' transcripts. One of the hypotheses formed was that teacher errors would be more likely to be uptaken than student errors.

To review, the students made 1617 errors, MorningTeacher made 5 errors and EveningTeacher 48 errors in the transcripts analyzed. Of the student errors, 74 (0.31%) resulted in error uptake, none (0%) of MorningTeacher's mistakes resulted in error uptake, and 8 (16.67%) of EveningTeacher's errors resulted in error uptake. Below in table 4.28 the numbers are reflected again and examples are given from each error source.

Table 4.28 Source of Error and Uptake

Source	Errors	Error Uptake	Examples
Student	1617	74 (0.31%)	NSCCarsten: Als ich ein Kind *(V//), habe ich *(V//) *(E) meine Schwestern *(Part) gekämpfen. NSCDanielle: Wie haben *(PN) siene eltern reagiert, wenn du *(V//) *(E)deine Schwestern *(Part) gekämpfen *(SVA) haben.
MorningTeacher	5	0 (0%)	Not applicable
EveningTeacher	48	8 (16.67%)	EveningTeacher: Wer bekam eine *(WW) Kinderzulage? (weekly allowance for children) ESCVictoria: Ich * (WW) habe *(WW) nicht *(WW) kinderzulage.

Table 4.29 Differences between Error Uptake by Source

	Student Errors	MorningTeacher	EveningTeacher	Total
Nonuptaken Errors	1543	5	40	1588
Uptake	74	0	8	82
Total	1617	5	48	1670

Degrees of freedom: 2; Chi-square = 14.85; $p < 0.001$.

Since the exact number of student subjects cannot be established in the report of this data (as the errors were made by both the case study subjects and their partners), a non-parametric measure had to be used to understand whether there was a significant difference between student and teacher feedback. In this case a chi squared analysis was performed, and it was found that there was a significant difference in the amount of error uptake for student errors, MorningTeacher's errors and EveningTeacher's errors. In the transcripts analyzed, the mistakes most likely to be uptaken were the ones made by EveningTeacher and the least likely the ones by MorningTeacher.

While it was initially thought that any teacher error would be more likely to be uptaken, this was not confirmed by the chi square analysis of the instances of error uptake from the case study subjects' transcripts. One possible explanation why MorningTeacher's errors did not lead to uptake may be that there was no need to use the structure or lexical item again. For example, by not using the form in a question or highlighting it through a translation, she may not have indicated the importance of a word. One may compare the examples from EveningTeacher's (see those quotes above table 4.27) errors with the following MorningTeacher's error below to indicate that error uptake may not have been encouraged.

MorningTeacher: Was ist *(WW) mit dem Bruder los? Er ist krank, nicht wahr?

NSCKlaus: Ja.

4.5.1 Research Question 4a

The question is: How do students perceive the teacher's role in the chat room and in the physical space? To investigate the question, the findings from the survey and the self-report forms are discussed. To provide a quick overview, all items of the survey are presented in see Appendix 14, even those that do not apply to this question. In the chart, the original statement is reiterated, and the percentage of students who either answered "agree" or "strongly agree" for opinion statements and "sometimes" or "always" on frequency items is listed. Then the results for both class and teacher differences are listed (as calculated with ANOVAs). For the statistical analysis the actual values from the Likert scale were used and not a combined value. The repeated measures ANOVAs were

used to establish a potential significant change in attitude, a difference between classes or teachers, or an interaction between the pre- and post-survey with the factor teacher or class. In cases where the item only appeared on either the pre or the post-survey a between subjects ANOVA was used to establish differences between classes or teachers. Some items were not answered by all students and were therefore disregarded for statistical analysis. To answer research question 4a, both the quantitative and the qualitative results from the survey will be reviewed. Furthermore, in the results both the preferred role of the teacher (i.e., how the teacher chose to interact), and the experienced role of the teacher (i.e., how the students experienced the teacher interacting) will be discussed based on the students' responses on the survey.

Despite the observed different teacher roles in the transcripts, there were only three items with significant differences in the quantitative analysis of the survey. This suggests that, for the most part, students share similar opinions and do not change their opinion over the course of a semester significantly, regardless of prior experience, the teacher or the level of technological support.

The items with a significant difference were items 9, 10, and 17. Item 9 states: "I don't think my classmates should correct me." Item 9 exhibited a statistically significant interaction between pre and post-survey and the class as the factor. Looking at the percentages you can see that the approval rating of peer feedback went down in the SSC and up in the ESC and NSC. However, it has to be admitted that students were challenged by the negative formulation of the item, often contradicting themselves between the circled answer and their comments.

The second significant difference was the interaction between pre and post survey and the teacher as a factor on item 10, which states “When I say something wrong, I like it when the teacher writes the correction on the board.” While MorningTeacher’s classes either increased the approval rating or stayed the same, EveningTeacher’s class went down in approval rating. This could suggest a difference in frequency of this form of feedback or a difference in implementation with either of these differences resulting in a more negative experience for the ESC students.

The third item with significant differences was item 17 which states: “In a foreign language class using computers gets in the way of really learning the language”. A statistically significant difference was observed between-subjects for both the class effect and the teacher effect. Given the different levels of support and the difference in teacher comfort with technology, it was to be expected that the ESC rated technology the highest on this item, and the SSC the lowest on this item. However, this same difference was not observed in the positively formulated item 13 (“I believe using technology in the language classroom is beneficial for language learning”), or any of the items that asked about chatting specifically.

Even though there were minimal quantitatively significant differences between pre- and post-survey, between teachers, and between groups, the analyses still provide a general picture of the preferences and experiences of the students, which will be summarized in the following.

To summarize the various items on the survey, students generally like corrective feedback both from peers and from teachers. Furthermore, students reported liking

technology in the classroom, and considered chatting to be both fun and beneficial for language learning. Students also reported liking active participation in chat by the teacher and error correction from the teacher during chat. Interestingly, while most students reported seeing their own and others' mistakes, only about half of them reported providing feedback to their peers.

The majority of students reported having received feedback from their teachers in the past; however, their reports on the frequency of feedback from their current teacher were more mixed. While this could mean that they experienced less feedback from the two teachers in this study than their prior teachers, this cannot be argued comfortably due to problems with the writing of the items. The addition of "only" in these items, an unfortunate wording, made the items unclear (e.g., "My teacher mainly corrects only certain kinds of mistakes I make during class"). It appears that some students interpreted the item to mean exactly the opposite of how it was intended. This was apparent, since several students answered "never" in response to the statement, but then wrote in the comment section "she corrects ALL mistakes." Therefore, it is important to analyze the qualitative findings on these items, rather than only the quantitative results.

In the table (in Appendix 15), the comments made by the students are listed to provide a detailed picture of their responses. Again, first students' preferred participation style will be discussed and then the students' comments on their experience will be discussed.

From the qualitative analysis of the survey, it appears that students prefer a teacher who provides corrective feedback in a discrete yet noticeable form. Some of the

reasons students provided for the desire for feedback were that: (a) feedback is necessary for learning; (b) feedback provides an opportunity for all students to learn; and (c) it shows that the teacher is listening to them. On the other hand, several students cautioned that corrective feedback can also be embarrassing. Interestingly SSCOphelia pointed out that she thought that error correction during chat was not necessary.

In terms of the students' preference for teacher participation during chat, only a few students made comments (4 in NSC, 1 in SSC, and 6 in ESC). NSCDanielle, NSCLaura, NSCMarkus, and ESCBarbara pointed out that an active teacher can help move the conversation in the chat rooms along. NSCGeorge and ESCTiffany mentioned that an active teacher will help them focus. SSCAdrienne, on the other hand, stated that she likes student-student interactions. ESCDominique, though she preferred an active teacher during chat, added that she only appreciates such interaction if it is related to the topic.

As mentioned earlier, the items about the teacher's use of corrective feedback were stated confusingly, and it is necessary to turn to the comments to understand the students' true opinion. In regards to error correction by the MorningTeacher during class: NSCDanielle, NSCGeorge, NSCJennifer, and SSCTina pointed out that she corrected "all mistakes." NSCMichelle and SSCAdrienne mentioned that she corrected "a variety of mistakes." NSCJennifer reported that MorningTeacher corrects "any she sees" and SSCSamantha said that "she corrects most." However, NSCMarkus stated that she only corrected "big mistakes." For the chat environment the students who commented reported the following: NSCJennifer and NSCDanielle reported "she corrects what she catches."

NSCLaura and SSCAdrienne reported that the teacher corrected a variety of mistakes. Again SSCTina felt that all mistakes were corrected. However, NSCDamion and NSCLaura did not feel that MorningTeacher provided corrective feedback.

The students in the ESC reported the following about EveningTeacher's corrective feedback during class: ESCGerhard reports that "all mistakes" are being corrected and ESCIan reports "most" as being corrected. However, ESCTiffany reports that "she is often busy with other things to correct ALL mistakes" and ESCVirginia reported only having been corrected "once or twice." For the chat environment, ESCTiffany said that the teacher corrects when she can, whereas ESCVirginia says that she was never corrected.

In summary, from the students that commented it appears that MorningTeacher used more corrective feedback in chat and in class than EveningTeacher. However, due to the fact that not all students commented and that student impressions are clearly subjective, this conclusion has to be viewed with caution.

The last three items on the survey were guided questions about the students' experience during chatting, especially in regards to their teachers' behaviors. According to the students, MorningTeacher (1) "went from chat room to chat room," (2) "made corrections," (3) "helped," (4) "facilitated conversation" through questions, (5) "participated," and (6) observed in the virtual environment during chatting. Only one student commented on MorningTeacher's actions in the physical space: SSCAdrienne reported also that MorningTeacher "walked around" during chatting and that she fixed computer problems. Her role was described as "minimal," "discrete," "regulating," and as

an “administrator” and “advisor” by the students in NSC. The students in SSC described her role as minimal, helping with grammar and conversation, participating, “not pushy,” and as a “corrector,” “observer”, supervisor, student and teacher, and “moderator”.

The ESC students described EveningTeacher’s behavior during chatting in the following ways: (1) starting the conversation, (2) suggesting topics, (3) “some correction,” (4) going “from channel to channel,” (5) asking questions, (6) stating “her opinion,” (7) participating, and (8) “stimulating conversation.” In addition, ESCDominique explicitly (“She asked questions, and gave her opinions. [I did] not usually [like the teacher’s comments], as they would have usually nothing to do with our conversation.”) and ESCAmanda implicitly (“she would throw out subjects”) reported that some of EveningTeacher’s topic suggestions were irrelevant. Furthermore, ESCVirginia reported that EveningTeacher never chatted with her. The ESC students described EveningTeacher’s role as “active”/”God”/”omnipotent,” helping with conversation, “stimulating conversation,” “participating,” and as monitoring. ESCJames did not think that EveningTeacher was active in the chat and ESCVirginia also implied that EveningTeacher did not play an active role in her chat rooms.

To summarize the findings in response to research question 4a, there were no significant differences between the groups or the students taught by the two different teachers in terms of their reported opinions on teacher feedback preference and experience in the quantitative analysis. Students reported liking an active teacher and feedback from the teacher. In addition, several of the components of the teacher’s behavior during chatting were reported similarly by the students of the two teachers in the

comment section. Both were described as correcting, participating, facilitating the conversation, and helping the students. However, there were some subtle differences. The students who commented generally reported experiencing corrective feedback from MorningTeacher more often than from EveningTeacher. Furthermore, interpreting the comments, the students may suggest more active participation by EveningTeacher than MorningTeacher and more expanding comments by EveningTeacher. However, as mentioned before, these conclusions have to be viewed with caution, since not all students commented.

4.5.2 Research Question 4b

The question is: How do these perceptions correspond with actual practices? To answer research question 4b, the results from the previous question will be discussed in relation to the findings from the transcripts and the observation notes. As mentioned above, students taught by MorningTeacher experienced more corrective feedback than the students taught by the EveningTeacher, based on the qualitative analysis of the comments. This perception was also confirmed by the corrective feedback exhibited by the six case study subjects. MorningTeacher provided significantly more feedback than EveningTeacher. In addition, students described EveningTeacher as more active than MorningTeacher. The analysis of the word count of all subjects showed a statistical difference between groups of teacher output. Hence, the students' perception corresponds with the quantitative findings from the transcripts. In the qualitative analysis of the teacher moves in the six case study subjects' transcripts, it was found that

MorningTeacher defined her role as providing feedback, participating, and keeping the conversations narrowly defined within the task. The EveningTeacher was found to provide less feedback, and exhibited more teacher turns that were expanding the task. Looking at the variety of comments from the students, these modes of participation were confirmed. Furthermore, the teacher was described as going from room to room. However, none of the students commented on MorningTeacher's use of the "invisible" function. In that same vein, none of the students commented on EveningTeacher's use of the "to all" function. However, ESCDominique's and ESCVirginia's critical comments could be comments on experiencing the "to all" function, namely feeling that EveningTeacher's comments were unrelated to their discussion or not addressed to them.

While students' descriptions of the teacher behavior in the virtual environment mostly matched the findings from other data sources, the description of the teacher's role in the physical environment was not present in the survey. Only one student commented on MorningTeacher as walking around in the classroom and fixing computers. However, in the classroom observation notes, MorningTeacher was found to walk around and assist students frequently, and to provide help with computer problems. Furthermore, EveningTeacher spent some time explaining the activity in the front of the class at the beginning of chatting, and during chatting, she commented out loud in the physical environment. These behaviors were not reported by the students. This may mean that students were not aware of the teacher's behavior in the physical environment as being part of the teacher's implementation and interaction during chatting.

In discussing these findings, one challenge is that different data sets were labeled in different ways. For example, the transcripts were stored with the students' self-selected screennames. However, since I did not know the identity of the students, I could not use the students' screennames to describe their behaviors in the classroom observations.

4.6.1 Research Question 5a

The question is: Which parts of the interaction are happening in the physical space and not in the virtual space? While the responses to the previous questions mostly discussed the interactions in the virtual space, it is also important to understand the interactions happening in the physical space. As universities are growing, classroom space becomes more and more limited, and creative solutions have to be found to deliver instruction with the limited classroom space. One of those solutions is to move some or all instruction into distance learning environments, creating online or web-enhanced classes. In order to understand how to effectively use a component, such as SCMC in a classroom setting or alternatively, in a distance learning environment, it is important to understand which interactions are occurring in the physical environment during chatting, so that changes can be made to accommodate the new delivery form if distance learning is chosen.

To respond to this research question, information from the classroom observation notes, the surveys, and the self-report forms will be discussed. I will not differentiate between teachers or among classes. First the behaviors by the teacher will be discussed, and then those by the students.

During chatting the physical space was used for group assignment as mentioned in response to question 1. In addition, the discussion of the task for the most part occurred in the physical environment, with EveningTeacher providing lengthy explanations of the task and unfamiliar words, and providing sample questions and answers. MorningTeacher, on the other hand, did not introduce the activities to the whole class, but, walked up to students and assisted them when they were confused about the activity.

Computer problems were attended to by the teacher or the Lab Assistant in the physical environment. Furthermore, when one student experienced technological problems, he or she was able to shout across the room to the partner or partners that his or her screen froze. This way the other partners knew that the “silence” in SCMC was due to technical problems. In addition, if an entire channel crashed, the teacher or the Lab Assistant was able to reassign them to a new channel and provide them instructions on the procedures to fix the computer problem. All computers in the lab had the same connection speed, and usually problems with slow internet servers were experienced by multiple students at the same time.

Besides logistical issues, the EveningTeacher also used the physical environment to comment on students’ writings in one or several chat rooms. Sometimes she laughed, or she spoke out a comment loudly. Furthermore, she sometimes stopped the interaction, if she felt that students were not understanding the activity, and either told them how to complete the task correctly, or provided more examples. MorningTeacher did not use the physical environment for these purposes according to my classroom observation notes.

However, according to my notes, and also one student's comment on the survey, she did use the physical environment to walk around amongst the students.

Another element of the interaction in the physical environment is the general shared experience of the students. For example, both teachers played music occasionally during chatting, which was an element of the physical environment. In addition, it was sometimes a point of discussion either in the virtual or the physical environment, with students either asking about the music, or commenting on it. Being in the same room also allowed students to experience some of the same distractions, such as ringing cell phones, or a computer repair man showing up, according to their self-report forms. These common elements in the physical environment may be an important component of the chatting in a classroom context.

The students interacted with each other in the physical environment also – though these interactions were more common in the ESC than the other two classes, according to my classroom observation notes. The students laughed together, read each others' transcripts, asked each other questions when they had problems understanding, and commented on events in the physical and the virtual environment. All of this information stems from my classroom observation notes and comments from the self-report forms and surveys. In the beginning, students were also observed trying to find out who they were talking to, since the students used screennames and not their actual names.

Students were also observed using several different resources, such as the internet dictionary Leo (leo.dict.org), paper dictionaries, their textbook, the course management software, and internet translators. The students also reported using such resources in their

self-report forms. Some students had several windows open and placed them on the screen so that they could read them all at the same time. In addition, some students also consulted task-unrelated websites, such as their email accounts, newspapers, the latest sports results, and websites popular among our students such as “Facebook.” From my classroom observations, this appeared to only occur when students were waiting for a response from their partner(s).

In conclusion, the physical environment was utilized for a variety of activities. Furthermore, the common setting allowed students to have some of the same experiences even if they were in different chat rooms. In addition, the staff was able to assist and solve technological problems, and students who were in a room where one or more students experienced problems knew about the problem quickly. The physical environment also served the purpose of dealing with logistical issues (such as group assignment, introduction of activities, and technological support) and for bonding (such as reading each other’s conversations, laughing together, and commenting out loud).

While these are all findings of behaviors and events in the physical space, some words of caution need to be expressed. First of all, having an observer present may have changed some of the interactions, and from my classroom observation notes, I can only comment on the events occurring during the times I observed the class. Second, due to the different labeling and formatting of data sources, in almost all cases it was impossible to match subjects from one data set to the next. However, since this was a discussion of events in general, such matching was not necessary. Furthermore, as has been discussed already with the surveys, students did not comment on many occurrences in the physical

space. In fact only one student out of 46 mentioned the teacher's actions in the physical environment on the survey. It may be that students also reported fewer occurrences in the self-report forms than actually were noteworthy. Therefore, it has to be pointed out that the students may not be the most reliable data source. However, in the absence of multiple video cameras, student report forms and observation notes are the best source of data regarding the events in the physical space.

4.6.2 Research Question 5b

The question is: What modifications would have to be made when moving SCMC activities to a remote location? As mentioned in response to question 4a, understanding chat implementation in distance learning contexts is of interests to administrators. The answer to question 5a provides the basis for the recommendations for modifications if chatting were to be moved from an in-class activity to a distance learning context.

The areas of modification fall into the following categories: logistical issues, technological aspects, resources, bonding, and commonality. While with no certainty can these factors be claimed as essential for chatting, they did occur in the physical environment during the chat activities of these three classes in this study. I can only provide suggestions for modification, which should then be tested in a later study using actual distance learning environments.

Since procedurals and task explanations were mostly given in the physical environment, it may be necessary to provide a glossary for the task descriptions. Furthermore, the chat server may need to have a whisper function, which students can use

to contact the teacher with any issue directly without having other students see it. To my knowledge, none of the students in this study used the whisper function, so it may be necessary to draw students' attention to this function. In response to item 38 on the survey, one student also stated that he wished that computer instructions were done in English. While this was only one student, because so many computer problems occurred due to errors in login and logout procedures according to the reports from the Program Developers who receives the error reports, it may be necessary to have one training session for students and teachers, and make procedural guidelines and troubleshooting guidelines easily available.

On a related note, since teacher and Lab Assistant were utilized to fix technological problems, again a training session may be necessary. Furthermore, it may be necessary to find a way in which students can communicate technological problems immediately to their chat partners, so that the chat partners do not feel ignored when a partner is not responding due to technical difficulties. Furthermore, minimum and ideal computer requirements need to be stated explicitly for students, and made available in some form to those students who do not have their own equipment that meets the requirements.

Since students cannot see which resources other students are using, providing a list of resources and making them easily accessible might be helpful for the students. EveningTeacher also used course management software, where students could share useful links.

Two of the major functions of the physical space seemed to be the commonality of the experience and the bonding. While it is not clear from the data collected for this study whether this is an important function, it was a predominant function. Hence, I consider finding ways to make this possible in a distance learning context important. To allow students to still look over each other's shoulders, the chat could be set up in a way that students can easily move from channel to channel. Furthermore, an added feature in which students can have a private one-on-one conversation with one of their friends may help with the sharing. In order to establish some commonalities or at least acknowledgement of differences, video software could be added to the chatting. Another less technologically demanding solution, could be to have students listen to the same radio station online while chatting or to ask students to describe their environment at the beginning of each chat session so that they have some common experiences or can visualize each other's environments.

While these are all recommended modifications based on the findings of the events in the physical environment in this study, there are several limitations to these recommendations. First of all, no level of importance of the events in the physical environment could be established. Second, the effectiveness of the recommendations has to be established first. Third, only two teachers, and three classes were investigated. Fourth, since the design of the computer lab in which the chatting occurred is so unique, some of the bonding elements may be a result of the collaborative set-up of the lab, rather than a necessity of the chatting.

4.7 Additional Findings

In the previous sections, the research questions were addressed. However, the data also revealed some additional findings worth mentioning. In addition, some of the results posed further questions, which were then investigated. The following additional findings will be discussed: students' attitudes towards technology and chat, students' recommendations for chat improvement; potential mismatches between students' desires and actual experiences; the relationship between teacher feedback and error uptake; the relationship between teacher feedback and student self-correction; and the issues of comprehensibility, fluency, accuracy, and target language use.

Looking at the results from the survey, students overwhelmingly liked technology in the classroom, and thought that chat was both beneficial for language learning (NSC: 83.33% approval, SSC: 87.5% approval, and ESC: 77.78% approval) and fun (NSC: 83.33%; SSC: 87.5%; ESC: 66.67%). Students who explained why they liked technology gave the following reasons: (1) "visual" aspects, (2) change of pace, (3) "resource," (4) "the future," (5) "broadcast information," and (6) available when the teacher cannot be. However, two students cautioned that they did not find it "necessary." Furthermore, one student specified that technology is only helpful when it is working and another student mentioned that the computer can be a hassle. Another student thought language learning is more effective when speaking it. Yet another student cautioned that effective use of technology requires computer literacy. NSC Jennifer also mentioned that the computer is her only real way of communicating with people in Germany.

Students thought that chatting was fun because it was a form of communication that was different. However, many students who commented expressed caution, such as “only if the other person responds quickly and accurately;” “would rather be getting from the teacher;” or “as long as chat partner has a clue.” Several students mentioned issues with their partners in the survey comments and also in the self-report form which influenced their experience.

Students who explained their opinion thought that chatting was beneficial because it was different, “visual,” and “practice.” However, NSCDanielle felt that only her written German improved. Furthermore, SSCOphelia added “when I had a good partner.” In addition ESCLarissa felt that she did “not learn anything.”

As has already become apparent from the previous section, several students had issues with their partners. Naturally several of the recommendations for improvement were regarding partner assignment. In the NSC and SSC students recommended that activities and procedures should be explained more clearly. In ESC students had varying recommendations regarding the timing and duration of the chat sessions. One student recommended that the transcripts could be used for corrective feedback.

Besides the students’ attitudes towards technology, attitudes towards corrective feedback were also gathered and already discussed previously. In addition, actual practices regarding feedback were also discussed. However, it needs to be stated here again, that they did not only perceive more corrective feedback than actual feedback given, but also their preference in receiving a lot of feedback was not matched. As a general trend students would have liked to have every one of their mistakes corrected,

however less than 12% of the errors of any case study subject were corrected by others. Therefore there is a mismatch between students' desired teacher behavior and actual practices.

Another question that arose out of the observation of low teacher feedback was the question of whether lower teacher feedback then also means a higher error uptake rate. To investigate this further, the data from the six case study subjects were analyzed in regard to correlations in a two-tailed test of significance with the Pearson Correlation coefficient. Correlational procedures are used to establish relationships between two factors; however, they do not suggest a cause and effect relationship. Furthermore, a correlation with only six subjects may receive chance results and has to be viewed with caution. Therefore, this is an exploratory analysis that will need further investigation with more subjects in the future.

Table 4.30 Correlation between Error Uptake Rate and Teacher Feedback Rate

		Error uptake	Teacher feedback
error uptake	Pearson Correlation	1	-.086
	Sig. (2-tailed)		.871
	N	6	6
Teacher feedback	Pearson Correlation	-.086	1
	Sig. (2-tailed)	.871	
	N	6	6

With only six subjects, the correlation between teacher feedback and error uptake was not significant ($r = -.086$, $p > .05$) (see also table 4.30). This may mean that the absence of teacher feedback does not lead to an increase in error uptake as one might fear. However,

as mentioned above the analysis cannot establish a cause and effect relationship and the number of subjects analyzed makes this an exploratory finding which needs further proof to be sustainable.

Another question that arose out of the observation that teacher feedback and self-correction were higher in SSCEmily's case was the question of whether observing more feedback from the teacher has a relationship with self-correction. The data from the six case study subjects were analyzed with regard to correlations in a two-tailed test of significance with the Pearson Correlation coefficient. For the same reasons as discussed above this procedure was chosen and faces the same limitations. However, the correlation between teacher feedback rate and self-correction rate ($r = .970$, $p < .01$) was significant (see table 4.31). This may mean that when students receive more feedback from the teacher, they may be more encouraged to self-correct or they may gradually develop more awareness of their errors, i.e. maybe teacher correction leads to 'noticing'. However, due to the low number of subjects, this is a preliminary finding that needs further exploration with other data or subjects.

Table 4.31 Correlation between Teacher Feedback Rate and Self-Correction Rate

		Teacher feedback	Self-correction rate
Teacher feedback	Pearson Correlation	1	.970(**)
	Sig. (2-tailed)		.001
	N	6	6
Self-correction rate	Pearson Correlation	.970(**)	1
	Sig. (2-tailed)	.001	
	N	6	6

** Correlation is significant at the 0.01 level (2-tailed).

The last question that arose from the data was the question of comprehensibility of chat transcripts and the relationship between fluency and accuracy. For the most part, the transcripts analyzed were comprehensible to the researcher. For the six case study subjects, 1617 errors were found. Of those only 68 (4.21%) were errors that lead to incomprehensibility as determined by my error coding. 31 of those errors were from ESCAmanda's transcript. Therefore, it can be concluded that comprehensibility was high.

The data of all subjects were then analyzed for any relationship between fluency and accuracy with regard to correlations in a two-tailed test of significance with the Pearson Correlation coefficient. With 44 subjects, this correlation can be assumed to be more accurate in describing a relationship between fluency and accuracy. The correlation between words per minute (as a measure of fluency) and the post-test score (as a measure of accuracy) from all subjects was significant ($r = .970$, $p < .01$) (see also table 4.32). While some fear that students who are more fluent pay less attention to accuracy, this analysis suggest that students' with higher fluency also have higher accuracy.

Table 4.32 Correlation between Fluency and Accuracy

		words per minute	post-test score
Words per minute	Pearson Correlation	1	.342(*)
	Sig. (2-tailed)		.023
	N	44	44
post-test score	Pearson Correlation	.342(*)	1
	Sig. (2-tailed)	.023	
	N	44	44

* Correlation is significant at the 0.05 level (2-tailed).

As mentioned earlier, EveningTeacher used significantly more English words in the case study subjects' transcripts than MorningTeacher. An interesting additional finding is that in comparing the target language use by the six case study subjects, there was also a significant difference found between the four case study subjects taught by MorningTeacher and the two case study subjects taught by EveningTeacher using a chi squared analysis (see table 4.32). MorningTeacher's case study subjects used significantly more target language than the EveningTeacher's case study subjects. This matches the difference between the two teachers and may suggest that the teacher's frequency of the use of the target language may be seen as a model by the students for their own language choices.

Table 4.33 Case Study Subjects' Target Language Use

	NSC & SSC	ESC	Total
German Words	3624	1732	5356
English Words	54	203	257
Total	3678	1935	5613

Chi-square = 236.26 -- $p < 0.001$.

4.8 Summary

In this chapter, the research results in response to the five research questions were presented. In summary, there was a difference in participation patterns between the two case study teachers. However, these differences between the two case study teachers resulted in only a few differences in attitudes and language of the students investigated.

The research results will be summarized in chapter five in relation to the following topics: role of the teacher in synchronous computer-mediated communication (SCMC), corrective feedback in SCMC, language use by teachers and students in SCMC, students' preferences and actual practices, implications for teaching, implications for program administration, implications for teacher training, connections to SLA research, connections to CMC research, directions for further research, and limitations of the study.

CHAPTER V: SUMMARY AND CONCLUSIONS

5.1. Introduction

After presenting the research results in response to the questions in detail in chapter four, in this chapter the results will be summarized according to the following themes: role of the teacher in SCMC, corrective feedback in SCMC, language use in SCMC, students' preferences and actual practices, implications for teaching, implications for program administration, implications for teacher training, connections to SLA research, connections to CMC research, limitations and suggestions for future research. Furthermore, the previous research discussed in chapter two, as well as some additional research, will be taken into consideration in this concluding chapter. However, first a summary of the study will be provided.

As described in chapter three, this study is a multiple case study using a mixed design analyzing a multi-faceted data set. Participants in this study are 46 students and two teachers from three classes. The students and teachers were originally intended to be involved in ten to fifteen 20-minute chat sessions. However, due to curriculum constraints and computer problems that led to transcript loss, students were engaged in 10 or fewer chat sessions, with some of them lasting more and some less than 20 minutes. Overall students chatted for a total of two to three hours on average during the semester. The two students who chatted the most in each class were selected as case study subjects for a more in-depth analysis of their chat transcripts. The classes were labeled according to the level of technological support they received during the lab session: No-Support

Class (NSC), Some-Support Class (SSC), and Expert-Support Class (ESC). NSC and SSC were held in the morning and were taught by the same teacher, who was assigned the pseudonym MorningTeacher. In similar fashion the teacher teaching ESC in the evening was named EveningTeacher. The students had self-selected screen names for the chatting, which were exchanged with pseudonyms for the purposes of reporting the data. The chatting occurred in the collaborative computer lab of the College of Humanities at the University of Arizona. The chat activities were designed in adaptation from the textbook and covered all relevant structures and vocabulary. The data sets included the transcripts, self-report forms, pre- and post tests, pre- and post-surveys, classroom observations, and informal conversations with the instructors.

As has been mentioned already in chapter four, this study added new findings to the research, even though it faces several limitations. In the following sections the findings, the connection to the field, the implications, the limitations, and the directions for future research will be discussed.

5.2. Role of the Teacher in SCMC

As has been discussed in chapter four, the two different teachers investigated in this study appeared to play some of the same roles and some differentiated roles in the SCMC environment. In this section the research results of the different roles will be reviewed.

The task that I gave the two teachers was to implement the chat activities in their teaching. While the Instructor's Manual instructed them to introduce the topic and any

unknown words, MorningTeacher did not introduce the activities during the classes observed, while EveningTeacher did.

As has been mentioned in chapter three, the teacher's role was intended to be that of instructor or facilitator, but not that of technological staff. However, in the absence of a Lab Assistant in the NSC, and with a Lab Assistant with limited knowledge of the program in the SSC, MorningTeacher experienced more technological problems than EveningTeacher. While EveningTeacher utilized the Lab Assistant for group assignment, procedural instructions, and computer assistance, the MorningTeacher almost exclusively controlled those aspects in NSC and SSC.

Furthermore, the two teachers utilized the physical space differently. The MorningTeacher walked around and assisted students during the chat, while EveningTeacher remained seated at the teacher station and commented out loud. Both teachers used the projector screen to show the activities. The physical space was used for the following purposes: group assignment, task introduction, assistance in case of questions or computer problems, common experience, to see and hear each other, to comment, to play music, to laugh, to read each other's conversations, and to utilize resources.

On a related note, it should also be reiterated that students' descriptions of their teacher's role and behavior was a good match with that found in the transcripts and in my classroom observations. However, students hardly ever commented on the teacher's function and role in the physical space during the chat, while the classroom observations revealed some differentiation in the teachers' approaches to using the physical space.

In regards to the amount of language the students were exposed to from their teacher, there was a significant difference between groups for teacher words per minute according to an ANOVA, with the NSC experiencing the least (0.45 word per minute) and ESC the most (2.12 words per minute) teacher input in words per minute. Hence, it can be argued that the ESC experienced more active participation from their teacher than the NSC and SSC students. If we approach an interpretation of these data from a perspective that emphasizes the importance of input, such as Krashen (1985), then the conditions in the ESC were more conducive to learning. On the other hand other models of input processing acknowledge that the input as such is not the only factor for language acquisition. Gass (1997), as was discussed in chapter two, defines several stages through which the input has to be processed in order to result in language learning. Furthermore, VanPatten (1995) suggested, based on his research, that input without attention to form may not lead to intake, at least not as frequently as input with attention to form. Considering the low frequency of corrective feedback by students and teachers observed in this study, the effects of the teacher input may be limited. On the other hand, all activities were based on the grammar topics in discussion, which may suggest the presence of a focus on form. Furthermore, during the chatting students not only received the teacher's input, but were also able to interact with her and negotiate meaning, which is considered beneficial for language learning (see for example Long, 1996). In terms of output opportunities, which Swain (1985) considers essential for language learning, there were no differences between the classes (see also Swain & Lapkin, 1995; Izumi, Bigelow, Fujimara, & Fearnow, 1999). The discussions in the literature concerning

output may weaken an argument that the conditions in the ESC where there was indeed more teacher input were more conducive to language learning than the classes where there was less teacher input, namely SSC and NSC.

Additionally, according to a chi-square analysis of the corrective feedback moves in the case study subjects' transcripts, MorningTeacher used significantly more feedback (3.18% of errors were corrected in contrast to 0.75% by EveningTeacher) than EveningTeacher. Both feedback rates are lower than those reported from face-to-face interactions (for example Lyster & Ranta, 1997). The study by Ene et al. (2005), the only other CMC study on teacher feedback, did not measure errors, so no feedback rate was investigated in that study. Furthermore, MorningTeacher had a clearly defined and high frequency form of feedback (repetitions with correction, which in the research are often referred to as recasts, and models), while EveningTeacher used varied forms of feedback, each less clearly defined and used with much less frequency. MorningTeacher's preferred feedback style matches that reported in other studies (see for example Lyster & Ranta, 1997).

Both teachers used some of the same and some differing teacher moves. Both teachers used corrective feedback moves, moves that modeled the language and the activity, moves that focused on conversing with the students, and moves that provided TL vocabulary items to the students. In addition, MorningTeacher used teacher turns to control language, on-off-task behavior, topic focus, and to praise students. EveningTeacher did not use those moves, but instead she used the following additional teacher moves: procedural help, personal sharing, and expanding the topic.

MorningTeacher used her turns to control the task, while EveningTeacher used her turns to widen the task. MorningTeacher did not introduce new topics, while EveningTeacher did. Beauvois (1998) argues that CMC allows more equality in terms of topic introduction between students and teachers, which was only observed in NSC and SSC here.

Based on these observations, MorningTeacher can be described as having the role of teacher and facilitator both in the physical and in the virtual space. EveningTeacher can be described as having the role of conversation partner both in the physical and virtual space, except for her short introductions in the beginning and the occasional corrections. The students described MorningTeacher's role as that of a source of correction and facilitation in a discrete form. EveningTeacher was described by her students as participating and stimulating the conversation. Students also stated preferring an active teacher, which is in contrast to Donaldson and Kötter's (1999) findings who found that the teacher was seen as an intruder.

Another interesting issue that arose out of the data analysis was the topic of teacher power. This is especially interesting given the 'democratization effect' often attributed to CMC (for example, Beauvois, 1998). In fact, despite some possible democratization with CMC, the teacher is still in an authority role, for he or she decides the grades of the students. By definition, any teaching setting is automatically comprised of roles for teacher and student (Lantolf & Genung, 2002). Auerbach (2000) states:

All classrooms are "teacher centered" to the extent that it is the teacher's conception of education that shapes how the learning community develops. Clearly teachers have their own goals, their own understanding of effective L2 pedagogy, and most importantly, they have power. To deny it is both

irresponsible and disingenuous: students know it and teachers act on it whether or not they acknowledge it (pp.144-145).

Indeed, the role of the teacher is inseparable from that of the role of power in a classroom setting, no matter what the specific activity is. Lantolf and Genung (2002) define power as: “the capacity (and privilege) to project and impose one’s perspective on others without taking account of others’ perspectives.” (p. 178). For the purposes of this study, that power is manifested in each teacher’s choices about how and when to interject in the virtual space.

In addition to the fact that the two teachers inherently had a power role in the classroom, there were also specific components of their behavior that exhibited these power relationships. EveningTeacher and MorningTeacher both used features of the chat server that were only available to the instructor: EveningTeacher the “to all” function and MorningTeacher the “invisible” function. This is an obvious manifestation of the teacher power assumed to be inherent to the role, as this instructional software was designed to possess certain capabilities for use only by the teacher. Not only were teachers the only ones allowed to address everyone or be invisible in a room, only the teacher could easily switch from room to room and therefore be omnipresent in all chat rooms. These extra functions for the teacher clearly exhibit an imbalance of power, since the students do not have the capability of using these functions.

Additionally, the teachers also implicitly or explicitly set the rules of the interaction. EveningTeacher modeled acceptable behavior, while MorningTeacher used her teacher turns explicitly to monitor the interactions of the students. For example, and

as briefly mentioned above, MorningTeacher used teacher moves to narrow the task and often used the “invisible” function, meaning that she could read what the students were typing without their knowing that she was doing so. These two implantation choices (narrowing task and “invisible” function) can be seen as elements of a teacher role which take a stance of power in interaction with the students. With her teacher moves as evidenced in the chat transcripts, MorningTeacher monitored the conversation of the students, including more feedback for her students than EveningTeacher did for hers. Furthermore, as just stated, the “invisible” function can only be used by the teacher, and allows the teacher to secretly observe the students’ conversation. EveningTeacher, on the other hand, used the “to all” function, which also can be seen as a move expressing the teacher’s hierarchical power, for it interrupts the flow of the conversation and can only be used by the teacher. Also, EveningTeacher exposed students to more of her own words per minute. Even though they did not have a significant impact on students’ words per minute, EveningTeacher’s frequent contributions to the chat written conversations may still suggest a more involved role than MorningTeacher. Since she expanded topics, she introduced new topics more often than MorningTeacher.

MorningTeacher and EveningTeacher both used power functions but used them differently. It can be argued that either of them or both of them are dominating styles. It may be just as dominating to know that MorningTeacher could be reading your chat and not knowing for sure when she’s doing so as it is to experience more topic introduction and a more active teacher.

To summarize the role of the teacher as discovered in this study: (1) teachers did not follow the instructions provided to them in their Manual; (2) teachers were not able to and did not use the Lab Assistant in the same way; (3) the two teachers used the physical space differently; (4) while students' descriptions of the teachers' role in the virtual space matched the observed role, they did not describe the teachers' role in the physical space; (5) students in the ESC received more input than the other students; (6) there was no difference in student output; (7) teacher words per minute were lower than student words per minute; (8) teacher feedback was infrequent in general and even less frequent from EveningTeacher; (9) the two teachers used some similar and some differing teacher moves during chatting; (10) MorningTeacher played the role of facilitator and EveningTeacher the role of conversationalist; (11) despite the student-centered activities and the more equal language output between teachers and students, the teacher still holds a power role in the classroom.

5.3. Corrective Feedback in SCMC

Several of the research questions answered in chapter three addressed the issue of corrective feedback in the transcript sets of the six case study subjects. The major finding was that corrective feedback was infrequent, regardless of who provided the feedback, or to whom the feedback was provided.

The percentage of errors that received feedback from the teacher ranged from 0% to 10.42% in the six transcript sets. Peer feedback ranged from 1.58% to 7.78%, bringing the total of other-initiated feedback to a range of 1.30% to 12.50% which is much lower

than the F2F reports from (Lsyter & Ranta, 1997) as discussed in chapter two. In addition, self-corrections ranged from 0% to 16.67%. Looking at the other-initiated feedback, this means that even in the most ideal circumstances, no more than 25 of 200 errors received feedback.

The two different teachers used two different feedback styles in the transcripts analyzed. MorningTeacher used repetitions with corrections and models more often than any other form of corrective feedback, and in general used significantly more feedback than EveningTeacher. I referred to MorningTeacher's feedback style as systematic. EveningTeacher used a variety of feedback forms such as clarification requests, models and repetitions in approximately equal frequency, and hence her feedback style was referred to in the discussion as unsystematic. The two generally opposed feedback styles of implicit and explicit were not found as the opposing factors in this study.

When providing feedback to peers, students across all three classes most frequently used models, while when correcting their own mistakes they most frequently used repetitions. The repetitions were often partial repetitions and usually marked “*.” Furthermore, not all repetitions included a successful correction.

Due to the overall infrequent use of feedback, no patterns could be established between error type and feedback type. However, a correlation between teacher feedback and self-correction could be established for the six case study subjects. This may indicate that students who receive more opportunities to observe more correction may gain a greater awareness of their own errors.

In terms of the effectiveness of feedback styles, two forms of evidence were considered: improvement from pre- to post-test and instances of uptake. This argumentation faces several problems that should be mentioned before reviewing the results. First of all, since chatting only played a minor role in the overall curriculum, gains on the test are most likely due to learning that occurred in the 47 to 48 hours of other instruction, than in the two to three hours of chatting. Furthermore, the dominant feedback style was labeled based on findings from only the chat transcript sets of the six case study subjects. While these are severe limitations to this study, given the time constraints, an in-depth analysis of only a subset of students was possible. For pedagogical and administrative reasons, chatting for more than 20 minutes a week would not have been possible or advisable. However, the results could still suggest trends, which should be investigated further.

As mentioned before, the first measure of effectiveness of feedback was the improvement from pre to post-test. The good news is that there was a significant difference between pre and post-test scores across all groups and teachers according to the repeated measures ANOVA analysis. However, there was no significant difference in student improvement among groups or between teachers. Again, this suggests that the differing feedback styles may not have a negative or positive influence on language learning, in contrast to what other researchers have argued, which will be discussed later. However, as mentioned above, chatting was only a minor portion of class, and in addition, the dominant feedback style was only quantitatively established from six case study subjects' transcripts.

To review, in the transcripts analyzed, 1670 student and teacher errors were identified, of which 91 received feedback from others and 28 were followed by self-correction. However, the 91 other-initiated feedback moves only resulted in four instances of correction uptake (4.40%). Due to this low frequency of uptake, no patterns could be established between corrective feedback type and correction uptake. As already discussed Lyster (1998a) found that feedback forms that promote negotiation resulted in more uptake. A similar pattern may present itself in this study, though it can not be substantiated due to the limited data. Nevertheless, it could be argued that feedback forms that engage the learner more may lead to more uptake.

In regards to teacher feedback this study, showed the following research results: (1) corrective feedback was infrequent from all sources; (2) the two teachers used different feedback styles and frequency; (3) peer-feedback and self-correction styles were the same across classes; (4) no patterns were found between error type and feedback type; (5) effectiveness of one feedback style over another could not be established as measured by uptake frequencies and by gain on achievement.

5.4. Language Use in SCMC

In discussing the language used during SCMC, I will again differentiate between the students and the teachers. First the language used by the teacher will be discussed and then that of the students.

It has already been mentioned that there were differences between the two teachers in regards to the input they exposed the students to, the amount of feedback and

the kinds of teacher moves used. Next, the teachers' target language use and error rate will be reviewed based on the findings from the transcripts of the six case study subjects.

According to a chi square analysis of the target language use in the six case study subjects' transcripts there was a significant difference between the two teachers, with EveningTeacher using less target language (93.65% in contrast to 100%) during the chat sessions. However, as was also found in Ene et al. (2005), target language use was high. In addition, in the transcript sets analyzed, EveningTeacher exposed the students to significantly more teacher errors (6.19% of her words in contrast to 1.13% of MorningTeacher's words according to a chi squared analysis). Finally, it was argued that EveningTeacher's errors were systematic while MorningTeacher's were not.

Below, the students' language will be discussed by addressing the following aspects: target language use of the six case study subjects, fluency of all students, comprehensibility of students' language use as observed in the six case study subjects' transcript sets, error rate in the six case study subjects' transcript sets, improvement from pre- to post-test of all students, error uptake, and correction uptake. It needs to be reiterated at this point that data were only coded by the researcher and no inter-rater reliability was established.

As mentioned earlier, EveningTeacher used significantly more English words in the case study subjects' transcripts than MorningTeacher and MorningTeacher's case study subjects used significantly more target language than the EveningTeacher's case study subjects. To reiterate, this may suggest that the teacher's frequency of the use of the

target language may be seen as a model by the students for their own language choices. A more focused study of this phenomenon would be of great interest.

As mentioned before, there was a significant difference between groups in regards to the input received by the students from the teacher. However, there was no significant difference in terms of students' output by group or by teacher according to an ANOVA. No silencing effect of any teacher participation style was found as was the case in Ene et al. (2005). The NSC on average produced 3.64 words per minute, the SSC 3.32, and the ESC 4.01. Furthermore, it should be mentioned that except in the case of ESC Tiffany, the quantity of teacher words per minute observed was always lower over the course of the semester than students' own words produced, which may confirm the democratization effect (Beauvois, 1998). It is interesting, though, that even though the feedback rate was different for each teacher, and the output rate was different for each group, there was no significant difference between groups or teachers in regard to students' fluency.

Comprehensibility of the chat transcripts analyzed was generally high. More than 95% of the language was comprehensible, as I evaluated. However, one should mention that I am a sympathetic reader used to American language learners of German.

To summarize my findings concerning accuracy, errors by the case study subjects' were counted. In relation to the total German words used, an error rate was established (see table 5.1. for data summary). All case study subjects had an error rate below 20%. The two case study subjects from the SSC had the lowest error rate (SSCEmily 4.75% and SSCGina 7.25%) and the students in ESC the highest error rate (ESCAmanda 14.84% and ESCVictoria 19.45%). These error rates, at a second-year level

of language study, are encouraging as counter-argument for those who might claim that a focus fluency and/or using CMC at this stage of interlanguage development may lead to severely reduced accuracy.

Table 5.1. Case Study Subjects' Error (E) Rates.

Subject	NSCDanielle	NSCJennifer	SSCEmily	SSCGina	ESCAmanda	ESCVictoria
E Rate	11.18%	12.82%	4.75%	7.25%	14.84%	19.45%

As mentioned in the previous section, there was significant improvement from pre- to post-test; however, there was no difference in improvement between classes or teachers. Students were observed moving from making unsystematic errors to systematic errors. Furthermore, there was a significant relationship between words per minute produced by the students and the post-test scores, i.e., between indicators of fluency and of accuracy. Students with higher fluency also had higher accuracy.

Since there was only a limited amount of feedback, one fear was that there would be a high frequency of error uptake. However, as in Ene et al. (2005), error uptake was low. Only 4.91% of all errors in the six case study subjects' transcripts sets resulted in error uptake. Yet, it should be mentioned that the error uptake rate of 4.91% is in contrast to an overall other-initiated feedback rate of 5.45%. In addition, while 4.91% of errors resulted in error uptake, only 4.40% of other-initiated corrections (to only 5.45% of errors) resulted in correction uptake.

In regards to patterns between error type and error uptake, no clear patterns could be established. I am speculating that errors such as grammatical gender, plural forms, and

stem vowel changes in verbs may be more likely to result in error uptake than other kinds of mistakes based on the reading of all transcripts. However, this will have to be substantiated at a later point with more data and a more precise definition of error types. In regards to the source of errors, I found that MorningTeacher's errors least frequently resulted in error uptake (0%), followed by the students' errors (0.31%), and the errors that most frequently resulted in uptake were errors by EveningTeacher (16.67%). At this point, I am speculating that error uptake may be a result of error type and context. In addition, no correlation was found between teacher feedback rate and error uptake rate, i.e., providing more teacher feedback may not reduce error uptake rate.

To summarize 5.4, teacher and student language use in SCMC was presented. The teachers both used the target language almost all of the time, however, MorningTeacher used it more. Furthermore, EveningTeacher had a higher error rate than MorningTeacher. The students also had a high level of target language use, with the students taught by MorningTeacher using even more target language than the EveningTeacher's. The students in the three different classes received differing levels and quality of input, but, this did not effect their output frequency. In general, the teachers produced fewer words per minute than the students. Comprehensibility was above 95% for this researcher, and the error rate of case study subjects did not exceed 20%. All students improved from pre- to post-test; however, there was no significant difference between the groups. There was a positive correlation between the fluency and accuracy measures, with higher fluency matching up with higher accuracy. Error uptake (4.91%), other-initiated feedback (5.45%), and correction uptake (4.40%) were all infrequent. In addition, there were no

clear patterns between error uptake and error source, or type of error and error uptake, suggesting the need for further research with more data to pursue the questions raised by the dearth of clear patterns.

5.5. Students' Preferences and Actual Practices

As mentioned in chapter four, there were hardly any differences among opinions of the students in the different classes, taught by the two different teachers, or across time. Students reported liking corrective feedback, though some of the students expressed some caution in regards to peer feedback. Furthermore, some students expressed their fear of embarrassment due to corrective feedback, which is probably the reason why some students said that feedback should be done discreetly. However, students thought that feedback was necessary for learning. This finding confirms Schulz's (1996) survey study findings.

In addition, students considered chatting both fun and beneficial and technology in general was seen as a positive addition to the classroom. The limitations that were expressed by students were that it requires computer literacy and that technology can be a "hassle." Donaldson and Kötter (1999) came to a similar conclusion.

Students preferred a teacher who actively participated in chat and corrected their mistakes, which is in contrast to Donaldson and Kötter's findings. While students reported that they were able to identify their own and others' errors, only about half of them reported correcting their peers. Most students reported that they felt that all or most of their errors were corrected, which is in agreement with their preference. However, as

has been discussed previously, the vast majority of errors did not receive corrective feedback as evidenced in the transcripts, either from teachers or peers. As mentioned in chapter four, other-initiated corrective feedback ranged from 1.30% to 12.50% with a total of other-initiated feedback rate of 5.45%.

5.6. Implications for Teaching

From the research findings of this study, several recommendations can be made for the use of chat activities in the foreign language classroom. One should keep in mind, however, that teaching philosophies differ and that recommendations made have to be evaluated from the perspective of one's own teaching philosophy.

A controversial issue in the relation to the findings of this study is the issue of a focus on accuracy in foreign language classrooms. This expansive discussion will only be summarized here. Long and Robinson (1998) discuss three models: a focus on forms, a focus on meaning, and a focus on form. The focus on forms is a traditional approach that puts accuracy and the teaching of grammar in the foreground, whereas a focus on meaning puts communicative competence and fluency in the foreground. Focus on form in their definition is a hybrid form, in which a focus on accuracy is implemented during times of communication breakdown or in response to repeated errors made by several students. Structures are practiced through communicative activities that require the use of these structures.

The literature has discussed many advantages and disadvantages of a focus on accuracy that can only be summarized here briefly (for a more thorough discussion see

Doughty & Williams, 1998; Hinkel & Fotos, 2002). It has been argued that a critical period for naturalistic language acquisition may make it necessary for adult learners, who are beyond the critical period, to receive feedback and focus on accuracy. If not necessary, it had been argued that a focus on accuracy will increase the rate of acquisition for adults. Furthermore, the context of learning or the learning goals may also necessitate a focus on accuracy. As discussed earlier, learners expect a focus on accuracy and hence this focus in the classroom may have affective consequences, or simply produce a placebo effect. In addition, a focus on accuracy increases the explicit knowledge of the language, which may make acquisition easier.

On the other hand, a focus on accuracy may not be beneficial for spontaneous language use. Furthermore, it may even have negative affective results. Some argue that it can only be effective at later stages of language learning. It has been argued that students need to be ready for a structure before a focus on accuracy for that structure can be beneficial to them. Since the context and timing of a focus on accuracy have been controversial issues in the field of SLA, the decision is ultimately the teacher's as to how and when to implement such a focus on accuracy. In this study, some more thoughts to take into consideration in regards to these controversial issues have been presented.

The main finding of this study was that the rate of corrective feedback was low. However, neither positive nor negative consequences of such a paucity of feedback could be determined in this study. If corrective feedback is important to one's teaching philosophy, several recommendations can be made here. One recommendation made by one of the students was to use the transcripts for corrective feedback. This would allow

the teacher to connect the chat sessions to the regular classroom instruction and provide a focus on accuracy. Since students have a clear pattern of self-correction, utilizing their preferred form (marked partial repetitions with correction) may make it easier for the students to recognize that they are being corrected. Furthermore, at the beginning of the semester, the teacher could spend a session on teaching students how to provide recognizable peer feedback during chatting, and how to recognize the teacher's feedback. One of the findings of this study was that there is a positive correlation between teacher feedback and student self-correction. Therefore, in order to increase students' focus on accuracy, the teacher could increase teacher feedback.

Another major finding of this study is that despite significant differences between the teachers, there were only very few differences between the groups of students. Hence, differences in teacher implementation of activities may not be as influential as initially thought, as long as the same general materials are used. Even technological challenges did not appear to have a major effect on students' language learning and use, experience, or attitude, except for the amount of teacher output they were exposed to.

In regards to language learning, the rate of correction uptake was low in this study, which may again suggest that the focus on accuracy could be implemented by using the transcripts after chatting. Furthermore, error uptake was rare in chatting also, which may suggest that the low frequency of feedback does not lead to more error uptake. In fact, no correlation was found between amount of teacher feedback and error uptake. Additionally, the high level of target language use (over 90% in all cases) by both teachers and students is encouraging. However, since teacher target language use may

influence student target language use, teachers need to match their TL use their expectations of the students' target language use.

From the students' perspective, students reported chatting as an enjoyable and beneficial learning activity in their surveys. Considering that previous research has also found chatting to be beneficial for learning (Beauvois, 1992; Chun, 1994; Kelm, 1992; Kern, 1995; Warchauer, 1996), and that students in this study reported it as beneficial and fun, chat activities indeed augment regular classroom activities for some portion of the curriculum.

However, when implementing chatting in the classroom, grouping and group assignment has to be considered carefully. This study can only conclude that partner assignments were an important issue reported by the students. More research needs to be done to establish best practices for constellations of partner assignment for optimal learning results using SCMC.

Furthermore, to avoid confusion for the students, and in alignment with best practices for classroom teaching, the teacher should introduce the activities well, and connect them to the materials talked about during regular classtime. Additionally, the teacher may want to avoid using the "to all" function unless something has to be communicated to all students such as "class is over now." Teachers also need to be aware that during in-class chat activities in the same physical space, they have a role in both the physical and the virtual space.

While most transcripts looked at in the background study did not have any teacher participation at all, students report that they prefer an active teacher. A teacher who wants

to accommodate students' desires needs to provide feedback and actively participate during chatting. Other considerations for matching these desires should be the research results discussed in chapter two, suggesting the benefits of the negotiation of meaning, the importance of input, especially target-like input, and the potential necessity for a focus on accuracy for adult learners.

5.7. Implications for Program Administrators

Some of the recommendations made in the previous section will be discussed again from the perspective of a program administrator. First of all, based on the students' feedback and the comprehensibility of the students' transcripts, it can be recommended that using chat during second-year German is appropriate.

Second, since significant teacher differences were discovered in this study, a program administrator may want to set up clear guidelines for the chat sessions. Such guidelines can include but are not limited to the following: (1) desired level of target language use, (2) desired feedback rate and form, (3) guidelines for implementation and introduction of activities, (4) acceptable (for example asking additional related questions) and unacceptable (for example commenting on one's personal life) teacher and student moves, (5) acceptable (for example German music) and unacceptable (for example making a personal phone call) concurrent activities, (6) acceptable (for example the class textbook) and unacceptable (for example an internet translator) resources, and (7) the role assignment for the technological support staff and the teacher (for example: who assigns groups; who assists with computer problems).

Third, technological support staff's availability and knowledge had an impact on this study. The most significant impact that the absence or lack of expertise of the technological staff had was that the teacher experienced frustration. To ease the comfort level of teachers who might be hesitant to include SCMC as a regular part of their class activities, qualified personnel should be present, so that the teacher can concentrate on teaching. Furthermore, though this was not a concern at all in this study, in other courses at other institutions I have experienced more difficulties related to hardware failures or equipment problems. The constant monitoring and upkeep of the equipment and software by the College of Humanities Instructional Computing staff were necessary for the technological successes of implementing chatting here, and similar standards should be maintained whenever possible.

The fourth point that may be helpful for program administrators stems from input offered by the MorningTeacher. As mentioned before, she experienced many problems due to mistakes in login and logout procedures which in the absence of an expert Lab Assistant often could not be prevented or fixed. As a result of the challenges she had been very resistant to using computers in her teaching. However, after the semester was over, she told me that she would be using the same chat activities again in future semesters, for she found the chatting and the activities effective. Having taught in the program for five years, she has seen different implementations of the regularly scheduled lab day. She reported that from her experience, students usually did not like lab day and saw no connection to the regular class, as they reported in the university-wide teacher evaluation forms. However, in the semester when the study was conducted, she experienced very

different reports from the students, and therefore wanted to use chatting again in the future. I interpret the teacher's change in attitude, despite all her challenges, as an indicator that once teachers receive both some support and encouraging feedback from students, they are willing to see the positive in SCMC.

However, as always, there are problems with the implementation of chat activities. The most important issue is the availability and the quality of computer equipment and technological support staff. Therefore, research question 5 addressed the issue of moving chat activities from the same physical location to a distance learning environment. In such circumstances, I would like to make the following recommendations, even though they have not yet been the focus of SLA research: a glossary of task descriptions, the availability of a whisper function to teachers so that they can work with students individually as needed, training sessions for teachers and students, procedural guidelines, a back-up communication channel (e.g., second server or using email) , a listing of computer requirements, accessibility of computers, a list of resources for teachers and students, a messaging component to enhance interpersonal bonding, and focused efforts toward establishing community.

In summary, SCMC activities can be implemented in intermediate foreign language classrooms successfully, but the implementation hinges on availability of equipment and personnel, and the provision of guidelines and training.

5.8. Implications for Teacher Training

As mentioned above, teacher training is a crucial component of the implementation of chat activities in the foreign language classroom. Teachers need training on the equipment to be used, with some instructions on trouble-shooting. Furthermore, teachers need to know the available human resources in case of problems and need to be encouraged to use them. As an example mentioned before, MorningTeacher had the phone number of the Program Developer to call for help, but she never did. Teachers are well acquainted and comfortable with the role of “being in charge” of a class, and hesitate and fail to even think about calling for help during class activities. In a SCMC context, though, interdependence with technologically helpful human resources is a key to successful implementation.

Preparing teachers for the use of chat activities in the foreign language classroom goes beyond training on the technological knowledge. Much of the training needs to address the medium-specific issues and the consequential decisions teachers have to make for daily pedagogical implementation.

From my experience and based on the initial reported feelings of MorningTeacher, teachers new to the implementation of chatting in the classroom are often nervous about implementing CMC, doubting its value in relation to the learning curve. Besides the already existing research on CMC’s benefits that teachers can be referred to (for a good summary see Ortega, 1997), this study also confirms that the students in this study liked chat and saw benefits in using it. Furthermore, comprehensibility of transcripts and target language use were generally high, which

offers evidence to alleviate some of the concerns I have encountered in teacher training in regards to CMC.

However, teachers have several different participation styles at their disposal. As was discussed in chapter four, while there were differences between the two teachers' participation styles, there were fewer differences among the students' experiences and language use. Hence, even though choosing one participation style over another may not significantly affect the students' experiences or language learning, a teacher still has to make multiple decisions about details of implementation. While one choice over another with the data from this study cannot be shown to be more or less effective, every teaching moment still requires a decision from the teacher, whether it bears consequences or not.

In addition to reporting that they like chatting, students also expressed their clear preference for specific kinds of feedback. However, such preferences were not matched with actual practices. Consequently, a teacher has to make a decision as to whether to accommodate these preferences or not. While corrective feedback was generally infrequent in this study, it came from all sources, i.e., teacher, students, and peers. There was a relationship between the source of feedback and the feedback type. A teacher may want to consider adopting either the peer-feedback or the self-correction feedback type to match the students' own use of corrective feedback. Teachers in training should receive example feedback moves to use in their teaching. These sample moves could be provided to them in their pre-service or in-service training and have their sources in the body of CMC research or in the experiences of other teachers at the institution. Tables such as provided throughout chapter four summarizing feedback and teacher moves could be

used in teacher training to (a) raise teacher trainees' awareness and (b) have a class or departmental discussion about the moves that best fit the group's desired teaching philosophy and current SLA theories.

In this study, the amount of teacher input did not have an effect on student output. Furthermore, in this study more input came from the peers, i.e., as non-target like input, than from the teacher. A teacher may accommodate a situation like this by either participating more, or by using transcript work to identify non-target like language. Teacher training should discuss the advantages and disadvantages of higher levels of teacher input.

One of the most crucial differences between chatting and other classroom activities is that there are two instructional spaces: the physical and the virtual space. In this study the physical space was used by the teacher mostly for logistical and procedural interactions. Allowing the teachers to experience chatting from a student and from a teacher perspective may help them to raise awareness about these two spaces. Another beneficial activity may be to show teachers in training a video tape of a chat session and have them record the teacher's behavior in the physical space, so that they can collect ideas. In general, while classroom observations are often part of the requirements of a teaching methodology course, pre-service teachers (in my experience) usually choose and may even be encouraged to only observe regular class-time activities. Since teaching in the lab and implementing CMC activities require different teaching strategies than the regular classroom, such sessions should be part of the classroom observations required in

pre-service or in-service methods courses. Furthermore, in-service teaching evaluations should also provide feedback for both types of class sessions.

Another factor related to the medium that has been discussed in previous research, yet was not observed in the transcripts of the case study subject's in this study, is flaming (Abrams, 2003b). However, there were some indications that rude behavior was present at least in the ESC where the teacher was using more topic-expanding and fewer topic-focusing teacher moves. For example, during one classroom observation, one student repeatedly tried to get EveningTeacher's attention and finally called me (the researcher) over and told me that her partner was "being mean" to her; in the survey one student reported that some students were "dumm," and in the transcripts (not from the case study subjects) some potentially offensive language was used such as calling another student "Idiot." Teachers in training need to be aware of these behaviors and be presented with techniques to prevent or redirect discussions that make one or several students feel uncomfortable, offended, or even disrespected. One such recommendation is to provide clear guidelines at the beginning of the semester that explain acceptable and unacceptable comments. Such guidelines may differ from teacher to teacher, and institution to institution and will have to be developed locally in the same way a student code of conduct is developed locally. Writing such guidelines will require discussions among teachers with experience in CMC.

The last issue that I want to address in respect to teacher training is the "bells and whistles" of chat software. Different chat programs have different features. In the case of the chat server used for this study, the features included the "invisible" function used by

MorningTeacher and the “to all” function used by the EveningTeacher. During teacher training, such features and their purposes need to be discussed. From my observations in this study and my own experience, students appear to be accepting of the teacher’s use of the invisible function once they know that the teacher can be invisible, i.e., observing their session without appearing on the list of participants. However, informing students that the teacher has this “lurking” option may be helpful. Some students in the ESC appeared to be experiencing EveningTeacher’s use of the “to all” function as distracting or not relevant for their conversation. From my experience the “to all” function has been very useful, when a teacher tries to do most of the interaction in the virtual space and has announcements for the entire class, such as “class is over now” or an additional explanation of the task in cases when most students appear to be completing the activity incorrectly. However, using the “to all” function to converse with the students is challenging, for it is impossible that the posting matches the conversation in all chat rooms. Presenting teachers in training with transcripts of different implementations of the various features, and discussing them, will provide them with ideas of how and when to use which feature.

In summary, in order to implement chatting effectively in the classroom, teachers need to be specifically trained and prepared for the SCMC context of teaching. Such preparation needs to occur on two levels: (1) technological training, and (2) pedagogical training.

5.9. Connections to SLA Research

While some connections to research have already been made in the presentation of research results in this chapter, this section will reiterate these connections more specifically with second language acquisition (SLA) research. The order of discussion items will be identical to the presentation of the previous research in chapter two, thus providing a parallel structure.

As mentioned before, input, output, noticing, and the negotiation of meaning occurring during interaction are the foundations of the interactionist framework and have been claimed to be beneficial for learning (Beauvois, 1992; Chun, 1994; Kelm, 1992; Kern, 1995; Warchauer, 1996). During the chat sessions, students had the opportunity to receive input both from their peers and to a lesser extent from their more proficient teacher. Furthermore, they had the opportunity to practice their language through output considered an essential step in SLA by Swain & Lapkin (1995). In addition, the written format gave them the opportunity to compare their own sentences with those of others. Most students reported noticing errors in the other students' writings, which may have been actual errors, or wrong hypotheses of their own about the target language. The caution that needs to be expressed here is that the students were exposed to more input from their peers, which was not always target like, than from their teacher, which was target-like. In addition negotiation was observed in the transcripts. However, a direct relationship between the opportunities for input, output, noticing, and the negotiation of meaning with a positive effect on language development cannot be established in this study due to the limited amount of time spent chatting in comparison to the time spent

with other classroom activities. As Gass (1997) pointed out, some of the effects of interaction may be delayed, and no long-term effects were measured. However, in connection with other research, this study's results may suggest that the chat activities completed by the students in this study may be beneficial for language learning. These benefits resulted from activities that provided opportunities for language input, and output, and negotiation of meaning. During the chatting, students had the opportunity to produce L2 output, which as Gass and Selinker (2001) reported, plays the following roles: (1) creating knowledge from semantic to syntactic processing; (2) practicing or applying existing knowledge; (3) creating automaticity; (4) eliciting further input; and (5) testing hypotheses formed and receiving feedback about them in regard to the target language. Several students also stated a paraphrase of (2) above as one of the reasons why they thought that chatting improved their language ability. However, while students may have been able to test their hypotheses, they received only little feedback in response to such testing. Since Long (1996) considers feedback received during conversations beneficial, the low frequency of feedback may decrease the benefits of negotiation in chat.

As has been argued by researchers within an interactionist framework, the negotiation of meaning is considered beneficial for language learning (Doughty & Pica, 1986; Ellis, Tanaka, & Yamazaki, 1994; Gass & Varonis, 1994; Long, 1985; Pica, 1991; Pica & Doughty, 1985; Pica, Young, & Doughty, 1987) though such effects may not always be immediate (Gass & Varonis, 1994). Some of the strategies identified as components of the negotiation of meaning were also found in the interactions in the case

study subjects' transcripts sets, such as clarification requests, self-repetitions, and other-repetitions. Furthermore, several researchers claim that negotiation of meaning is the highest in dyads between non-native speakers such as the interactions during the chat session in this study (Gass & Varonis, 1985; Oliver, 2002; Pica & Doughty, 1985; Varonis & Gass, 1985; Yule & MacDonald, 1990).

Some researchers have argued that not just negotiations experienced directly by learners, but also observed negotiations of meaning may benefit language development (Ellis, Tanaka, & Yamazaki, 1994) though the benefit according to Mackey (1999) is greater if negotiations are directly experienced. Nonetheless, in this study, both observed and experienced errors and feedback moves were discussed as potential contributors to changes of learner language through uptake, error uptake, and hypothesis testing as observed in the detailed analysis of the pre- and post-tests. However, this conclusion is based on only a sample of the data. Firmer conclusions may be reached after analyzing all transcripts, rather than only selected case-study transcripts.

From the perspective of research on corrective feedback, input is divided into positive and negative evidence. In this study, students received positive and negative evidence, but the frequency of negative evidence was low. In addition not all of the positive evidence was target-like, due to the fact that the pairs and groups consisted of non-native speakers.

As had already been mentioned in chapter two, the differentiation between explicit and implicit feedback posed some challenges in regards to the feedback moves during the chat activities. According to Panova and Lyster (2002), explicit feedback is

feedback that contains an explicit signal. In the chat environment, repetitions were observed both with an overt signal and without. While repetitions are traditionally considered as implicit feedback, in this study, due to the overt signal, they may be considered explicit feedback. It was decided that the differentiation between explicit and implicit feedback is not as easily applicable to a written medium such as chatting; furthermore it did not appear to play a role in differentiating the feedback styles of the two teachers, because EveningTeacher seemed to have no clear preferred feedback style based on the case study transcripts. This issue of traditionally implicit feedback forms used with overt signals was also addressed in regards to recasts by Nicholas, Lightbown, and Spada (2001). Similarly to Ene, Goertler, and McBride (2005), this study also found that the use of “*” (asterisk) to mark corrections was common, at least among the students.

Previous research as discussed in chapter two, found that explicit feedback was infrequent (see for example Chun, Day, Chenoweth, & Luppescu, 1982; Seedhouse, 1997;) and implicit feedback was frequent (see for example Morris, 2002;). Since the definitions of implicit versus explicit do not seem applicable for the CMC context, this research can neither be confirmed nor questioned.

Looking further at the definitions of corrective feedback, repetitions and recasts have been differentiated. Repetitions are then repetitions without change and recasts are repetitions that correct the ill-formed part of the phrase (Panova & Lyster, 2002). Yet, Morris (2002) added more features to recasts, as discussed in chapter two. During the review of previous research, the definitions of recasts seemed too varied, and I, hence,

adopted the terminology of repetitions with and repetitions without correction. What Nicholas, Lightbown, and Spada (2001) referred to as recasts are referred to in this study as the repetitions with correction introduced with praise used by the MorningTeacher. Lyster (1998b) reported that recasts (called ‘repetitions with correction’ in this study) were often accompanied with approval of meaning (called ‘praise’ in this study). Doughty and Varela (1998) described repetitions with corrections as an unintrusive, low affective filter form of feedback. MorningTeacher mentioned the same reasons for preferring such a feedback style.

One more definitional issue to be taken into consideration when connecting this study to other research on SLA is the issue of attempted correction. Panova and Lyster (2002) define uptake to include both attempted and successful uptake. Just as Panova and Lyster (2002) considered both attempted and successful uptake, this study took note of corrective feedback both when it included an attempted and a successful correction, for it is argued that both are an indication of providing feedback. In the discussion of the use of corrective feedback in chapter four, attempted and successful corrections in corrective feedback moves were listed separately so that the corrective feedback moves found can be more easily compared with the existing research.

Another issue in the definition of the corrective feedback literature is the definition of uptake, as has been discussed in chapter two. In one sense the definition of uptake in this study was narrower, yet in another sense wider than that of other researchers. This study was narrower with regard to the possible functional categories that could be categorized as uptake. For example, Lyster and Ranta (1997) included in

their definition acknowledgment, repetition, and unsolicited self-repair, which were not considered as uptake here. On the other hand, Lyster and Ranta only consider uptake if it is immediately following the corrective feedback. This narrow definition was not adopted here, but rather in accordance with Mackey and Philp (1998), uptake was considered if it appeared at some point in the same conversation, i.e., the same chat transcript. As mentioned in chapter four, there were only four instances of uptake as defined for this study.

Moving on from the definitional differences and similarities between this study and the studies reviewed in chapter two, I will now compare the research results. Panova and Lyster (2002) summarized feedback applications and research as quoted in chapter two. In accordance with their statement, the teachers used various forms of corrective feedback; however, MorningTeacher had a clear preference, whereas EveningTeacher did not. In this study a relationship between error type and feedback type was not found due to the low number of feedback moves. Most research reports that recasts are the most common type of feedback. However, as mentioned before, the definitions of recasts differ. This study's 'repetitions with corrections' match some other researchers' definitions of recasts. Considering this, the present study can partially confirm the findings of other researchers (see for example Panova & Lyster, 2002). For example, MorningTeacher clearly used repetitions with correction, otherwise known as recasts, most frequently. However, EveningTeacher did not exhibit such a pattern. Panova and Lyster also discussed the problematic nature of recasts, as it can be difficult for learners to recognize them as corrective feedback rather than positive evidence. It is argued here

that since several learners were able to describe the corrective feedback style of MorningTeacher, some learners over the course of the semester were able to recognize repetitions with corrections as corrective feedback moves, if they were presented consistently. Panova and Lyster (2002) also argued that recasts that reduce the utterance and add stress are more likely to be recognized. In this study those feedback forms were referred to as marked partial repetitions, which weren't used by the teacher that frequently; however, the students used it for self-corrections. Furthermore, Panova and Lyster argued that feedback forms that involve the learner such as clarification requests are more likely to result in repair. This finding was somewhat confirmed by this study, but with only four instances of uptake present in the data set, the finding has to be seen in conjunction with the findings of others such as Panova and Lyster.

Nicholas, Spada, and Lightbown (2001) also discussed several features of effective corrective feedback as presented in chapter two. While quantitatively a difference cannot be proven, it appeared that the consistent feedback by the MorningTeacher was easier to be recognized by students based on a reading of all transcripts, which will have to be proven or disproven with a quantitative analysis at a later point. Students marked their self-corrections with an asterisk "*", potentially to make them identifiable as feedback. Looking at the description of effective feedback put forth by Nicholas et al. (2001) and Panova and Lyster (2002), it appears that the preferred self-correction feedback form used by all students in all classes may be the most effective form of feedback. Since this form, marked partial repetition with (attempted) correction, was not used as frequently by peers or the teacher as it was for self-correction, no

relationship to its effectiveness could be established in this study. However, for teacher training, one could suggest to teachers to adopt this feedback style used for self-correction since students are assumed to be more likely to recognize it. Not only is it a good idea for teachers to adopt that feedback style, but it would be even better if teachers would explicitly tell the students they are doing so.

As discussed in chapter four, uptake in this study was infrequent. Since uptake is seen as one measure of the effectiveness of corrective feedback, this may mean that the corrective feedback used was not effective. However, as Lyster (1998a) and Oliver (1995, 2000) point out, uptake can appear awkward in the discourse and may not always be present, even when recognition (noticing) and potential learning occurred. Instead, other measures of effectiveness should also be considered, such as noticing and language development. While Doughty and Varela (1998) found that students who receive repetitions with correction (also called recasts) showed more language progress on accuracy than a control group, the same could not be confirmed in this study. While it cannot be excluded that the feedback received by the students led to an improvement in language development, it cannot be proven either. Furthermore, since there was no significant difference between the three groups, claims cannot be made that the kind of feedback, or even the feedback in general received during chat made a difference in the students' language development.

Overall, research on recasts seems to suggest that recasts result in a low repair or uptake rate in comparison with other feedback forms (see for example Lyster & Ranta, 1997; Morris, 2002). While it can be confirmed here that repetitions with correction had a

low uptake rate, it cannot be confirmed that other feedback forms were more effective due to the infrequent uptake in general.

Looking at the amount of feedback reported in other studies, it has to be stated that feedback was less frequent in these groups and pairs comprised solely of non-native speakers, than in some of the research reported. For example, Lyster and Ranta (1997) found that 62% of errors received feedback, which is in contrast with 5.45% in this study.

Patterns between error type and feedback type as discussed in other research were not found here. The finding by Morris (2002) that morphosyntactic errors were responded to with recasts and lexical errors with negotiation moves can not be confirmed. Neither can this study confirm Lyster's (1998a) finding that grammatical and phonological errors were corrected with recasts while lexical errors were followed by negotiation moves.

In this section some of the previous research within the interactionist framework and on corrective feedback was discussed in relation to this study. While definitional issues, as well as research findings on feedback frequency and uptake, have already been discussed, error uptake has not been mentioned yet, and will be discussed as part of the question of language use in SCMC in the following section.

5.10 Connections to CMC Research

As discussed in chapter two, much of the research on CMC has compared face-to-face (F2F) conversations with those in a CMC context. Several of the differences in medium have been discussed in chapter two. One of those features was the absence of paralinguistic features, discussed for example by Donaldson and Kötter (1998). Since the

chatting in this study was done in the same physical environment, in contrast to the study by Donaldson and Kötter, students did not solely have to rely on the written chat medium to communicate with each other. They could see each other, though due to the screen names, they may not have known who they were chatting with. In addition, students were able to and did speak across pods to communicate with each other, especially in the ESC. Again, this is one of the reasons why thinking about modifications of chat activities in distance learning contexts, for example to include community building, is important. Additionally students also used emoticons, all capital letters, and extensive punctuation as other ways to compensate for lack of paralinguistic signs, as has been reported by others such as Kern (1995).

As discussed in chapter two, research methodology is problematic for CMC. As Smith (presentation at CALICO, 2005) had indicated, observations of the physical environment are crucial. While the attempt was made to follow his recommendation in this research study through the use of classroom observations and the self-report forms, there were still several methodological issues which will be discussed in more detail in a later section of this chapter and have been mentioned throughout chapter four. Since labeling of subjects was different in the self-report forms, the classroom observation notes, and in the transcripts, it was hard to triangulate these data sets. The observed chat sessions may not have been representative of all chat sessions. For example, MorningTeacher never played music when she was observed; however, in informal conversations she mentioned playing music during chatting. Additionally, while EveningTeacher explained the activities in German with a translation of key words and

grammar explanations in English during the classroom observations, on another occasion she was observed introducing the entire activity in English. In addition, since the chat server did not record key strokes, not everything that students typed was recorded. Also, students were only partially found to be a reliable source of information in their self-report forms. For example, their reports about the amount of time spent chatting were mostly incorrect.

One of the findings from early research has been that CMC encourages target language use (see for example Beauvois, 1992, 1997, 1998; Chun, 1994; Kelm, 1992; Ene, Goertler, & McBride, 2005). Extensive use of the target language was also confirmed in this study. While in a tandem learning context, Donaldson and Kötter (1999) reported frequent code-switching, evidence for the phenomenon was very limited in this study.

Furthermore, CMC can enhance language development (Beauvois, 1992; Chun, 1994; Kelm, 1992; Kern, 1995; Warschauer, 1996). Due to the limited time spent chatting in comparison to the time spent in the traditional classroom context, such conclusions cannot be drawn from this study. However, the majority of students reported that they felt that chatting improved their language ability.

One of the concerns about CMC has been the issue of accuracy (see for example Beauvois, 1992; Kern, 1995). Research results so far have been contradictory. In this study the error rate was 4.40% and the error uptake rate was 4.40%. Ene et al. (2005) found little evidence of error uptake.

One of the underexplored issues in CMC is the use of feedback in CMC. Sotillo (2005) reported that when learners received feedback, NNSs provided explicit and NS implicit feedback. Obviously such a comparison was not made in this study, and as mentioned before, the terms explicit and implicit were not adopted here. However, for peer feedback students mainly used models, which are considered an implicit form of feedback, and the peers were NNSs. Learners received corrective feedback, but it was infrequent, and there was a difference in style and frequency between the two teachers. No clear patterns were found between uptake and feedback type, unlike Ene et al. (2005). However, it was confirmed that error uptake was rare and that self- and peer correction, while present, were also infrequent. Yet, as Smith (2001) argued, chatting exhibits disjointed negotiation moves, which may make it harder to identify uptake.

One of the main benefits discussed, especially in early CMC research, is the democratization (Beauvois, 1998; Kern 1995) or equalization effect (Beauvois, 1992, 1998; Bump, 1990; Kelm, 1992; Kern, 1995; Warschauer, 1996) for the teacher and students introducing topics. As discussed already, since students exhibited more words per minute than the teacher, one can argue for such an effect in this study. However, the teacher-only functions used such as the “invisible” and the “to all” functions may arguably not contribute to such a democratization. While in MorningTeacher’s case it was confirmed that most of the topic initiation came from the students and not the teacher, this was not the case with EveningTeacher.

Donaldson & Kötter (1999) reported that the teacher was seen as an intruder, which was not the case in this study. Students actually reported preferring active

participation from their teacher. No silencing effect due to feedback style was found either, in contrast to the results from Ene et al. (2005).

An affective benefit of CMC has been the increase of student motivation (Batson, 1998; Beauvois, 1992, 1998; Bump, 1990; Donaldson & Kötter, 1999; Kelm, 1992). In this study no direct measures of motivation were made. Nevertheless, I can conjecture that, since the majority of students reported enjoying chatting and also saw it as beneficial, SCMC may be a factor contributing to an increase in motivation. Furthermore, the MorningTeacher reported that while in the past the students always disliked the lab sessions, now that they included the chat activities, students liked lab day, also giving credence to the idea that SCMC may contribute positively to student motivation.

One of the logistical issues and differences between asynchronous and synchronous CMC discussed was the use of resources. Abrams (2003) argued that in comparison to APMC, the use of resources was cumbersome in an SCMC environment. This cannot be confirmed by this study. The students used online and physical resources while chatting, according to my classroom observation notes, and in their own reports. Furthermore, most students over the course of the semester were able to arrange the windows on their computer monitors, so that they could use an online dictionary, the chat window, and the course management web site all at the same time. Furthermore, students still asked the teacher and their peers questions in the physical and in the virtual environment. These human resources would have been harder to come by in an APMC, dispersed or distance learning context.

Another logistical issue discussed in the research is technical difficulties. Donaldson and Kötter (1999) found that experiences with technical difficulties minimized the benefits of CMC language learning encounters. While as such this finding cannot be confirmed, it has to be mentioned that the MorningTeacher experienced frustration and challenges due to technical difficulties. Furthermore, a few students commented on technical “hassles” as limiting the benefits of computer use in the classroom. In this study, from my perspective the most challenging aspect of the technical difficulties was the loss of transcripts for research purposes.

While tasks have been discussed in the SLA and the CMC research as a factor, in this study, task type was not analyzed. However, it appeared that the task type itself did not play as much of a role for the students’ experience according to their reports in the survey, as the implementation of the task by the teacher. The teacher moves during chatting appeared to be seen as a model by the students, again, making the implementation the factor in differences and not the task itself. Yet it cannot be excluded that the various task types also played a role in differences of language use in different transcripts by the same student.

5.11 Limitations

As mentioned throughout chapter four and this chapter, while measures were taken to limit methodological problems, this dissertation has some major limitations. First and foremost, the small number of subjects, especially the teachers and the case study subjects, does not allow for generalization of the research results.

Furthermore, unanticipated differences and challenges influence the results of this study. Most importantly, the computer challenges in NSC and SSC, which led to partial and complete transcript loss, limit the comparability of transcript sets. In addition, differences in test administration between the morning classes and the evening class also influence the comparability of the results. The different labeling of data sets (screen names vs. descriptors vs. anonymous postings) and the subsequent difficulties in the attribution of data produced at different times to the specific individuals impacted my ability to triangulate data from the different sets in regards to specific subjects. The self-report form was even further challenging due to the formatting provided by the course-management software, so its results had to be eliminated in any discussion of teacher, group or individual differences. Also, the teachers rarely turned in the automated chat analysis sheet, which resulted in a need to find alternative ways to measure word count. However, since the chat analysis program would not have been able to differentiate between German or English words and names or not names, some counting “by hand” would have been necessary regardless.

A limitation, and at the same time a finding, is the different implementation of the chat between the two teachers. Differences included the introduction of activities, the interpretation of the activities, the definition of the scope of the task through own teacher moves, the group assignments, and group size.

Another limitation of the study is the absence of inter-rater reliability for the scoring of the tests, as well as the coding of the data. While an attempt was made to make

scoring and coding sheets as explicit as possible, it does not replace the coding and scoring by another trained rater.

Finally, since chatting was only a minor portion of class, students' experiences, attitudes, and language learning were most likely influenced by the chat sessions only in a minor way. Furthermore, language learning is a multi-faceted process with many variables that cannot be controlled in a classroom-based study.

5.12 Directions for Future Research

While this study provided some new and confirmed some previous results, it also posed new research questions. Limitations in the research design also provide new ideas for future research.

In regards to corrective feedback, several questions still remain open: (1) Can pauses be considered clarification requests? (2) If so, are self-corrections following clarification requests then forms of uptake? (3) What patterns exist between error type and error treatment? (4) Which forms of feedback are most effective during chatting? (5) Is the best time for a focus on accuracy during the chatting, or would it be better implemented by using transcripts to focus on accuracy or simply focus on fluency? (6) What are the short term and long term effects of the feedback received during chatting? (7) Are weaker students more prone to error uptake than stronger students? (8) What are the qualitative and quantitative differences in corrective feedback, error uptake, and uptake when comparing face-to-face and chat conversations? (9) Are there individual

factors that influence the patterns of feedback received or provided and effectiveness of feedback provided or received?

The following questions emerged from this study as open questions in respect to SCMC: (1) How do individual differences such as age, previous experience with technology, and previous experience with classroom language learning affect students use of the chat medium and the effectiveness of corrective feedback given in that medium? (2) Which of the proposed modifications for a distance learning environment are effective? (3) Are medium-specific writing conventions based on the English language such as “BRB” used by the majority of target language chatters, and if so, how should they be dealt with in a foreign language classroom? (4) What are effective grouping strategies for chat activities? (5) What are the effects of task type on language learning success?

Since there were various limitations of this study, the following recommendations are suggested: (1) an in-depth analysis of the remaining transcripts to confirm or question results found in the case study subjects’ transcripts; (2) further case studies with different teachers; (3) replication of the study with a more reliable chat server; (4) research methodology that captures more of the interactions in the physical environment, such as multiple video cameras; (5) correlation between structures receiving feedback during chatting and improvement on those structures on the test; (6) more refined and generally acceptable definitions of error types, feedback types, and uptake; (7) assessment of inter-rater reliability for test scoring, error coding, and feedback coding.

5.13 Final Comments

In conclusion, chatting and corrective feedback were seen as positive learning experiences by the majority of students. In contrast to the overall experience by the students, the MorningTeacher experienced some struggles with the implementation of SCMC. From the researcher's perspective, and contrary to expectations, corrective feedback was infrequent in general. Despite the differences between the two teachers, there were not many differences among students' experiences and learning irrespective of their teacher and class. An incidental finding, was that students made no indication, through comments on questionnaires and surveys, that they were aware of the teacher's role in the physical space of the CMC classroom, nor that they were responding to the teacher in the physical space when the SCMC context is most salient.

While the study was able to respond to the research questions and provide further insights to the field of SLA research, it also posed new questions. Furthermore, due to the limitations in research design and implementation, no generalizations were possible. Hence, as always, more research needs to be done.

APPENDIX 1: Error Coding Sheet

Zeichen	Übersetzung	Beispiele
E	Incorrect ending	<i>ein guter Buch:</i> ein gutes <u>u</u> Buch
PL	Incorrect plural form	<i>die Kinds</i> die <u>Kinder</u>
WW	Incorrect word choice	<i>mit dem Auto gehen</i> mit dem Auto <u>fahren</u>
SVA	Subject and verb do not agree	<i>er gehen</i> er <u>geht</u>
VF	Other verb mistake .	<i>Ich bin gehen zum Geschäft.</i> Ich <u>gehe</u> zum Geschäft
P	Incorrect verb participle	<i>Sie ist gegeht</i> Sie ist <u>gegangen</u>
T	Incorrect verb tense	<i>Gestern kommt sie.</i> Gestern <u>kam</u> sie (Gestern <u>ist</u> sie gekommen)
WST	Incorrect word order	<i>Ich gebe dem Kind es.</i> Ich gebe <u>es</u> dem Kind.
V//	word(s) missing	<i>Ich fahre Cleveland</i> Ich fahre <u>nach</u> Cleveland.
?	sentence is unclear	<i>Ich Dose das machen.</i> Ich <u>kann</u> das machen
PN	Wrong pronoun	<i>Stefanie ruft seinen Vater an.</i> Stefanie ruft <u>ihren</u> Vater an.
Pr	Wrong preposition	<i>Er geht auf das Kino.</i> Er geht <u>ins</u> Kino.
X	Unnecessary Word	<i>In 1994 kam er.</i> 1994 kam er.
TMP	Time Manner Place	<i>Ich fuhr nach Hause gestern.</i> Ich fuhr gestern nach Hause.

Adapted from models by Nikhil Sathe, R. Minert and Kathryn Corl

APPENDIX 2: Sample Chat Transcript

Student 1 (11:12:10): Connected & Entered Channel 1
Student 1 (11:12:28): was haben?
Student 1 (11:12:33): hallo...
Student 2 (11:12:37): hallo
Student 2 (11:12:43): wie geht's?
Student 1 (11:13:23): du hast eine gut tage?
Student 2 (11:13:45): ja, danke
Student 2 (11:13:48): und du?
Student 1 (11:13:49): ich bin gut
Student 1 (11:14:20): ja
Student 2 (11:14:39): hast du die anweisungen gelesen?
Student 1 (11:15:5): was du im einer Friezheit?
Student 2 (11:15:38): ich gehe ins Kino
Student 1 (11:15:56): nein, ich lese nicht
Student 2 (11:16:1): haha
Student 2 (11:16:55): Wan musstest du aufstehen, als sie in der 8. klasse war?
Student 1 (11:18:11): Deustsch ist meine erste Klasse
Student 1 (11:18:46): ich stehe um 10 Uhr auf
Teacher (11:19:50): Ja, aber wann musstest du aufstehen, als du in der Schule warst?in der 8.Klasse?
Student 2 (11:20:43): Als ich in der 8. klasse war, bin ich um 7 uhr aufgestanden.
Student 1 (11:21:49): ich will schalfen um 7 Uhr
Student 1 (11:22:4): Welcher Film du hast gesehen?
Student 2 (11:22:46): Ich habe viele Film gesehen
Student 1 (11:23:27): was ist einer Lieblings Film?

APPENDIX 3: Pre-Survey

Background Information Survey

Thank you for taking the time to complete this survey. This survey is intended to provide background information about your language learning and computer-mediated communication experiences. The surveys will not be shown to your instructor and will have no effect on your grade. The screenname you picked and will use throughout the semester, will be replaced with a pseudonym, so that any publication of the research results will not contain your name or your screenname.

I. General Information

1. Screenname: _____
2. Section: _____
3. Age: _____
4. Gender: F _____ M _____
5. Which languages do you speak?
 native language: _____
 foreign/second language: _____
 Others: _____

6. How would you describe your German ability?

7. Is German the first language that you are learning in a classroom? Yes ____ No ____

8. Is German the only foreign language that you have learned? Yes ____ No _____

II. Please respond to the following statements by circling the appropriate answer: strongly disagree (1), disagree (2), agree (3), strongly agree (4). Feel free to explain your answer in the space provided.

1. When I say something wrong, I like it when the teacher explains to me what is wrong in front of others.

strongly disagree disagree agree strongly agree

Explain: _____

2. I like it when my teacher corrects me.

strongly disagree disagree agree strongly agree

Explain: _____

3. I don't think my classmates should correct me.

strongly disagree disagree agree strongly agree

Explain: _____

4. When I say something wrong, I like it when the teacher writes the correction on the board.

strongly disagree disagree agree strongly agree

Explain: _____

5. I like it when my teacher helps me in getting my meaning across rather than fixing every error.

strongly disagree disagree agree strongly agree

Explain: _____

6. When I say something wrong, I like it when the teacher tells me that what I said was wrong without telling me the correct form.

strongly disagree disagree agree strongly agree

Explain: _____

7. I believe using technology in the language classroom is beneficial for language learning.

strongly disagree disagree agree strongly agree

Explain: _____

8. When I am in a language classroom, I want the teacher to focus on the grammatical accuracy of what I say and not focus on responding to what I am saying in terms of content.

strongly disagree disagree agree strongly agree

Explain: _____

9. When I say something wrong, I like it when the teacher rephrases what I said and asks if that is what I meant.

strongly disagree disagree agree strongly agree

Explain: _____

10. When the teacher corrects me, I am uncomfortable.

strongly disagree disagree agree strongly agree

Explain: _____

11. In a foreign language class using computers gets in the way of really learning the language.

strongly disagree disagree agree strongly agree

Explain: _____

12. My classmates can help me by pointing out my errors.

strongly disagree disagree agree strongly agree

Explain: _____

13. When I say something wrong, I like it when the teacher rephrases what I said so that it contains no errors and then moves on.

strongly disagree disagree agree strongly agree

Explain: _____

III. Please respond to the following statements by circling the appropriate answer: never (1), rarely (2), sometimes (3), or always (4). Feel free to explain your answer in the space provided.

1. I have used chat/ messaging software (ICQ, Instant Messenger, etc.) to communicate with friends.

never rarely sometimes always

Explain: _____

2. I have used chat and messaging software to communicate for work or for school.

never rarely sometimes always

Explain: _____

3. I have used chat in another foreign language classroom.

never rarely sometimes always

Explain: _____

4. My teacher mainly corrects only certain kinds of mistakes I make during class.

never rarely sometimes always N/A

Explain: _____

5. My teacher mainly corrects only certain kinds of mistakes during chat.

never rarely sometimes always N/A

Explain: _____

6. When the teacher corrects mistakes during chat it is really unkind to the student.

never rarely sometimes always N/A

Explain: _____

7. In my other language classes, my teachers corrected certain kinds of students' errors in spoken conversations.

never rarely sometimes always N/A

Explain: _____

8. In my other language classes, my teachers corrected certain kinds of students' errors in written assignments.

never rarely sometimes always N/A

Explain: _____

9. In my other language classes, my teachers corrected certain kinds of students' errors during chats.

never rarely sometimes always N/A

Explain: _____

Is there anything else you would like me to know? Comment below.

Thank you very much for your participation.

APPENDIX 4: Pre-Test

Screenname: _____

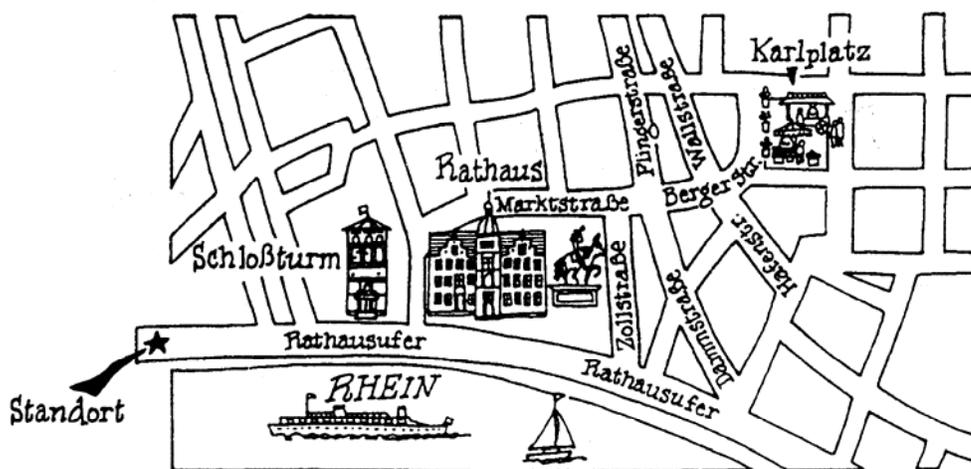
Section: _____

Einstufungstest für Deutsch 200

Welcome to 200 level German classes at the University of Arizona. We are excited to have you in our courses. Even though some of you have already taken a general placement exam, your participation in this placement exercise, will afford us to provide better instruction for you. This is a placement exam specific to your curriculum. The test will not be graded. However, it is important that you show your best effort on this test, for your performance will guide the teacher of your class in his/her teaching and preparation for this course. You should be able to complete this test in 50 minutes. Since it is a placement exercise, there will be exercises you are unable to complete. We appreciate your time and effort.

I. Hörverständnis: (10 Punkte)

Nach dem Weg fragen. Listen to the directions twice and indicate on the map how you get to **Karlplatz** from where you are now. Your starting position is marked with an asterisk.



II. Lesen: (10 Punkte)

A. Märchen. Read the following Märchen and answer the questions below.

Es waren einmal ein König und eine Königin, die wollten so gern ein Kind. Als die Königin endlich eine Tochter bekam, war die Freude groß. Sie veranstalteten ein Fest und luden zwölf Feen ein, verzauberten aber die dreizehnte. Die dreizehnte Fee kam und verwünschte die Tochter, das Dornröschen. Sie sollte sich an einer Spindel stechen und sterben. Die zwölfte Fee änderte den bösen Wunsch. Dornröschen sollte nur hundert Jahre schlafen und nicht sterben. Als Dornröschen fünfzehn Jahre alt war, ging der böse Wunsch in Erfüllung. Sie stach sich an einer Spindel und fiel in einen tiefen Schlaf. Mit ihr schlief das ganze Schloss ein, alle Menschen und alle Tiere. Um das Schloss wuchs eine große Dornenhecke. Als 100 Jahre vorbei waren, kam ein Prinz zur Hecke und die Dornen verwandelten sich

in Blumen. Er ging ins Schloss, fand Dornröschen und als er sie küsste, wachte sie auf. Alle anderen Menschen und alle Tiere wachten auch auf. Der Prinz und Dornröschen heirateten. Und wenn sie nicht gestorben sind, dann leben sie noch heute.

1. Was wünschten sich König und Königin?

2. Wie feierten sie die Geburt ihrer Tochter?

3. Wie viele Feen wurden eingeladen?

4. Was machte die 13. Fee?

5. Was machte die 12. Fee?

6. Was passierte, als Dornröschen 15 war?

7. Was geschah mit den Menschen im Schloss?

8. Wann kam der Prinz?

9. Was machte der Prinz?

10. Was passierte dann?

III. Grammatik: (10 + 10 + 10 + 10 Punkte)

A. Im Bad. Describe what you do with the following items. Write sentences using reflexive pronouns.

MODELL: Mit einem Kamm? → *Ich kämme mir die Haare.*

1. Mit einer Zahnbürste?

2. Mit Shampoo?

3. Mit Seife?

4. Mit einem Föhn?

5. Mit einem Rasierapparat?

B. Baby-sitting. Eva is baby-sitting the neighbors' twins. Even though they are a boy and a girl, she has a hard time telling them apart, so when she is there she keeps a log, so that she can report to the parents. Below are the phrases from the sentences in her log. Put the phrases in the sentences into the right order. Pay attention to the cases!

MODELL: der Junge / dem Kind / einen Ball geben → *Der Junge gab dem Kind einen Ball.*

1. ein Auto / dem Jungen / das Mädchen / schenkte

2. er / es / ihr / gab / zurück.

3. er wollte, dass / den Ball / ihm/ sie zurück gibt.

4. ihm / ihn / sie / gab / zurück

5. den beiden/ ich / ein neues Spielzeug /gab

C. Unsere Jugend. Thomas and Markus are sitting at "Stammtisch" reflecting on their youth. Connect the sentences with the conjunction in parentheses.

MODELL: Wir mussten das Haus des Schuldirektors streichen. Wir haben am 1. Mai Kuhmist an seine Wand geschmiert. (weil)

→ *Wir mussten das Haus des Schuldirektors streichen, weil wir am 1. Mai Kuhmist an seine Wand geschmiert haben.*

1. Nachts waren wir oft lange aus. Wir sind nach Mitternacht oft im Schwimmbad geschwommen. (und)

2. Wir waren schon mit 14 bis nachts um drei in der Discothek. Wir wurden nie von der Polizei verhaftet. (aber)

3. Wir haben viel Alkohol getrunken. Wir waren auf der Berufsschule im Schwarzwald. (als)

4. Wir haben unsere Ausbildung gut abgeschlossen. Wir waren selten im Unterricht. (obwohl)

5. Wir hatten in unserer Jugend sehr viel Glück. Wir hatten nie einen schweren Unfall. (denn)

D. Multikulti. Ender talks about immigrants in Germany. Fill in the endings for him.

MODELL: In Deutschland gibt es viel___ Ausländer.

→ *In Deutschland gibt es viele Ausländer.*

1. In unser___ Land (N.) leben viele Ausländer.

2. D___ meisten Ausländer (Pl.) kommen aus d___ Türkei.

3. In d___ 50er Jahren (Pl.) kamen d___ Menschen (Pl) auch aus mein___ Heimatland (N.) nach Deutschland.

4. Dies___ Ausländer (Pl.) sind d___ Gastarbeiter (Pl).

5. Mein___ Vater (M.) ist auch ein___ Gastarbeiter (M.).

6. D___ Mutter (F.) mein___ Vaters (M.) hat mein___ Vater (M.) nach Deutschland geschickt.

V. Sprechen (20 Punkte):

You are starting your study abroad year in Freiburg. You just arrived at the train station and are met by a representative of the International Student Association. You have many questions and comments for the representative. Record five questions about university-related information (How do I register for classes?) and information about the city. Since you do not know this person, you need to ask polite questions using subjunctive or indirect questions. You have just experienced your first four hours (arrival at Frankfurt Main airport and the train ride to Freiburg) of German culture, record five comments on your experience so far. Remember to be polite. Also record five comments about what you would like to do while studying in Freiburg. Use the subjunctive.



APPENDIX 5: Teacher Manual (excluding portions already in Appendices)

Dear >>>>>>

Thank you so much for agreeing to participate in my dissertation study. This manual is intended to make things easier for you. Should you have any other questions or concerns during the course of the study, please, let me know. Your feedback is very valuable to me.

Here is a quick overview of the requirements for the study:

- students and you pick screennames and keep them for the rest of the semester
- students and you sign the consent form during the first week of class.
- students take the placement exam August 24th, 2005 in the lab – tech personnel will help with the speaking portion of the exam
- students and you take the background survey on August 24th, 2005 in the lab (you can fill it out in Word and then drop it into the D2L online drop box, or on paper and turn it in to the lab personnel)
- starting in week 2 you and your students will engage in 20 minute chat activities from this manual (also available at the course D2L web site)
- at the end of each chat session, please print out the chat analysis and chat question consoles and put them into my mailbox
- after chatting leave 2-5 minutes for the students and yourself to complete the Self Report For on D2L.
- several times during the semester I will sit in on the class and see what kinds of study-related issues arise during chatting
- students take the exit exam December 7th, 2005 in the lab – tech personnel will help with the speaking portion of the exam
- students and you take the background survey on December 7th, 2005 in the lab (you can fill it out in Word and then drop it into the D2L online drop box, or on paper and turn it in to the lab personnel)

This manual includes:

- Participation Ideas
- Procedural Overview
- Instructor Instructions for COH Chat Client
- Student Instructions for COH Chat Client
- Trouble Shooting Help Manual for COH Chat Client
- Navigation Instructions for D2L 201 Main Site
- Chat Activities for Chapters 9-12

I am wishing you a great semester and lots of fun with the activities.

Thank you,

Senta

Participation Ideas

Here are some ways that other teachers in the past have interacted with their students. You can read through the examples for inspiration.

Teacher logged in

<S1> hallo

<S2> hallo

<S3> Jutta, was hast du seinen Haare gemacht !!!!!

<S1> ich mochte meiner haare

<S2>: ja!

<S1> Diese schnitten is sehr schon

<S3> nein, das ist schlecht!!

<S2> du verstehst nichts

Teacher logged out

<S1> Die Uhr ist über dem Sofa.

<S2> Ich JA

<S2> bitte

<S2> ja

<Teacher> Was meinst du?

<Teacher> Welche Zimmer beschreibt S1?

<S2> ahhh

<Teacher> Felipe, du musst raten

<S2> raten?

<Teacher> 'raten' bedeutet "guess

<S1> Was Bild ist das?

<Teacher> *Ist es Bild eins?

<Teacher> Du bist dran

<S1> Okay, numero 1?

<S2> ja

<S3> Ich bin dran

<S1> ist es Nummer eins?

<Teacher> Na?

<S2> Ja, okay, nummer eins! Und für mich, die Zeitung ist auf dem Schrank.

<S1> Das Uhr is halb vor elf

<Teacher> Die Uhr zeigt halb elf

<S1> der sofa ist neben dem schrank

<Teacher> das Sofa

<S1> Hallo!

<Teacher> Hallo

<S1> Tschüss

<Teacher> Tschüss!

<S2> Tschüß

<Teacher> Schönen Abend noch!

<S3> Tschüss~!

<Max> Das Vyedanya

<Teacher> Bis Mittwoch!

<S4> Sayonara

<S1> Ich hatte viele CDs- ein Kriminal stahl alles!

<Teacher> Was ist das Krimanl Stahl? Kenne ich nicht.

<S1> stahl=stehlen, ja?

<Teacher> Oh du meinst du lädst dir alles vom Internet runter?

<S1> Malst oder zeichnest du?

<S1> Ich kann nicht.

<S2> Nein, ich habe null Talent

<S2> und du?

<Teacher> Ich auch nicht.

<S1> Was ist dein libelingsradio?

<S1> Lieblingsband, vielleicht?

<Teacher> Die meisten sind nun schon fertig, dann gehen wir weiter. Okay, dann machen wir nun mal die Situation 16 –

<S1> Ich wurde FAHRENHEIT 9/11 sehen.

<S1> gesehen.

<S2> nein. Ich will das nicht sehen.

<S1> warum?

<S2> Ich hasse Micheal Moore.

<S1> Wir können sehen nach Ausburg.

<S2> "bowling for columbine" war sehr schlecht.

<Teacher> ODer vielleicht die Frauen von Stepford?

<S1> Ich habe nicht sehen aber ich wunchen.

<S1> Die Frauen von Stepford ist nicht so gut.

Procedural Overview

Before class:

- pick a chat activity from the Manual (they are organized by Kontakte grammar sections)
- either make photocopies for the students or use the D2L web site

Before chatting:

- explain the activity
- explain any unfamiliar words if necessary
- assign groups/pairs (students who did not give consent to participate in the study should be grouped together)
- log into the computers using your class account
- log into the chat client (see guidelines for Instructors)
- have students log into the chat (see guidelines for Students)

During chatting:

- have the students chat
- you can interact with the students whichever way you prefer including just observing
- see the Participation Ideas sheet for examples from other classes on different ways you can interact with the students during chatting
- pull up the analysis and question console at the end of chatting
- have students log out (see guidelines for students)
- print the analysis and question console (to be dropped of in my mailbox)
- log out of the chat (see guidelines for instructors)

After chatting:

- have students fill out the Self Report form on D2L
- fill out the Self Report form on D2L

Navigation Instructions for D2L 201 Main Site

Procedures:

- go to www.d2l.arizona.edu
- go to the box entitled NetID Login in the top left
- click onto UA NetID Login
- put in your NetId and password just like you would for webmail
- in the middle of the page is a box with all of the courses
- click on the cross next to Fall 2005
- click on the cross next to German Studies
- click on the course entitled “Ger201 Main Site for FA 05 001 002 003 Goertler”
- at the end click on the Logout button on top of the blue bar

Navigation Bar:

- under the thick blue bar on top is your navigation bar
- the navigation bar includes the following
 - Course Home
 - Content (this is where the Activities and the Surveys are posted)
 - Discussion (here you can leave feedback and ask questions about the technology and the activities – all 201 students and instructors + myself have access)
 - Dropbox (here you and the students can submit the survey as a word document)
 - Survey (this is where you retrieve the Self Report Form at the end of each chat session)

Retrieving Activities

- click on content
- click on the appropriate activity and you are good to go

Retrieving Survey

- click on content
- click on the Background Information Survey
- open word
- select all text and copy it into word
- save it under your screenname in the class folder
- fill out the survey – highlight instead of circle
- save the survey again and close the document

Submitting Survey

- click on the dropbox
- click on the available folder
- click on browse
- find your survey on the desktop

- click upload
- click done

Completing the Self-Report Form

- click on survey
- click on Self Report Form
- fill out the form
- save
- submit
- click ok



Chat Client – Troubleshooting:

Pre-Chat Requirements and Warnings:

1. Students **cannot** log-off their computers (soft or hard boot) without closing down their clients. This means they must click on File => Quit, or the fifth button from left, or the [X] box in the upper right.

* If they do not log-off first they will crash the server, thereby stopping all research files from being created.*
2. The server must be started on the teacher station before students can connect and begin chatting to each other. To do this: log into the computer using your username and password, find the ChatServer file on the desktop, and double-click it. Double-click only once or you may start the server twice and cause problems.
3. Remind students to double click on the Chat Client icon only *once*. Repeated clicking will lead to multiple clients being opened and the eventual slowing down and halting of the computer. Patience is needed after they initially start the client. The title image will display and the program will begin.

Common Problems and Questions:

- My students are connecting, but I am not seeing them on the server.

Chances are that you may have started the server more than once. Look down at the taskbar and click through the applications you have open. If you see two copies of the server then it is best to close both of them and start the server again. If your students are *already connected* and chatting on one of the running servers, then it is alright to leave it running and close the second server.

- It is taking a long time to move between channels on the server.

This means that one of the connections between a client and the server has crashed. It will continue to propagate until the server is shut down. Nonetheless, chat can continue

and students should be able to finish up the class without problems. (If they do experience problems, see one of the latter situations.) An unfortunate problem with this is that you will be forced to do an ‘end task’ on the server to stop it. This will stop all research files from being created.

In the future it is helpful to monitor the server during chat and if it slows down, immediately go to File and Quit. If the server is ultimately shut down, research files will be created. Unfortunately this will disconnect all students who are currently talking. Once the server has been restarted they can reconnect exactly like they did in the beginning (typing in their name and choosing a channel) and continue talking.

- A student’s connected client has stopped and no typed messages will go out.

At this point the student must disconnect from their channel. This can be done with either the second button from the left or File => Close Connection. The next action depends on how many people this is occurring to.

1. Only one student is having this problem.

The student can reconnect by clicking on the first button or File => New Connection and choose the channel they had previously. It is highly recommended that the student change their name to something other than the ‘exact’ name they had previously. Anything similar is perfectly fine. As long as the student has not closed their client, only one transcript file will be created. It will contain their previous chat, disconnection, reconnection, and the new discussion.

2. Everyone within a single channel is having this problem.

In this case it is an entire channel that is having problems. Therefore all of the students must move into the next available channel. Each student, once disconnected, can reconnect again with their same name and the new channel. As long as the student has not closed their client, only one transcript file will be created. It will contain their previous chat, disconnection, reconnection, and the new discussion.

3. People in different channels are having this problem.

If this occurs then chances are that a crash has occurred and is affecting the server and therefore multiple connections. Attempt to have the students disconnect and reconnect again to their channels. If the problem persists then the Server must be shut-down and restarted. Understand that even though the server must be restarted, the Clients do not have to be. Once the server has been restarted they can reconnect exactly like they did in the beginning (typing in their name and choosing a channel) and continue talking.

Warning Messages:

Chat Client

- Empty Field

The student is currently being prompted to enter information about their name and number and have left one or more of the open fields empty. An open field is white and not shaded. Text must be entered into it to satisfy the requirements.

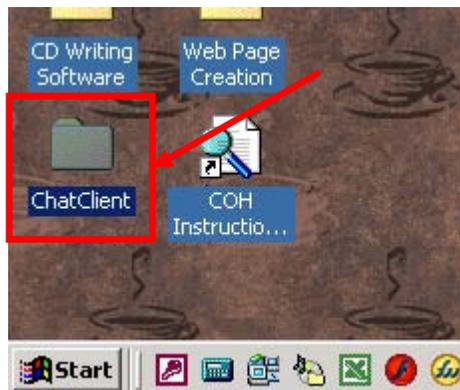
- Socket Could Not Be Opened

This message will appear if a student is trying to connect when the server has not been started yet. If the server is running but the student still obtains this message, then something is wrong with their IP Address setting. Contact a COHIC technical assistant for support in this matter.

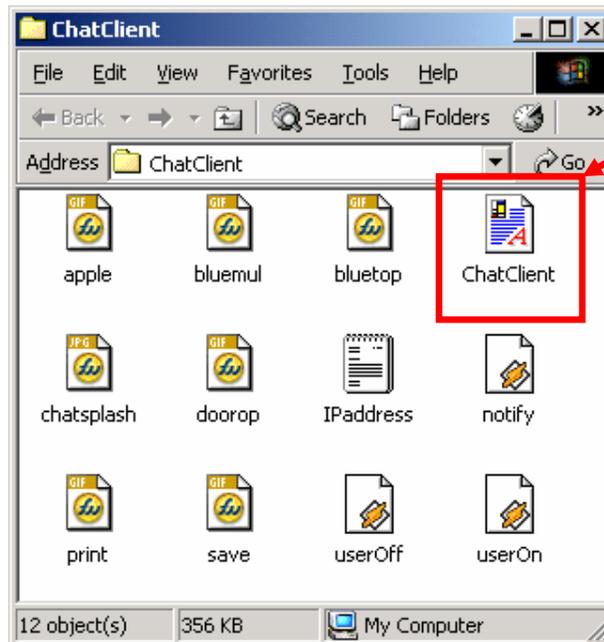


Documentation for Chat Client

Step 1: Locate and open the Chat Client folder from the desktop.



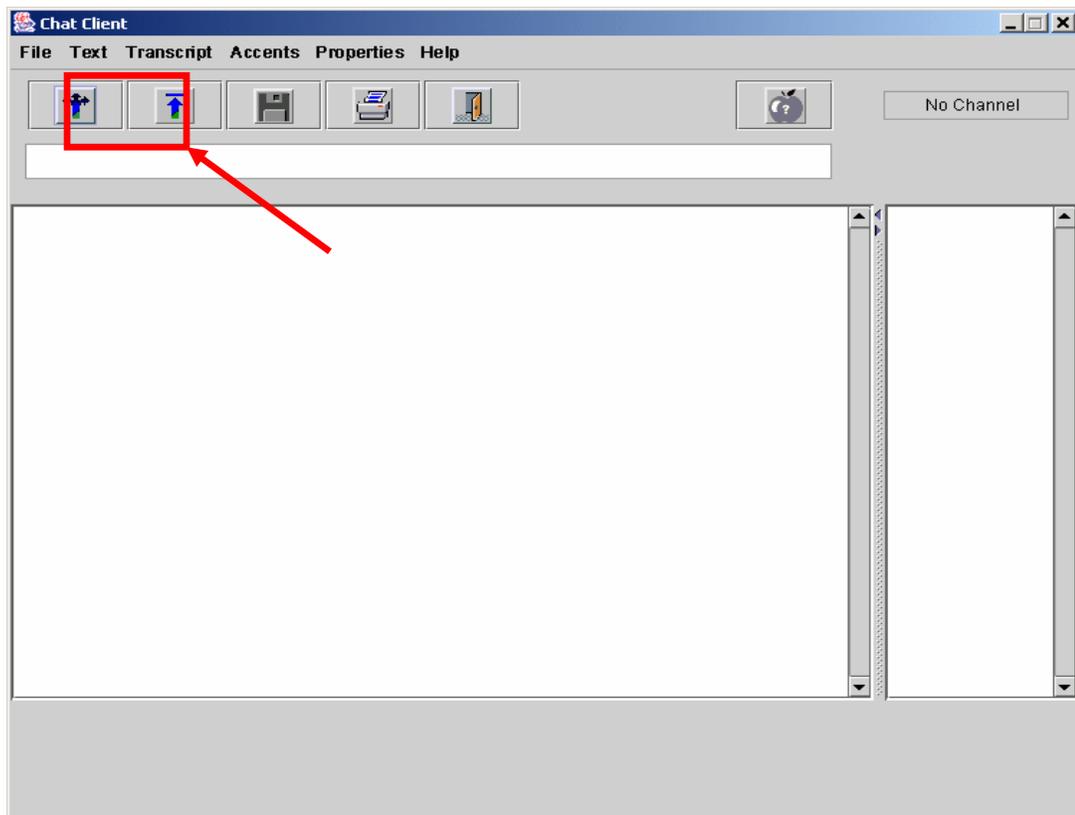
Step 2: Locate and open the Chat Client icon.



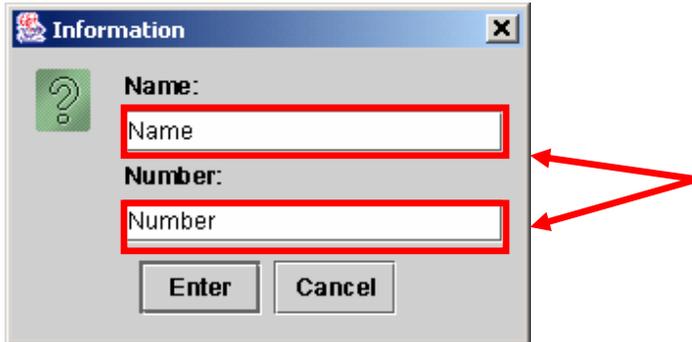
Step 3: Select the appropriate language.



Step 4: Click the “New Connection” button.

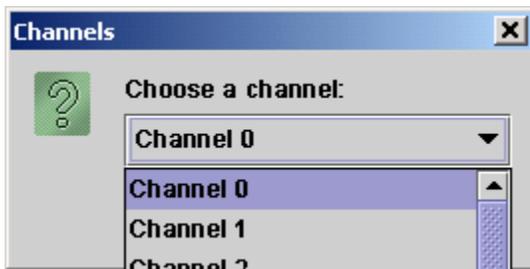


Step 5: Enter a screen *name* and *number*. Your name is up to you, but your number will be assigned to you the first day you use chat. If you have not been assigned, type 'test'.



The screenshot shows a dialog box titled "Information" with a close button (X) in the top right corner. On the left side, there is a green question mark icon. The main area contains two input fields: "Name:" and "Number:". Both input fields are highlighted with red rectangular boxes. To the right of these boxes, two red arrows point towards them. At the bottom of the dialog box, there are two buttons: "Enter" and "Cancel".

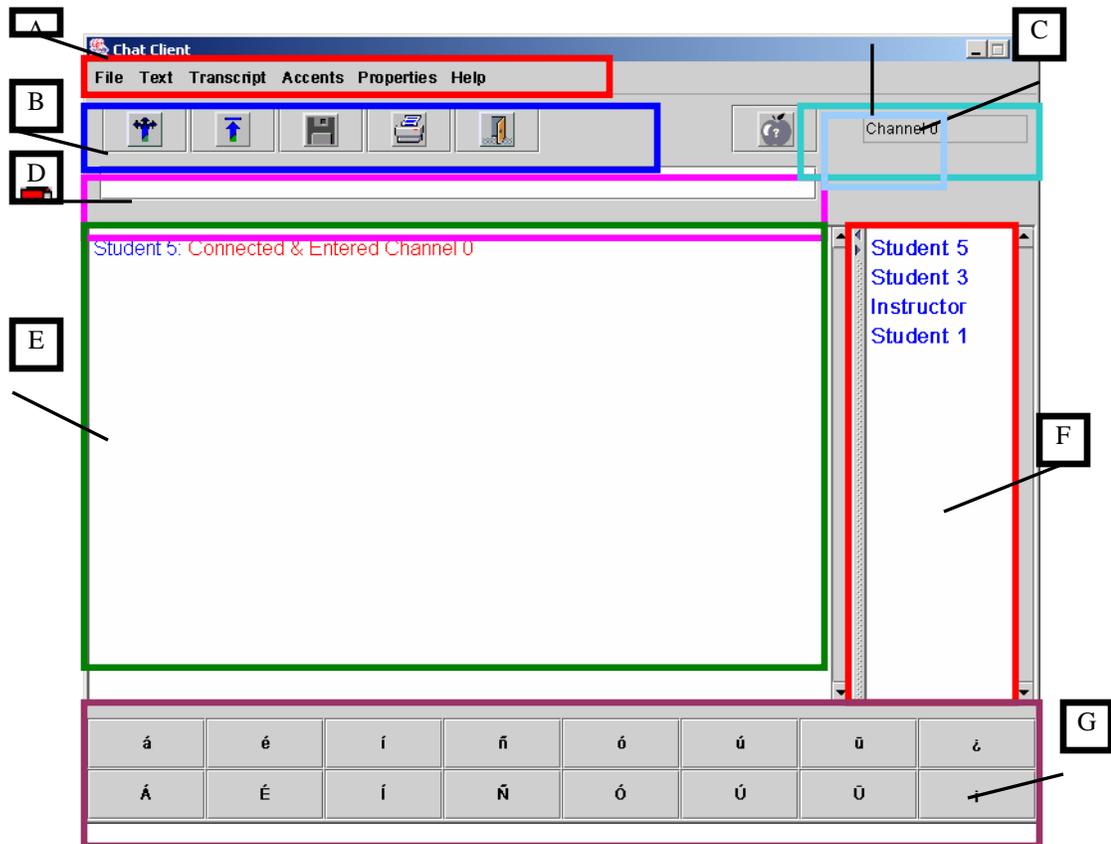
Step 6: Choose your Channel. Your instructor will assign this to you each class period.



The screenshot shows a dialog box titled "Channels" with a close button (X) in the top right corner. On the left side, there is a green question mark icon. The main area contains a label "Choose a channel:" followed by a dropdown menu. The dropdown menu is open, showing a list of channels: "Channel 0", "Channel 1", and "Channel 2". The "Channel 0" option is currently selected and highlighted in blue.

Once you login, the program will look like this.

H



A) **Menu Bar:** Provides access to the following menus & functions.

File-

- New Connection** - Join a Channel
- Close Connection** - Exit current Channel
- Quit** - Exit and shut down the Client



Text-

- Color** - Choose the color of the text you type.
- Size** - Choose the size of the text you type.

Transcript-

- Print** - Print your chat transcript
- Save** - Save your chat transcript

Accents-

- Spanish** - Displays Spanish accents in accent area (G)
- German** - Displays German accents in accent area (G)
- French** - Displays French accents in accent area (G)
- None (English)** - Displays no accents

Properties (shown above) -

Sounds - Toggles the sound effects on/off.

Help-

Accent Quick-Key - List of shortcut key combinations that produce accents.

- B) **Icons:** These buttons are shortcuts for (from left to right):
 “New Connection”, “Close Connection”, “Save”, “Print” and “Quit.”
- C) **Channel Indicator:** Displays the name of the channel you are currently in.
- D) **Text entry box:** This is where you type your message.
- E) **Transcript window:** All messages sent to the channel are displayed here.
- F) **Name List Window:** Displays the names of everyone in that particular channel.
- G) **Accent Area:** Displays all available accents. To use a particular accent, simply click on it and it will be inserted into your *text entry box*.
- H) **Question to Teacher:** To send a message directly to the teacher, type your message into the Text entry box (D) and click this button.



Documentation Chat Server

It is important that the Chat Server is launched and running before anyone attempts to log into the Chat Client program. If students try to log into the Chat Client before the Chat Server is launched, they will receive a “socket error”. Once the server is running, they will be able to log in.

Step 1: Locate the Chat Server shortcut icon.

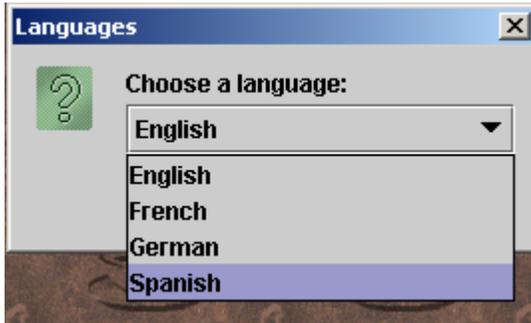


Step 2: Open Chat Server.

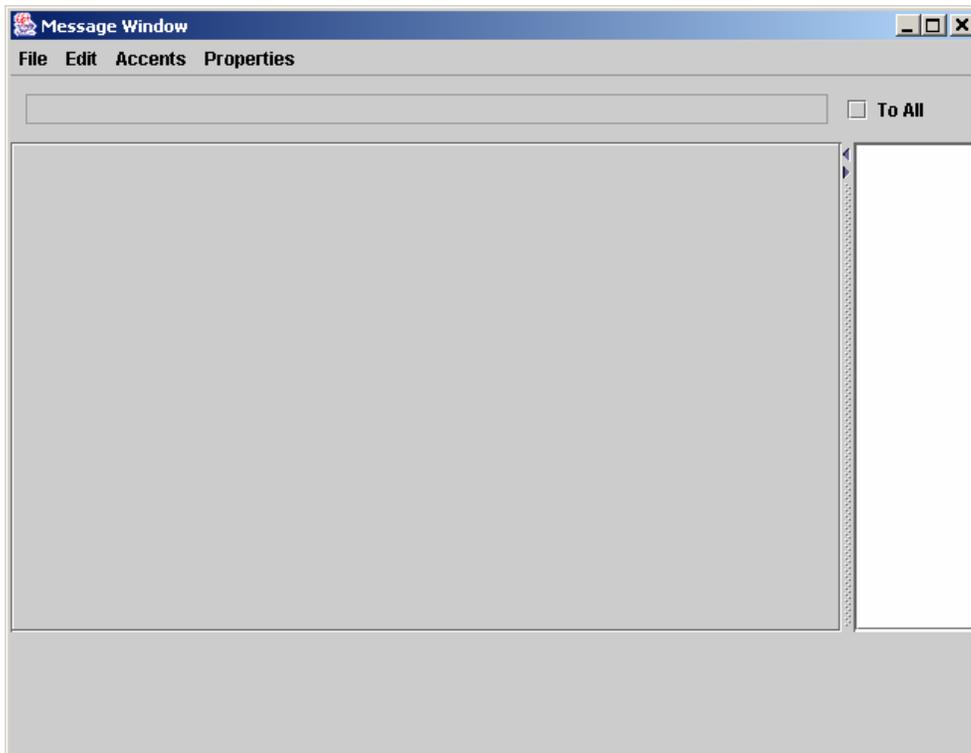
Step 3: Enter a name.



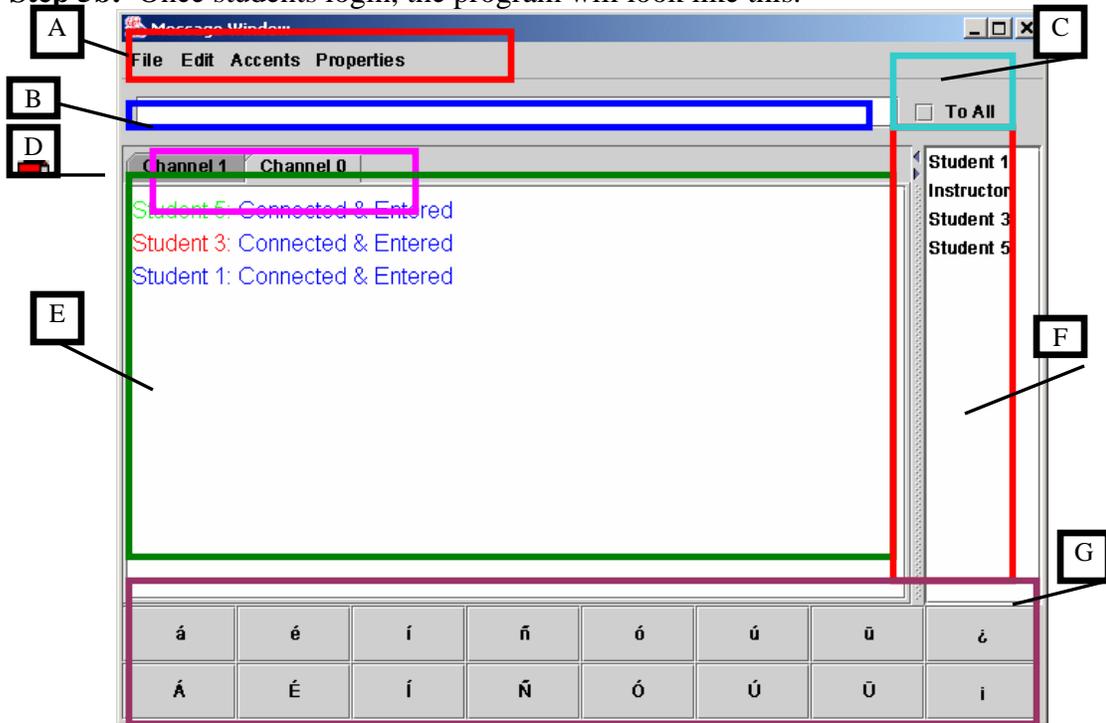
Step 4: Select the appropriate language.



Step 5a: The program will be fairly empty at first because no one has logged in.



Step 5b: Once students login, the program will look like this.



A) Menu Bar Provides access to the following *menus/functions*:

File-

Print - Print the log

Quit - Exit the application and shut down the server

Edit-

Clear Text - Clear out the transcript window (D)

Accents-

Spanish - Displays Spanish accents in [accent area](#) (G)

German - Displays German accents in accent area (G)

French - Displays French accents in accent area (G)

None (English) - Displays no accents

Properties (shown above) -

Analysis Console - Opens the Analysis Console window (Step 6)



- Invisible** - Allows you to view and chat in a Channel without the students knowing you are there or your name being displayed in the [Name List Window](#)
- Sounds** - Toggles the sound effects on/off

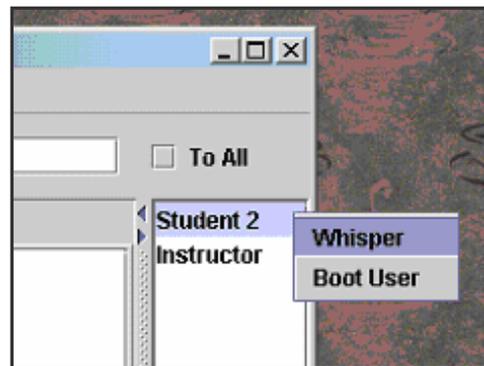
- B) **Text entry box.** This is where you type your message.
- C) **“To All” function.** By checking this box, you can send a message to all of the channels, instead of just the channel that you are viewing/in.
- D) **Channel Tabs.** By clicking on a Channel’s tab, you are able to view the participants in a channel and the dialog taking place between them, and join in.
- E) **Transcript window.** All messages sent to the channel are displayed here.

F) **Name List Window.**

Displays the names of everyone in that particular channel. By right-clicking one of the student names, a menu (at right) appears with the following options:

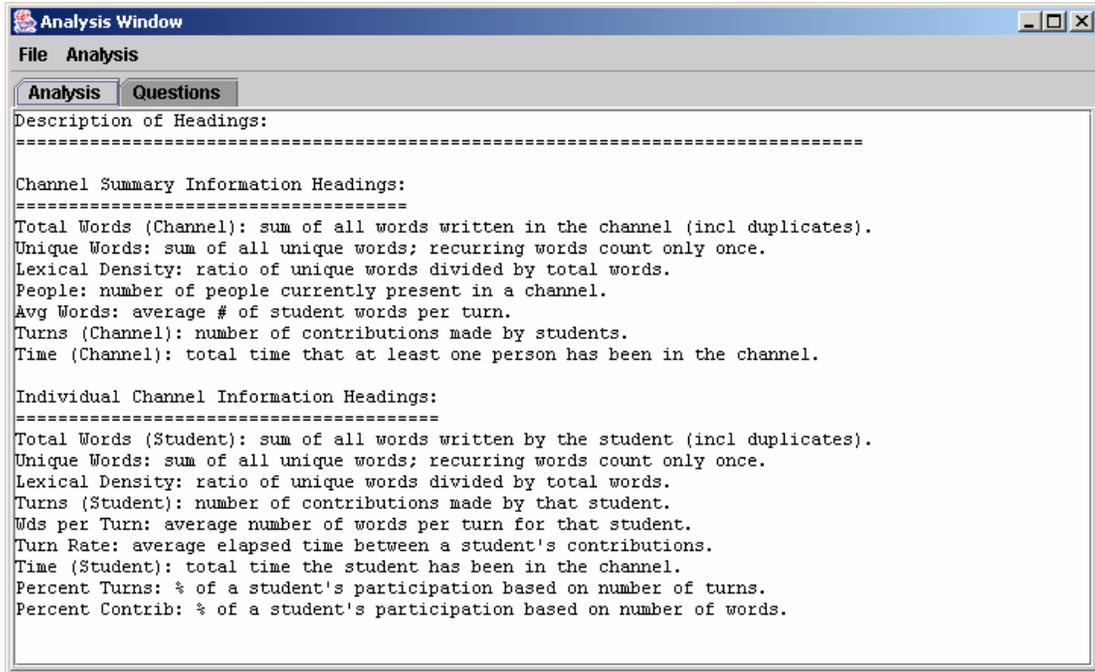
Whisper- Sends a message to only the selected student.

Boot User- Forces selected student out of his/her Chat channel.



- G) **Accent Area.** Displays all available accents. To use a particular accent, simply click on it and it will be inserted into your *text entry box*.

Step 6: The Analysis Console



This window consists of two parts:

Part A) Menu Bar- Provides access to two *menus*:

File-

Close – Closes the analysis console.

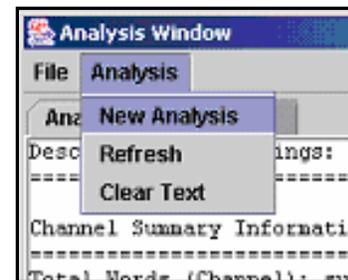
Print – Prints the current analysis.

Analysis-

New Analysis – Produces/Appends a new analysis.

Refresh – Clears & Produces a new analysis.

Clear Text – Clears analysis console window.



Part B) Function tabs

Analysis tab – Displays current analysis

Questions tab – Displays questions submitted directly to the instructor. Students ask the teacher questions using the “Ask Teacher A Question” function found on the Chat Client. (This function is further explained in the Chat Client documentation.)

Dear Student

Thank you so much for agreeing to participate in my dissertation study. This manual is intended to make things easier for you. Should you have any other questions or concerns during the course of the study, please, let me know. Your feedback is very valuable to me. You can reach me at SentaG@u.arizona.edu.

Here is a quick overview of the materials that will be used for research:

- placement exam
- background information survey
- chat transcripts
- exit exam (different from final)
- self report forms

This manual includes:

- Procedural Overview
- Student Instructions for COH Chat Client
- Navigation Instructions for D2L 201 Main Site

I am wishing you a great semester and lots of fun with the activities.

Thank you,

Senta

Procedural Overview

Before class:

- bring your screenname and this manual to class (at least in the beginning)
- my screenname is _____

Before chatting:

- your teacher will explain the activity which she will either hand to you or have you retrieve from D2L
- your teacher will explain any unfamiliar words if necessary
- your teacher will assign you in groups/pairs (students who did not give consent to participate in the study will be grouped together)
- log into the computers using your class account
- wait until the instructor has logged into the chat client
- log into the chat (see guidelines for Students)
- follow the log out procedures as described in the Student guidelines

After chatting:

- fill out the Self Report form on D2L

Navigation Instructions for D2L 201 Main Site

Procedures:

- go to www.d2l.arizona.edu
- go to the box entitled NetID Login in the top left
- click onto UA NetID Login
- put in your NetId and password just like you would for webmail
- in the middle of the page is a box with all of the courses
- click on the cross next to Fall 2005
- click on the cross next to German Studies
- click on the course entitled “Ger201 Main Site for FA 05 001 002 003 Goertler”
- at the end click on the Logout button on top of the blue bar

Navigation Bar:

- under the thick blue bar on top is your navigation bar
- the navigation bar includes the following
 - Course Home
 - Content (this is where the Activities and the Surveys are posted)
 - Discussion (here you can leave feedback and ask questions about the technology and the activities – all 201 students and instructors + myself have access)
 - Dropbox (here you and the students can submit the survey as a word document)
 - Survey (this is where you retrieve the Self Report Form at the end of each chat session)

Retrieving Activities

- click on content
- click on the appropriate activity and you are good to go

Retrieving Survey

- click on content
- click on the Background Information Survey
- open word
- select all text and copy it into word
- save it under your screenname in the class folder
- fill out the survey – highlight instead of circle
- save the survey again and close the document

Submitting Survey

- click on the dropbox

- click on the available folder
- click on browse
- find your survey on the desktop
- click upload
- click done

Completing the Self-Report Form

- click on survey
- click on Self Report Form
- fill out the form
- save
- submit
- click on okay

APPENDIX 6: Activities

Chataktivität Kapitel 9.1.

Thema:	Kindheit
Grammatikschwerpunkt:	als-clauses
Aufgabentyp:	Interview
TeilnehmerInnen:	2-3 pro Chatzimmer



Anweisungen:

Sie treffen sich in einem Chatraum für Eltern. Die Eltern diskutieren, wie man am besten Kinder erzieht. Als Sie ein Kind waren, was haben Sie schlimmes gemacht und wann? Wie haben die Eltern darauf reagiert? Was waren die Regeln (rules) in Ihrem Haus? Was mussten die Kinder im Haushalt helfen? Fragen und beantworten Sie diese Frage im Chatraum mit Ihrem Partner/Ihrer Partnerin.

MODELL: Was durftest du als Kind nicht machen? – Ich durfte nie abends fernsehen.

Und du?

Chataktivität Kapitel 9.2.

Thema:	Jugend
Grammatikschwerpunkt:	simple past tense von werden und modals
Aufgabentyp:	Rollenspiel
TeilnehmerInnen:	2-3 pro Chatzimmer



Anweisungen:

Großvater/Großmutter und Vater/Mutter unterhalten sich über die Jugend.

Partner 1:

Sie sind die Mutter von Katja. Sie finden es schrecklich, was die Jugendlichen heute alles machen. Ihre Tochter Katja ist ganz schlimm. Katja trägt schlechte Kleidung und hat böse Freunde. Sie, die Mutter, wollen, dass Katja eine bessere Tochter ist. Als Sie eine Jugendliche waren, haben Sie ihren Eltern nie Probleme gemacht.

Partner 2:

Sie sind die Großmutter von Katja. Sie denken, dass Katja eine nette Enkeltochter ist. Katja sieht nicht schön aus, aber sie ist ein gutes Kind. Als Katjas Mutter eine Jugendliche war, war sie ganz schlimm. Erinnern (remind) Sie Katjas Mutter an die furchtbaren Dinge, die sie als Jugendliche gemacht hat.

Chataktivität Kapitel 9.3.

Thema:	Jugend
Grammatikschwerpunkt:	als, wenn, wann
Aufgabentyp:	Rollenspiel
TeilnehmerInnen:	3-5 pro Chatzimmer

Anweisungen:

Der Abijahrgang 1994 vom Albert-Schweitzer Gymnasium trifft sich zum virtuellen Klassentreffen, da viele KlassenkameradInnen (classmates) im Ausland leben. Sprechen Sie mit den alten Klassenkameraden.

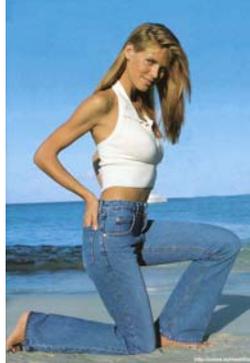
Fragen Sie viele Fragen, zum Beispiel:

- Wo wohnst du jetzt?
- Was hast du gemacht, als du an der Uni studiert hast?
- Wann hast du dein Studium beendet?
- Hast du geheiratet? Wann?
- Hast du Kinder? Wann hast du sie bekommen?
- Was hast du gearbeitet seit wir Abitur gemacht haben?
- Wann hast du die Arbeit angefangen?
- Was hast du gemacht, wenn Frau Schmidt dir eine schlechte Note gegeben hat?
- Was hast du gemacht, wenn du nicht in die Schule wolltest?
- Warst du eine gute Schülerin/ein guter Schule, als wir auf dem Gymi waren?
- Mit wem warst du zusammen(who were you dating), als wir in der Schule waren?
- Was waren deine Träume, als wir in der Schule waren? Hast du sie verwirklicht?
-

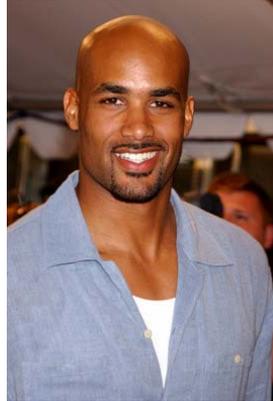
Schreiben Sie noch mehr Fragen auf.

Beantworten Sie alle Fragen mit der Information über Ihren Charakter.

Sie sind _____.

Stefanie:

Wohnort: Berlin
Studium: Modedesign in Berlin 1994-1998
Beruf: Modedesignerin seit 1998 und Fotomodell seit 1994
Familienstatus: ledig; keine Kinder
Träume: in Paris leben
Schulfreund: Timo – Timo ist jetzt mit Marion verheiratet
Schule: fleissig, aber kein Talent, viele schlechte Noten, viel gelernt, Nachhilfe bekommen (got tutored), war immer in der Schule,

Tobias:

Wohnort: Rio de Janeiro, Brasilien
Studium: Geografiestudium in Tübingen 1994-1997 aber kein Abschluss (degree); Auslandsstudium in Brasilien 1997-2000.
Wehrpflicht: T-5 (physically not fit enough to serve in the army)
Farbenblind
Beruf: Umweltschützer für Green Peace seit 2000
Familienstatus: verheiratet mit Australierin seit 2002; ein Sohn, 3 Jahre
Träume: eine Weltreise machen
Schulfreundin: Kathrin – Kathrin ist jetzt mit Wolfgang verheiratet
Schule: fleissig, sehr gute Noten, sehr wenig gelernt, hat oft in der Schule gefehlt; hat viele dumme Sachen gemacht;

Kristin:

Wohnort: Gundelfingen
 Studium: Beamtenstudium in Lahr 1994-1996
 Beruf: Beamtin auf dem Rathaus in Gundelfingen
 Familienstatus: verheiratet mit Polizeichef seit 2003; eine Tochter, 1 Jahr
 Träume: Weltmeisterin im Tennis werden
 Schulfreundin: Anita – aber Kristin mochte Männer mehr
 Schule: fleissig, okay Noten, manchmal schlechte Noten, dann lernte sie;
 viel Sport gemacht; viel mit den Lehrern diskutiert,

Stephan:

Wohnort: Berlin
 Studium: Volkswirtschaftslehrestudium in Freiburg 1995-1998
 Wehrpflicht: Zivildienst im St. Josephs Krankenhaus Freiburg 1994-1995
 Beruf: Direktor für Marketing bei Daimler Chrysler seit 1998
 Familienstatus: verheiratet mit Frank seit 2003
 Träume: einmal mit Cher tanzen
 Schulfreundin: Katja – Stefan mag aber Männer lieber
 Schule: fleissig, sehr gute Noten, war immer ein guter Schüler, hat nie eine schlechte Note bekommen, hat nie anderen Schülern geholfen, war nicht sehr sportlich

Fabian:

Wohnort: Karlsruhe
 Studium: Betriebswirtschaftslehrestudium in Hohenheim 1995-1998
 Wehrpflicht: Bundeswehr in Stetten am kalten Markt 1994-1995
 Beruf: 1998-2002 Manager bei Pfizer in Freiburg; Doktorstudent in Betriebswirtschaftslehre seit 2002
 Familienstatus: verheiratet mit Monika seit 2002
 Träume: einmal an der Wall Street erfolgreich sein
 Schulfreundin: Monika und jetzt sind sie verheiratet
 Schule: Problemkind, Teil der fürchterlichen fünf; schlechte Noten, dumme Ideen, hat oft gefehlt (er hat gesagt, dass er krank ist, aber in Wirklichkeit war er im Kasino)

Chataktivität Kapitel 9.4.

Thema: Geschichten
Grammatikschwerpunkt: simple past tense
Aufgabentyp: Interview
TeilnehmerInnen: 2-3 pro Chatzimmer

**Anweisungen:**

Interviewen Sie Ihren Partner über Ihren Schulalltag, als sie in der 8. Klasse waren. Wann mussten Sie aufstehen? Welche Fächer hatten Sie? Welchen Sport haben Sie getrieben? Welche Haushaltsaufgaben mussten Sie machen? etc. Kommentieren Sie auch die Antworten Ihres Partners/Ihrer Partnerin und finden Sie mindestens drei Gemeinsamkeiten.

10.1 Partner 1

Thema : Reisepläne
 Grammatikfokus: aus, bei, nach, von, zu
 Aufgabentyp: Informationsspiel



Es ist kurz vor den Sommerferien und Sie diskutieren mit Ihrem Studienkollegen die Urlaubspläne ihrer Freunde. Jeder von Ihnen hat andere Information und gemeinsam können Sie die ganze Tabelle ausfüllen.

MODELL:

Woher kommt Stefanie? – Sie kommt aus Freiburg.
 Wohin fährt sie in den Ferien? – Sie fährt nach Schottland.
 Wo wohnt sie? - Sie wohnt bei ihrer Mutter.
 Was macht sie da? - Sie lernt Englisch und besucht Museen.
 Wann kommt sie zurück? – Sie kommt in drei Monaten zurück.

	Melanie	Michael	Jason	Svetlana	Jochen	Maria	mein(e) Partner(in)
Woher?	Kassel		Tucson		München		
Wohin?		Berlin		Barcelona		Freiburg	
Wo?	Gastfamilie		Schwester			Gastfamilie	
Was?	Ski fahren			am Strand liegen	Familie besuchen		
Wann?		drei Tage	zwei Monate		eine Woche		

10.1 Partner 2

Thema : Reisepläne
 Grammatikfokus: aus, bei, nach, von, zu
 Aufgabentyp: Informationsspiel



Es ist kurz vor den Sommerferien und Sie diskutieren mit Ihrem Studienkollegen die Urlaubspläne ihrer Freunde. Jeder von Ihnen hat andere Information und gemeinsam können Sie die ganze Tabelle ausfüllen.

MODELL:

Woher kommt Stefanie? – Sie kommt aus Freiburg.
 Wohin fährt sie in den Ferien? – Sie fährt nach Schottland.
 Wo wohnt sie? - Sie wohnt bei ihrer Mutter.
 Was macht sie da? - Sie lernt Englisch und besucht Museen.
 Wann kommt sie zurück? – Sie kommt in drei Monaten zurück.

	Melanie	Michael	Jason	Svetlana	Jochen	Maria	mein(e) Partner(in)
Woher?		Leipzig		Moskau		Alicante	
Wohin?	Schweiz		Italien		London		
Wo?		Freunden		Vater	Oma		
Was?		Museen besuchen	Italienisch lernen			einen Sprachkurs am Goethe Institut belegen	
Wann?	zwei Wochen			drei Wochen		zwei Monate	

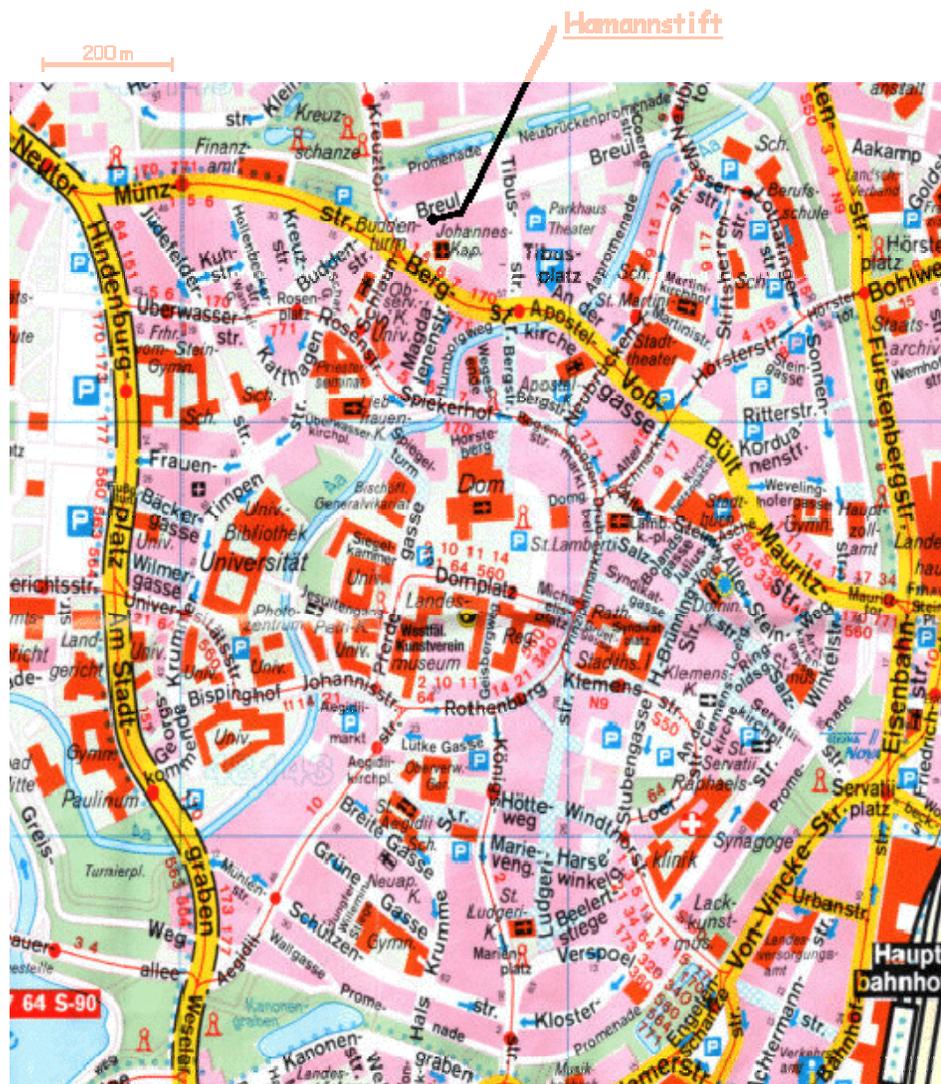
10.2.

Thema: nach dem Weg fragen
 Grammatikfokus: Imperativ; an.. vorbei, bis zu, entlang, gegenüber von, über
 Aufgabentyp: Informationsspiel

Sie sind mit einem Studienkollegen nach Münster gefahren. Sie haben sich aber leider beide verlaufen. Sie SMSen (in our case chatten) mit ihrem Kollegen um sich wieder zu treffen. Sie wollen sich am Dom treffen.

Partner 1:

Sie sind am Finanzamt (IRS). Fragen Sie ihrem Partner nach dem Weg vom Finanzamt zum Dom. Helfen Sie dann Ihrem Partner den Weg zum Dom zu finden.



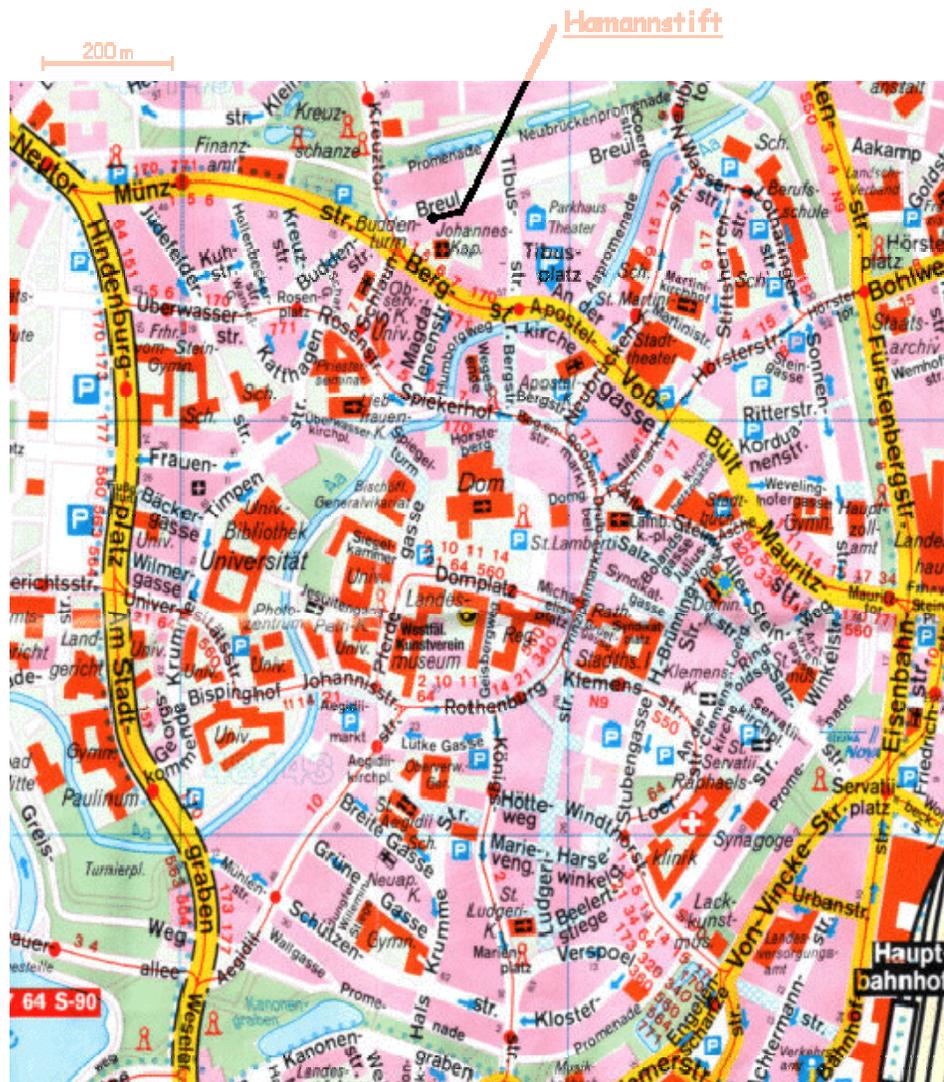
10.2.

Thema: nach dem Weg fragen
 Grammatikfokus: Imperativ; an.. vorbei, bis zu, entlang, gegenüber von, über
 Aufgabentyp: Informationsspiel

Sie sind mit einem Studienkollegen nach Münster gefahren. Sie haben sich aber leider beide verlaufen. Sie SMSen (in our case chatten) mit ihrem Kollegen um sich wieder zu treffen. Sie wollen sich am Dom treffen.

Partner 2:

Helfen Sie Ihrem Partner den Weg zum Dom zu finden. Fragen Sie dann Ihren Partner nach dem Weg. Sie sind an der Synagoge und wollen zum Dom.



10.3.

Thema: Urlaub am Strand
Grammatikfokus: subjunctive of modal verbs
Aufgabentyp: Rollenspiel



Sie sitzen in der Uni und lernen. Aber sie wollen nicht lernen. Also machen Sie Urlaubspläne für einen Strandurlaub an der Ostsee. Sie treffen einen Freund im Chat.

Diskutieren Sie die folgenden Fragen:

- Was solltest du gerade machen?
- Was müsstest du eigentlich machen?
- Was wolltest du gerne machen?
- Was könntest du machen, wenn du jetzt nicht lernen müsstest?
-

Für Inspiration gehen Sie zu <http://www.ruegenwelt.de/urlaub-ostsee.html>

10.5.

Thema: Tiere
Grammatikfokus: Passiv
Aufgabentyp: Rollenspiel



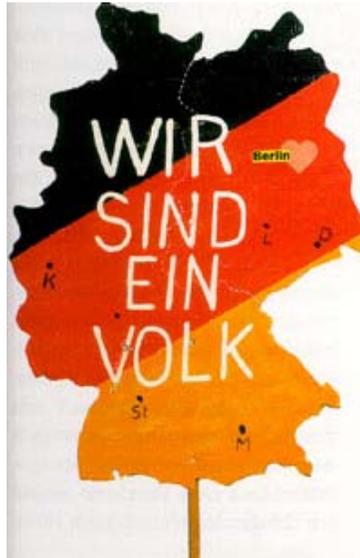
Sie arbeiten dieses Semester bei einem Tierarzt. Ihre Freundin/Ihr Freund arbeitet auch bei einem Tierarzt. Sie chatten bei der Arbeit mit Ihrer Freundin/Ihrem Freund. Diskutieren Sie:

- was jeden Tag gemacht wird
- was noch gemacht werden muss
- was schon gemacht wurde.

MODELL: Heute wurden die Hunde schon gefüttert, aber die Katzen müssen noch gefüttert werden.

10.6.

Thema: Deutsche Geschichte
 Grammatikfokus: Passiv
 Aufgabentyp: Web-Quest



Hier ist eine Liste von Daten, die wichtig sind in der deutschen Geschichte. Zusammen mit Ihrem Partner suchen Sie im Internet, was zu diesen Daten gemacht wurde. Eine gute Webseite ist: <http://www.dhm.de/lemo/home.html>

MODELL:

Frage: Was wurde 1945 gemacht?

Antwort: 1945 wurde der zweite Weltkrieg beendet.

Die Daten:	Die Ereignisse
1871	die Fussball-WM in Deutschland austragen (host)
1918	das Zweite Deutsche Reich gründen
1933	Bundeskanzler Schröder die Vertrauensfrage stellen
1945	die zwei deutschen Staaten gründen
1949	die Mauer bauen
1954	Deutschland wiedervereinigen
1961	die Mauer öffnen
1989	Hitler als Reichskanzler wählen (vote)
1990	den ersten Weltkrieg beenden
2005	die Fussball-Wm gewinnen
2006	den zweiten Weltkrieg beenden

11. 1

Thema: Krankheit
Grammatikfokus: Akkusativreflexipronomen
Aufgabentyp: Rollenspiel

**Partner 1:**

Sie waren mit ihrer Klasse auf einer Bootsfahrt auf dem Bodensee. Die Bootsfahrt war sehr schön, aber jetzt sind sie alle krank. Sie gehen alle zum Arzt. Nur Sie sprechen Deutsch. Erklären (explain to) Sie dem deutschen Arzt, was wem weh tut (just make up aches and names for your classmates).

MODELL: Wir fühlen uns alle schlecht. Michaela war so schlecht, dass sie sich ins Bett legen musste.

11. 1

Thema: Krankheit
Grammatikfokus: Akkusativreflexipronomen
Aufgabentyp: Rollenspiel

**Partner 2:**

Ein amerikanischer Student kommt zu Ihnen in die Praxis. Nach einer Bootsfahrt auf dem Bodensee ist die Klasse krank geworden. Fragen Sie den Studenten wie es den Studenten geht. Fragen Sie auch weitere Fragen (follow-up questions). Machen Sie einen Plan, wie den Studenten geholfen werden kann.

*MODELL: Michaela sollte sich sofort ins Bett legen.
 Fühlt sich der Lehrer auch nicht wohl?*

11.2.**Thema:****Grammatikfokus:****Aufgabentyp:****Köperteile und Körperpflege****Reflexivpronomen****Diskussion**

Diskutieren Sie mit Ihrem Partner, was Sie jeden Tag machen und was Sie heute gemacht haben.

- Was ist Ihre Körperpflegeroutine?
- Was machen Sie und Ihr Partner?
- Was machen Sie, aber Ihr Partner nicht?
- Was macht Ihr Partner, aber Sie nicht? Warum?
- Was haben Sie heute gemacht?

MODELL; Morgens dusche ich mich zuerst.

11.4.

Thema: Krankenhaus
Grammatikfokus: Indirect Questions
Aufgabentyp: Rollenspiel

**Partner 1**

Ihr Bruder ist sehr krank im Krankenhaus. Er kann nicht mehr sprechen. Der Arzt fragt viele Fragen über die Krankengeschichte (medical history) in Ihrer Familie. Fragen Sie den Arzt auch über die Krankheit und Kondition Ihres Bruders. Beginnen Sie Ihre Fragen und Antworten mit Phrasen wie:

- Wissen Sie,
- Könnten Sie mir sagen, ...
- Ich weiss nicht,
- Wenn ich nur wüsste, ...
- Ich frage mich,

11.4.

Thema: Krankenhaus
Grammatikfokus: Indirect Questions
Aufgabentyp: Rollenspiel

**Partner 2**

Sie sind Arzt in einem Krankenhaus. Sie kümmern sich um einen Patienten, der nicht mehr sprechen kann. Der Bruder des Patienten ist auch im Krankenhaus. Fragen Sie den Bruder über die Krankengeschichte (medical history) der Familie. Beantworten Sie auch die Fragen des Bruders. Beginnen Sie Ihre Fragen und Antworten mit Phrasen wie:

- Wissen Sie,
- Könnten Sie mir sagen, ...
- Ich weiss nicht,
- Wenn ich nur wüsste, ...
- Ich frage mich,

11. 5.**Thema: Unfälle****Grammatikfokus: Word order in dependent/independent clause****Aufgabentyp: Rollenspiel**

Sie sind Polizisten Sie waren die Polizisten am Unfallort von Lothar (see story in Kontakte chapter 11). Jetzt sind sie beide wieder auf Streife (in the patrol car). Aber Sie sind an verschiedenen Orten. Versuchen Sie via Chat Ihren Polizeibericht (police report) zu schreiben. Beantworten Sie dabei die folgenden Fragen:

- Was ist passiert?
- Wer war beteiligt?
- Wo ist es passiert?
- Wem ist etwas passiert?
- Warum ist es passiert?
- Wie ist es passiert?

Benutzen Sie so viele komplexe Sätze wie möglich mit Subjunktionen und Konkunktionen (z. Bsp. und, oder, aber, sondern, denn, als, bevor, bis, damit, dass, nachdem, ob, obwohl, während, weil, wenn)

12.1.**Thema: Familie, Ehe, Partnerschaft****Grammatikfokus: Genitiv****Aufgabentyp: Rollenspiel**

Beschreiben Sie Ihrem Partner Ihre Familie. Wen gibt es alles in Ihrer Familie? Wie sind diese Leute? Geben Sie auch viele Details. Fragen Sie nach extra Information.

Beispiel:

Partner 1: Mein Onkel heisst Jürgen und er hat zwei Töchter. Die Töchter meines Onkels sind meine jüngsten Cousinen.

Partner 2: Ist dein Onkel Jürgen der Bruder deiner Mutter oder der Bruder deines Vaters?

12.2.**Thema: Familie, Ehe, Partnerschaft****Grammatikfokus: Subjunktiv****Aufgabentyp: Rollenspiel**

Diskutieren Sie mit Ihrem Partner was Sie ändern würden, wenn Sie Ihre Familie und Ihre Kindheit verändern könnten. Welche Regeln würden Sie ändern? Würden Sie vielleicht ein anderes Instrument spielen? Würden Sie mehr lernen? Geben Sie einen guten Grund für Ihre Veränderungsidee.

Beispiel:

Wenn ich meine Kindheit verändern könnte, würde ich nicht so oft umziehen, denn umziehen ist nicht gut für die Stabilität der Kinder.

12.3.**Thema: Multikulturelle Gesellschaft****Grammatikfokus: Kausalkonnektoren****Aufgabentyp: Diskussion**

Schauen Sie sich die Tabelle an und diskutieren Sie mit Ihrem Partner über die Situation der Minderheiten in Deutschland und in ihrer Heimat.

- Was sind die grössten Minderheiten in Deutschland?
- Wann und warum kamen diese Ausländer nach Deutschland?
- Welche Probleme haben die Ausländer und Minderheiten in Deutschland? Warum?
- Was könnte getan werden um die Ausländer besser zu integrieren?
- Welche Minderheiten gibt es in ihrer Heimatstadt (home town)?
- Sind diese Minderheiten gut integriert? Warum? Warum nicht?
- Welche Probleme gibt es? Warum?
- Welche Hilfeleistungen (assistance) werden den Minderheiten gegeben? Warum?
- Wie wird man amerikanischer Staatsbürger?

Bevölkerung nach Geschlecht und Staatsangehörigkeit

Gegenstand der Nachweisung	Einheit	2001	2002	2003
Einwohner am 31.12.	1 000	82 440,3	82 536,7	82 531,7
männlich	1 000	40 274,7	40 344,9	40 356,0
weiblich	1 000	42 165,6	42 191,8	42 175,7
Nach Staatsangehörigkeit				
Deutsche	1 000	75 122,1	75 188,7	75 189,9
Ausländer/-innen	1 000	7 318,2	7 348,0	7 341,8
darunter: ¹				
- Türkei	1 000	1 947,9	1 912,2	1 877,7
- Jugoslawien	1 000	627,5	591,5	568,2
- Italien	1 000	616,3	609,8	601,3
- Griechenland	1 000	362,7	359,4	354,6
- Bosnien und Herzegowina	1 000	159,0	163,8	167,1
- Polen	1 000	310,4	317,6	326,9
- Kroatien	1 000	223,8	231,0	236,6
- Österreich	1 000	189,0	189,3	189,5
- Vereinigte Staaten	1 000	113,5	112,9	112,9
- Mazedonien	1 000	56,0	58,3	61,0
- Slowenien	1 000	19,4	20,6	21,8

APPENDIX 7: Post-Survey

Background Information Survey

Thank you for taking the time to complete this survey. This survey is intended to provide background information about your language learning and computer experiences. The surveys will not be shown to your instructor and will have no effect on your grade. The screenname you picked and used throughout the semester, will be replaced with a pseudonym, so that any publication of the research results will not contain your name or your screenname.

I. General Information

1. Screenname: _____
2. Section: _____
3. How would you describe your German ability?

II. Please respond to the following statements by circling the appropriate answer: strongly disagree (1), disagree (2), agree (3), strongly agree (4). Feel free to explain your answer in the space provided.

1. When I say something wrong, I like it when the teacher explains to me what is wrong in front of others.

strongly disagree disagree agree strongly agree

Explain: _____

2. I like it when my teacher corrects me.

strongly disagree disagree agree strongly agree

Explain: _____

3. I don't think my classmates should correct me.

strongly disagree disagree agree strongly agree

Explain: _____

4. When I say something wrong, I like it when the teacher writes the correction on the board.

strongly disagree disagree agree strongly agree

Explain: _____

5. I like it when my teacher helps me in getting my meaning across rather than fixing every error.

strongly disagree disagree agree strongly agree

Explain: _____

6. When I say something wrong, I like it when the teacher tells me that what I said was wrong without telling me the correct form.

strongly disagree disagree agree strongly agree

Explain: _____

7. I believe using technology in the language classroom is beneficial for language learning.

strongly disagree disagree agree strongly agree

Explain: _____

8. When I am in a language classroom, I want the teacher to focus on the grammatical accuracy of what I say and not focus on responding to what I am saying in terms of content.

strongly disagree disagree agree strongly agree

Explain: _____

9. When I say something wrong, I like it when the teacher rephrases what I said and asks if that is what I meant.

strongly disagree disagree agree strongly agree

Explain: _____

10. When the teacher corrects me, I am uncomfortable.

strongly disagree disagree agree strongly agree

Explain: _____

11. In a foreign language class using computers gets in the way of really learning the language.

strongly disagree disagree agree strongly agree

Explain: _____

12. My classmates can help me by pointing out my errors.

strongly disagree disagree agree strongly agree

Explain: _____

13. When I say something wrong, I like it when the teacher rephrases what I said so that it contains no errors and then moves on.

strongly disagree disagree agree strongly agree

Explain: _____

14. When we chat in class, I like it when the teacher participates actively in our discussion.

strongly disagree disagree agree strongly agree

Explain: _____

15. When we chat in class, I don't like talking out loud with the other students.

strongly disagree disagree agree strongly agree

Explain: _____

16. Chatting in class is fun.

strongly disagree disagree agree strongly agree

Explain: _____

17. When we chat, I like it when the teacher corrects my mistakes.

strongly disagree disagree agree strongly agree

Explain: _____

18. When we chat class, I correct other people's mistakes.

strongly disagree disagree agree strongly agree
 Explain: _____

19. When we chat in class, I notice my own mistakes and the mistakes of other students.
 strongly disagree disagree agree strongly agree
 Explain: _____

20. My German improved through the chatting in class.
 strongly disagree disagree agree strongly agree
 Explain: _____

III. Please respond to the following statements by circling the appropriate answer: never (1), rarely (2), sometimes (3), or always (4). Feel free to explain your answer in the space provided.

1. I have used chat/ messaging software (ICQ, Instant Messenger, etc.) to communicate with friends.
 never rarely sometimes always
 Explain: _____

2. I have used chat and messaging software to communicate for work or for school.
 never rarely sometimes always
 Explain: _____

3. I have used chat in another foreign language classroom.
 never rarely sometimes always
 Explain: _____

4. My teacher mainly corrects only certain kinds of mistakes I make during class.
 never rarely sometimes always
 Explain: _____

5. My teacher mainly corrects only certain kinds of mistakes during chat.
 never rarely sometimes always
 Explain: _____

6. When the teacher corrects mistakes during chat it is really unkind to the student.
 never rarely sometimes always N/A
 Explain: _____

IV. Please respond to the following questions.

1. What did your teacher do during chatting? Did you like what she did?

2. How would you describe your teacher's role during the chatting? What role would you have liked her to play?

3. If you were the teacher in the class how would you change the chat sessions?

Is there anything else you would like me to know? Comment below.

Thank you very much for your participation.

APPENDIX 8: Post-Test

Screenname: _____

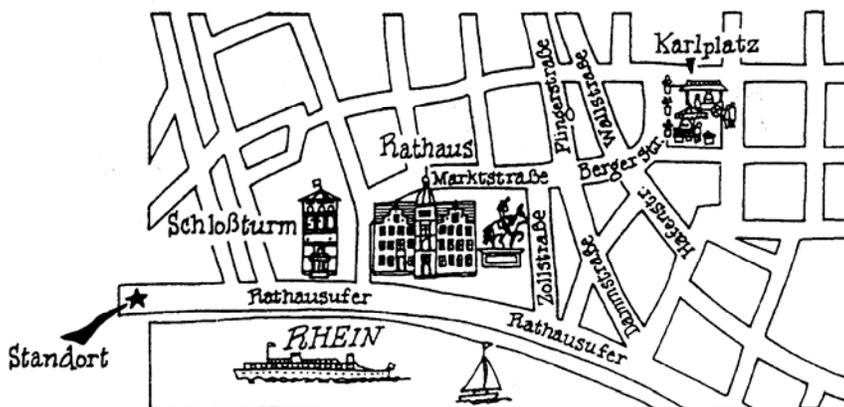
Section: _____

Exitprüfung für Deutsch 200

Thank you for taking 200 level German classes at the University of Arizona. Your participation in this exit exam, will help us evaluate your language improvement over the course of one semester. In addition, it is an indicator for you to see how you might do on the final exam in this class. The test will not be graded. However, it is important that you show your best effort on this test, for your performance will help you identify your strengths and weaknesses before the final exam. You should be able to complete this test in 50 minutes. We appreciate your time and effort.

I. Hörverständnis: (10 Punkte)

Nach dem Weg fragen. Listen to the directions twice and indicate on the map how you get to **Karlplatz** from where you are now. Your starting position is marked with an asterisk.



II. Lesen: (10 Punkte)

A. Märchen. Read the following Märchen and answer the questions below.

Es waren einmal ein König und eine Königin, die wollten so gern ein Kind. Als die Königin endlich eine Tochter bekam, war die Freude groß. Sie veranstalteten ein Fest und luden zwölf Feen ein, veräßen aber die dreizehnte. Die dreizehnte Fee kam und verwünschte die Tochter, das Dornröschen. Sie sollte sich an einer Spindel stechen und sterben. Die zwölfte Fee änderte den bösen Wunsch. Dornröschen sollte nur hundert Jahre schlafen und nicht sterben. Als Dornröschen fünfzehn Jahre alt war, ging der böse Wunsch in Erfüllung. Sie stach sich an einer Spindel und fiel in einen tiefen Schlaf. Mit ihr schlief das ganze Schloss ein, alle Menschen und alle Tiere. Um das Schloss wuchs eine große Dornenhecke. Als 100 Jahre vorbei waren, kam ein Prinz zur Hecke und die Dornen verwandelten sich in Blumen. Er ging ins Schloss, fand Dornröschen und als er sie küsste, wachte sie auf. Alle anderen Menschen und alle Tiere wachten auch auf. Der Prinz und Dornröschen heirateten. Und wenn sie nicht gestorben sind, dann leben sie noch heute.

1. Was wünschten sich König und Königin?

2. Wie feierten sie die Geburt ihrer Tochter?

3. Wie viele Feen wurden eingeladen?

4. Was machte die 13. Fee?

5. Was machte die 12. Fee?

6. Was passierte, als Dornröschen 15 war?

7. Was geschah mit den Menschen im Schloss?

8. Wann kam der Prinz?

9. Was machte der Prinz?

10. Was passierte dann?

III. Grammatik: (10 + 10 + 10 + 10 Punkte)

A. Im Bad. Describe what you do with the following items. Write sentences using reflexive pronouns.

MODELL: Mit einem Kamm? → *Ich kämme mir die Haare.*

1. Mit einer Zahnbürste?

2. Mit Shampoo?

3. Mit Seife?

4. Mit einem Föhn?

5. Mit einem Rasierapparat?

B. Baby-sitting. Eva is baby-sitting the neighbors' twins. Even though they are a boy and a girl, she has a hard time telling them apart, so when she is there she keeps a log, so that she can report to the parents. Below are the phrases from the sentences in her log. Put the phrases in the sentences into the right order. Pay attention to the cases!

MODELL: der Junge / dem Kind / einen Ball geben → *Der Junge gab dem Kind einen Ball.*

1. ein Auto / dem Jungen / das Mädchen / schenkte

2. er / es / ihr / gab / zurück.

3. er wollte, dass / den Ball / ihm/ sie zurück gibt.

4. ihm / ihn / sie / gab / zurück

5. den beiden / ich / ein neues Spielzeug / gab

C. Unsere Jugend. Thomas and Markus are sitting at "Stammtisch" reflecting on their youth. Connect the sentences with the conjunction in parentheses.

MODELL: Wir mussten das Haus des Schuldirektors streichen. Wir haben am 1. Mai Kuhmist an seine Wand geschmiert. (weil)

→ *Wir mussten das Haus des Schuldirektors streichen, weil wir am 1. Mai Kuhmist an seine Wand geschmiert haben.*

1. Nachts waren wir oft lange aus. Wir sind nach Mitternacht oft im Schwimmbad geschwommen. (und)

2. Wir waren schon mit 14 bis nachts um drei in der Discothek. Wir wurden nie von der Polizei verhaftet. (aber)

3. Wir haben viel Alkohol getrunken. Wir waren auf der Berufsschule im Schwarzwald. (als)

4. Wir haben unsere Ausbildung gut abgeschlossen. Wir waren selten im Unterricht. (obwohl)

5. Wir hatten in unserer Jugend sehr viel Glück. Wir hatten nie einen schweren Unfall. (denn)

D. Multikulti. Ender talks about immigrants in Germany. Fill in the endings for him.

MODELL: In Deutschland gibt es viel ___ Ausländer.

→ *In Deutschland gibt es viele Ausländer.*

1. In unser ___ Land (N.) leben viele Ausländer.

2. D ___ meisten Ausländer (Pl.) kommen aus d ___ Türkei.

3. In d ___ 50er Jahren (Pl.) kamen d ___ Menschen (Pl) auch aus mein ___ Heimatland (N.) nach Deutschland.

4. Dies ___ Ausländer (Pl.) sind d ___ Gastarbeiter (Pl).

5. Mein ___ Vater (M.) ist auch ein ___ Gastarbeiter (M.).

6. D ___ Mutter (F.) mein ___ Vaters (M.) hat mein ___ Vater (M.) nach Deutschland geschickt.

APPENDIX 9: Self-Report Form

Self Report Check List

After each chat session, complete this form. Neither your teacher nor your classmates will see your answers. Furthermore, your screenname will be replaced by a pseudonym.

Name: _____ Date: _____

Did you use an online dictionary today? For what?

Did you use an internet translator today? For what?

Did you use a paper dictionary? For what?

Did you have technical difficulties with the chat server today? What kinds:

Did you have difficulties accessing the necessary websites today? Which/what was the problem:

Did you talk to someone in class out loud today? With whom? For what?/Why?

Did your teacher correct you today in the chat?

Did the teacher correct anyone else in the chat?

Did the teacher participate in your chat?

Was working with this partner a good choice?

Were there any distractions in the lab today? What:

How much time did you have to complete the task?

**APPENDIX 10: Test Score-Card
Score Card**

Exam: _____
 Section: _____
 Screenname: _____
 Total Points: _____ /73 _____

Hörverständnis:

Punkte: _____/10

Everything correct on first try
 Everything correct after _____ corrections
 _____ mistakes

	Correct	Corrected Mistake	Remaining Mistake
Rathausufer entlang			
nach dem Schloßturm links			
am Rathaus vorbei			
nach rechts auf die Marktstr			
geradeaus auf die Bergstr			
Bergstr entlang zum Karlpl			

Comments:

Leseverständnis:

Punkte: _____/10

Question	correct info	complete sentence	verb conjugated correctly	simple past tense correct
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Comments:

Grammatik:**Reflexivpronomen:**

Punkte: _____/10

	correct verb	correct conj.	correct word or.	correct reflexive
Zähne putzen				
Haare waschen				
(???) waschen				
Haare föhnen				
(???) rasieren				

Comments:

Word order with indirect/direct object:

Punkte: _____/10

	unrel. mistake	N+N order	N+P order	P + P order
dem Jungen ein Auto				
es ihr				
ihm den Ball				
ihm ihn				
den beiden ein neues Spielzeug				

Comments:

Word order independent/dependent clause:

Punkte: _____/10

	unrel. mistake	Conj + verb	Verb final	verb second
Und				
Aber				
Als				
Obwohl				
Denn				

Comments:

Case endings:

Punkte: _____/13

what it is	Case	Gender	ein/der word
1a: two way prep	Dat	N	possessive adj.
2a: subject	Nom	Pl	definite art.
2b. aus + dativ	Dat	F	definite art.
3a. two way prep in temporal phrase	Dat	Pl	definite art.
3b. subject but not in first position	Nom	Pl	def. art
3c. aus + dat	Dat	N	possessive adj.
4a. subject	Nom	Pl	dieser
4b: predicate noun	Nom	Pl	definite art
5a Subjekt	Nom	M	possessive adj.
5b. predicate noun	Nom	M	indefinite art.
6a. Subjekt	Nom	F	definite art
6b: Possessiv	Gen	M	possessive adj.
6c: direct object	Akk	M	possessive adj.

Comments:

Schreiben:

Punkte: _____/10

Content:	
Language:	
Word Count:	
Unique Words:	
Words per Sentence:	
#of Mistakes:	
% Incorrect:	

Mistakes:

APPENDIX 11: Combined Survey Combined Survey

Thank you for taking the time to complete this survey. This survey is intended to provide background information about your language learning and computer experiences. The surveys will not be shown to your instructor and will have no effect on your grade. The screenname you picked and used throughout the semester, will be replaced with a pseudonym, so that any publication of the research results will not contain your name or your screenname.

(This is the combined pre- and post-survey. Items in italics only appeared on the pre-survey. Items in bold only appeared in the post-survey)

I. General Information

0a. Screenname: _____

0b. Section: _____

1. Age: _____

2. Gender: _____ M _____ F

3. Which languages do you speak?

native language: _____

foreign/second language: _____

Others: _____

4. How would you describe your German ability?

5. *Is German the first language that you are learning in a classroom?* Yes _____
No _____

6. *Is German the only foreign language that you have learned?* Yes _____ No _____

II. Please respond to the following statements by circling the appropriate answer: strongly disagree (1), disagree (2), agree (3), strongly agree (4). Feel free to explain your answer in the space provided.

7. When I say something wrong, I like it when the teacher explains to me what is wrong in front of others.

strongly disagree disagree agree strongly agree

Explain:

8. I like it when my teacher corrects me.

strongly disagree disagree agree strongly agree

Explain:

9. I don't think my classmates should correct me.

strongly disagree disagree agree strongly agree

Explain:

10. When I say something wrong, I like it when the teacher writes the correction on the board.

strongly disagree disagree agree strongly agree

Explain:

11. I like it when my teacher helps me in getting my meaning across rather than fixing every error.

strongly disagree disagree agree strongly agree

Explain:

12. When I say something wrong, I like it when the teacher tells me that what I said was wrong without telling me the correct form.

strongly disagree disagree agree strongly agree

Explain:

13. I believe using technology in the language classroom is beneficial for language learning.

strongly disagree disagree agree strongly agree

Explain:

14. When I am in a language classroom, I want the teacher to focus on the grammatical accuracy of what I say and not focus on responding to what I am saying in terms of content.

strongly disagree disagree agree strongly agree

Explain:

15. When I say something wrong, I like it when the teacher rephrases what I said and asks if that is what I meant.

strongly disagree disagree agree strongly agree

Explain:

16. When the teacher corrects me, I am uncomfortable.

strongly disagree disagree agree strongly agree

Explain:

17. In a foreign language class using computers gets in the way of really learning the language.

strongly disagree disagree agree strongly agree

Explain:

18. My classmates can help me by pointing out my errors.

strongly disagree disagree agree strongly agree

Explain:

19. When I say something wrong, I like it when the teacher rephrases what I said so that it contains no errors and then moves on.

strongly disagree disagree agree strongly agree

Explain:

20. When we chat in class, I like it when the teacher participates actively in our discussion.

strongly disagree disagree agree strongly agree

Explain:

21. When we chat in class, I don't like talking out loud with the other students.

strongly disagree disagree agree strongly agree

Explain:

22. Chatting in class is fun.

strongly disagree disagree agree strongly agree

Explain:

23. When we chat, I like it when the teacher corrects my mistakes.

strongly disagree disagree agree strongly agree

Explain:

31. My teacher mainly corrects only certain kinds of mistakes during chat.

never rarely sometimes always

Explain:

32. When the teacher corrects mistakes during chat it is really unkind to the student.

never rarely sometimes always N/A

Explain:

33. In my other language classes, my teachers corrected certain kinds of students' errors in spoken conversations.

never rarely sometimes always N/A

Explain:

34. In my other language classes, my teachers corrected certain kinds of students' errors in written assignments.

never rarely sometimes always N/A

Explain:

35. In my other language classes, my teachers corrected certain kinds of students' errors during chats.

never rarely sometimes always N/A

Explain:

IV. Please respond to the following questions.

36. What did your teacher do during chatting? Did you like what she did?

37. How would you describe your teacher's role during the chatting? What role would you have liked her to play?

38. If you were the teacher in the class how would you change the chat sessions?

39. Is there anything else you would like me to know? Comment below

Thank you very much for your participation.

APPENDIX 12: Processed Transcripts
ESCAMANDA 9-12

ESCAmanda (19:21:6): Connected & Entered Channel 4
 ESCAmanda (19:22:53): Connected & Entered Channel 4
 ESCDominique (19:23:13): Connected & Entered Channel 4
 ESCAmanda (19:23:19): Hallo
 ESCLisa (19:23:24): Connected & Entered Channel 4
 ESCChristian (19:23:26): hallo
 ESCChristian (19:23:39): Wie gehts?
 ESCDominique (19:23:39): Hallo!
 ESCLisa (19:23:46): es geht mir gut
 ESCAmanda (19:23:49): eh gut. und du?
 ESCDominique (19:24:5): Es geht mir gut auch. Danke.
 ESCAmanda (19:24:21): gut. so....
 ESCAmanda (19:24:52):
 ESCDominique (19:25:3): Ach so, wie alt waren sie wenn sie waren im den achten Klasse?
 ESCAmanda (19:25:20): dreizehn
 ESCAmanda (19:25:23): und du?
 ESCDominique (19:25:27): Ich war dreizehn auch.
 ESCDominique (19:25:36): und ESCLisa?
 ESCAmanda (19:25:36): nett!
 ESCLisa (19:25:40): 13
 ESCChristian (19:25:40): alt war in achten klasse, I trieb Fussball
 ESCAmanda (19:26:5): ich trieb softball und fußball und basketball
 ESCChristian (19:26:6): Ich war vierzehn auch
 ESCDominique (19:26:36): Ich trieb Fußball und Volleyball.
 ESCDominique (19:26:57): Welche Fächer hatten sie?
 ESCLisa (19:27:13): Meine Lieblings fächer war English
 ESCChristian (19:27:31): Ich war Chemie studiernt
 ESCAmanda (19:27:42): ich hatte 3 oder 4 freunden in den achten Klasse.... ich bewegte
 ESCAmanda (19:28:6): Meine Lieblings Fächer war Music und SportKlasse
 ESCChristian (19:28:22): Mein Lieblings fächer war Deutsch! NEIN!
 ESCAmanda (19:28:31): haha nein huh?
 ESCDominique (19:28:40): Ich hatte Biologie, Mathematik, English, und andere dass ich vergaß.
 ESCChristian (19:29:18): (im a AF brat too, where were u stationed?)
 ESCAmanda (19:29:37): ich hatte Biologie, Chemie, Musik, Mathematik, Technisch.... und andere.
 ESCAmanda (19:30:16): (bunches of places.... Deutschland, Maryland, Kalifornia, Mississippi, Illinois, Wisconsin....) \

ESCAmanda (19:30:20): und du?
 ESCChristian (19:30:23): Ich hatte latein
 ESCChristian (19:30:39): (Deutschland, Nebraska, etc etc)
 ESCDominique (19:30:49): Und was waren seine Hausaufgaben?
 ESCAmanda (19:30:52): Wo in Deutschland?
 EveningTeacher (19:31:7): Ich hasste alle Hausaufgaben, aber wann meine Eltern gaben mir Geld, war alles ok...
 ESCChristian (19:31:12): (Aachen, Gilenkirchen)

ESCDominique (19:31:21): Ich musste die Geschirr spülen und mein Bett machen.
 ESCAmanda (19:31:22): (landstuhl, Ramstein)
 ESCDominique (19:31:50): Ich hasste auch alles, aber, wenn ich machte alles, konnte ich ausgehen.
 ESCAmanda (19:31:52): Ich musste mein Bett machen und meinen Hund laufen.
 ESCLisa (19:32:4): Ich musste auch Bett machen.
 EveningTeacher (19:32:50): Wer bekam eine Kinderzulage? (weekly allowance for children)
 ESCChristian (19:33:11): ich musste disch(?) waschen
 ESCAmanda (19:33:28): Ja, ich hatte nicht die Bestrafung. Meiner Eltern für mir Mal fühlen.
 ESCAmanda (19:33:56): *mies
 ESCChristian (19:34:16): Ich hatte fünf Dollars pro woche
 ESCAmanda (19:34:16): Air Force?
 ESCDominique (19:34:17): Ich bekam keine Kinderzulage, aber wenn ich machte meine Haushaltsaufgaben, dann gaben sie mir Geld und durfte ich ausgehen.
 ESCChristian (19:34:22): (yes)
 ESCAmanda (19:34:26): nett
 EveningTeacher (19:34:32): Ich wollte in der 8en Klasse Krankenplegerin oder Doktorin werden. Was wolltet euch werden?
 ESCChristian (19:35:29): (doktorin?)
 ESCChristian (19:35:54): Was ist doktorin auf Englisch?
 ESCChristian (19:36:6): (doctor)
 ESCLisa (19:36:11): Ich weiß nicht.
 ESCAmanda (19:36:15): Ich würde Pilotin oder Sportunterrichtlererin oder Musik spiele/
 ESCDominique (19:36:19): Ich mochte eine Tierärzte werden.
 ESCAmanda (19:36:31): ja es ist doctor
 ESCChristian (19:37:0): artzt ist ein doktor, interessant
 ESCAmanda (19:38:3): ja
 ESCChristian (19:38:36): ja
 ESCAmanda (19:38:38): so....
 ESCDominique (19:38:39): Wie war deine Lehrer/Lehrerin? Meine Lehrerin in 8. Klasse war sehr nett.
 ESCChristian (19:38:42): ja
 ESCChristian (19:39:2): Mein Deutsche lehrerin ist Bose!
 ESCLisa (19:39:9): Meine Lieblings Lehrern war sehr nett.
 ESCAmanda (19:39:14): Ich hatte allzu viele.
 ESCLisa (19:39:45): *Lehrerin
 ESCAmanda (19:40:35): soo....
 ESCAmanda (19:41:6): ich habe müde
 EveningTeacher (19:41:13): Was durftet euch machen? Was durftet ihr nicht?
 EveningTeacher (19:41:41): Ich durfte nicht nach 9 Uhr fernsehen...
 ESCDominique (19:41:52): Ich durfte mit meinen Freunden ausgehen, aber nicht zu spät.
 ESCAmanda (19:42:18): Ich durfte nicht um drei Uhr ausgehen.
 ESCChristian (19:43:0): Ich hatte mude aber, es weglaufen
 ESCAmanda (19:43:25): was?
 ESCChristian (19:43:57): (i had but it ran away)
 ESCAmanda (19:44:11): haha hatte was?
 ESCChristian (19:44:24): Müde
 ESCAmanda (19:44:28): ich vermisst das

ESCAmanda (19:44:31): ohhhhhh
 ESCAmanda (19:44:34): hahaha
 ESCAmanda (19:44:50): ich bekam es
 ESCAmanda (19:46:1): ich habe muede, bedauern
 ESCAmanda (19:46:23): (ok no one else is talkin..... come on people!)
 ESCChristian (19:46:42): (tut mir leid)
 ESCDominique (19:46:53): Um welche Uhr mussten Sie aufstehen um zur Shule gehen?
 EveningTeacher (19:46:58): Was musstet euch für Hausaufgaben machen? Hattet euch viele Hausaufgaben? Waren die Lehreren böse oder nett?, interessant oder langweilig?
 ESCAmanda (19:47:3): (haha yea sorry like i said ich habe muede)
 ESCLisa (19:47:33): Ich musste Hausaufgaben machen.
 ESCDominique (19:47:55): Ich musste um 6.Uhr aufstehen, aber Klasse begann um 8. Uhr.
 ESCChristian (19:48:12): Ich musste hausaufgaben machen auch, es war sehr langweilig
 ESCAmanda (19:48:46): ich hatte viele Hausaufgaben und ich nicht ausgehen.
 ESCAmanda (19:48:57): ich weiß nicht.
 EveningTeacher (19:49:11): Ich hatte VIELE Hausaufgaben in der 8en Klasse.
 ESCDominique (19:49:27): Ich hasste Hausaufgabe.
 ESCAmanda (19:49:30): ja ich auch
 ESCAmanda (19:49:38): hahaha mir auch
 ESCDominique (19:49:53): Wer nicht?
 ESCDominique (19:49:56): jaja
 ESCChristian (19:50:7): Deutsche Examen auf Mittwoch! Sind sie bereit?
 ESCAmanda (19:50:23): nein
 ESCDominique (19:50:24): nein
 ESCLisa (19:50:27): nein
 ESCChristian (19:50:29): ich studiere nicht
 ESCChristian (19:50:37): :)
 ESCAmanda (19:50:51): ich auch habe ein Physiologie examen
 ESCAmanda (19:51:9): ich habe nicht studieren
 ESCAmanda (19:51:32): für entweder
 ESCLisa (19:51:49): Exited
 ESCChristian (19:51:51): Exited
 ESCDominique (19:51:53): Exited

APPENDIX 13: Coded Transcripts

NSCDanielle 8-31

NSCDanielle (9:25:14): Connected & Entered Channel 6

NSCDanielle (9:28:5): Hallo?

NON-SUBJECT1 (9:29:23): Connected & Entered Channel 6

NSCDanielle (9:35:36): Als sie ein Kind waren, was haben sie schlimmes gemacht?

NON-SUBJECT1 (9:43:3): Als ich ein Kind *(PV//), habe ich meine Schwestern *(PPart) gekämpfen.

NON-SUBJECT1 (9:44:20): Was haben sie schlimmes gemacht?

NSCDanielle (9:45:13): Ich habe viele Fensterscheiben eingeworfen.

NSCDanielle (9:46:3): Wie haben *(SPN) siene eltern reagiert, wenn du *(SV// - EupP) *(SE) deine Schwestern *(SPart - EUpP) gekämpfen *(SSVA) haben?

P = Partner

S = Self

EUp = Error Uptake

APPENDIX 14: Students' Answers on Survey

#	Statement	Agree Pre-Survey	Agree Post-Survey	Teacher Difference Significant yes no? P value? F value?	Class Difference Significant yes no? P value? F value?
7	When I say something wrong, I like it when the teacher explains to me what is wrong in front of others.	NSC: 91.7% SSC: 87.5% ESC: 77.8%	NSC: 83.33% SSC: 87.5% ESC: 77.78%	Within-subject: F (1.44) = 0.13, p > .05 interaction: F (1.44) = 0.50, p > .05 between- subject: F (1.44) = 0.11 , p > .05	Within-subject: F (1.43) = 0.01, p > .05 interaction: F (2.43) = 0.30, p > .05 between- subject: F (2.43) = 0.06, p > .05
8	I like it when my teacher corrects me.	NSC: 100% SSC: 100% ESC: 94.4%	NSC: 100% SSC: 100% ESC: 88.89%	Within-subject: F (1.44) = 0.81, p > .05 interaction: F (1.44) = 0.81, p > .05 between- subject: F (1.44) = 1.49 , p > .05	Within-subject: F (1.43) = 0.46, p > .05 interaction: F (2.43) = 0.59, p > .05 between- subject: F (2.43) = 0.73, p > .05
9	I don't think my classmates should correct me.	NSC: 16.7% SSC: 37.5% ESC: 22.2%	NSC: 33.3% SSC: 18.8% ESC: 33.3%	Within-subject: F (1.44) = 0.01, p > .05 interaction: F (1.44) = 2.11, p > .05 between- subject: F (1.44) = 0.45, p > .05	Within-subject: F (1.43) = 0.02, p > .05 interaction: F (2.43) = 3.31, p < .05 between- subject: F (2.43) = 0.47, p > .05
10	When I say something wrong, I like it when the teacher writes the correction on the board.	NSC: 100% SSC: 87.5% ESC: 83.3%	NSC: 100% SSC: 93.75% ESC: 77.78%	Within-subject: F (1.44) = 0.60, p > .05 interaction: F (1.44) = 6.01, p < .05 between- subject: F	Within-subject: F (1.43) = 2.69, p > .05 <i>interaction: F (2.43) = 3.01, p > .05</i> between- subject: F

#	Statement	Agree Pre-Survey	Agree Post-Survey	Teacher Difference Significant yes no? P value? F value?	Class Difference Significant yes no? P value? F value?
				(1.44) = 3.67, p > .05	(2.43) = 1.90, p > .05
1 1	I like it when my teacher helps me in getting my meaning across rather than fixing every error.	NSC: 83.3% SSC: 93.8% ESC: 83.3%	NSC: 75% SSC: 81.3% ESC: 77.8%	Within-subject: F (1.44) = 0.26, p > .05 interaction: F (1.44) = 0.63, p > .05 between-subject: F (1.44) = 2.03, p > .05	Within-subject: F (1.43) = 0.05, p > .05 interaction: F (2.43) = 0.34, p > .05 between-subject: F (2.43) = 2.45, p > .05
1 2	When I say something wrong, I like it when the teacher tells me that what I said was wrong without telling me the correct form.	NSC: 16.7% SSC: 6.2% ESC: 5.6%	NSC: 0% SSC: 6.2% ESC: 11.1%	Within-subject: F (1.44) = 0.30, p > .05 interaction: F (1.44) = 0.30, p > .05 between-subject: F (1.44) = 0.001, p > .05	Within-subject: F (1.43) = 0.13, p > .05 interaction: F (2.43) = 0.15, p > .05 between-subject: F (2.43) = 0.41, p > .05
1 3	I believe using technology in the language classroom is beneficial for language learning.	NSC: 83.3% SSC: 100% ESC: 100%	NSC: 91.67% SSC: 93.75% ESC: 88.89%	Within-subject: F (1.44) = 0.98, p > .05 interaction: F (1.44) = 2.33, p > .05 between-subject: F (1.44) = 1.09, p > .05	Within-subject: F (1.43) = 0.22, p > .05 interaction: F (2.43) = 1.14, p > .05 between-subject: F (2.43) = 1.14, p > .05
1 4	When I am in a language classroom, I want the teacher to focus on the grammatical accuracy of what I	NSC: 25% SSC: 43.8% ESC: 22.2%	NSC: 33.33% SSC: 25% ESC: 33.33%	Within-subject: F (1.44) = 0.08, p > .05 interaction: F (1.44) = 0.08, p > .05 between-	Within-subject: F (1.43) = 0.17, p > .05 interaction: F (2.43) = 1.64, p > .05 between-

#	Statement	Agree Pre-Survey	Agree Post-Survey	Teacher Difference Significant yes no? P value? F value?	Class Difference Significant yes no? P value? F value?
	say and not focus on responding to what I am saying in terms of content.			subject: F (1.44) = 0.80, p > .05	subject: F (2.43) = 0.78, p > .05
1 5	When I say something wrong, I like it when the teacher rephrases what I said and asks if that is what I meant.	NSC: 100% SSC: 93.8% ESC: 88.9%	NSC: 91.67% SSC: 81.25% ESC: 88.89%	Within-subject: F (1.44) = 0.11, p > .05 interaction: F (1.44) = 0.11, p > .05 between-subject: F (1.44) = 0.18, p > .05	Within-subject: F (1.43) = 0.11, p > .05 interaction: F (2.43) = 0.56, p > .05 between-subject: F (2.43) = 0.76, p > .05
1 6	When the teacher corrects me, I am uncomfortable.	NSC: 33.3% SSC: 31.3% ESC: 22.2%	NSC: 16.7% SSC: 18.8% ESC: 16.7%	Within-subject: F (1.44) = 1.74, p > .05 interaction: F (1.44) = 1.74, p > .05 between-subject: F (1.44) = 1.37, p > .05	Within-subject: F (1.43) = 3.22, p > .05 interaction: F (2.43) = 0.90, p > .05 between-subject: F (2.43) = 1.02, p > .05
1 7	In a foreign language class using computers gets in the way of really learning the language.	NSC: 25% SSC: 12.5% ESC: 5.56%	NSC: 25% SSC: 18.8% ESC: 11.1%	Within-subject: F (1.44) = 0.01, p > .05 interaction: F (1.44) = 0.13, p > .05 between-subject: F (1.44) = 8.01 , p < .01	Within-subject: F (1.43) = 0.00, p > .05 interaction: F (2.43) = 0.08, p > .05 between-subject: F (2.43) = 4.48, p < .05
1 8	My classmates can help me by pointing out my errors.	NSC: 91.7% SSC: 81.3% ESC:	NSC: 91.67% SSC: 87.5% ESC:	Within-subject: F (1.44) = 2.11, p > .05 interaction: F (1.44) = 2.11, p	Within-subject: F (1.43) = 0.81, p > .05 interaction: F (2.43) = 1.22, p

#	Statement	Agree Pre-Survey	Agree Post-Survey	Teacher Difference Significant yes no? P value? F value?	Class Difference Significant yes no? P value? F value?
		88.9%	77.78%	> .05 between-subject: F (1.44) = 1.73 , p > .05	> .05 between-subject: F (2.43) = 0.85, p > .05
19	When I say something wrong, I like it when the teacher rephrases what I said so that it contains no errors and them moves on.	NSC: 91.7% SSC: 81.3% ESC: 66.7%	NSC: 41.67% SSC: 68.75% ESC: 55.56%	Within-subject: F (1.44) = 2.89, p > .05 interaction: F (1.44) = 0.00, p > .05 between-subject: F (1.44) = 1.00, p > .05	Within-subject: F (1.43) = 3.14, p > .05 interaction: F (2.43) = 0.20, p > .05 between-subject: F (2.43) = 0.49, p > .05
20	When we chat in class, I like it when the teacher participates actively in our discussion.		NSC: 100% SSC: 81.25% ESC: 94.44%	between-subject: F (1.44) = 0.03, p > .05	between-subject: F (2.43) = 1.01, p > .05
21	When we chat in class, I don't like talking out loud with the other students.		NSC: 33.33% SSC: 25% ESC: 38.89%	between-subject: F (1.44) = 0.02, p > .05	between-subject: F (2.43) = 0.01, p > .05
22	Chatting in class is fun.		NSC: 83.33% SSC: 87.5% ESC: 66.67%	between-subject: F (1.44) = 0.40, p > .05	between-subject: F (2.43) = 0.21, p > .05
23	When we chat, I like it when the teacher corrects my mistakes.		NSC: 100% SSC: 87.5% ESC: 88.89%	between-subject: F (1.44) = 0.89, p > .05	Between-subject: F (2.43) = 0.92, p > .05
24	When we chat class, I correct other people's		NSC: 41.67% SSC: 50%	between-subject: F (1.44) = 0.09, p	between-subject: F (2.43) = 0.67, p

#	Statement	Agree Pre-Survey	Agree Post-Survey	Teacher Difference Significant yes no? P value? F value?	Class Difference Significant yes no? P value? F value?
	mistakes.		ESC: 44.44%	> .05	> .05
2 5	When we chat in class, I notice my own mistakes and the mistakes of other students.		NSC: 91.67% SSC: 93.75% ESC: 94.44%	between-subject: F (1.44) = 1.67, p > .05	between-subject: F (2.43) = 1.04, p > .05
2 6	My German improved through the chatting in class.		NSC: 83.33% SSC: 87.5% ESC: 77.78%	between-subject: F (1.44) = 0.54, p > .05	between-subject: F (2.43) = 0.30, p > .05
2 7	I have used chat/messaging software (ICQ, Instant Messenger, etc.) to communicate with friends.	NSC: 83.3% SSC: 87.5% ESC: 77.8%	NSC: 83.33% SSC: 81.25% ESC: 77.78%	Within-subject: F (1.44) = 0.05, p > .05 interaction: F (1.44) = 3.30, p > .05 between-subject: F (1.44) = 0.24, p > .05	Within-subject: F (1.43) = 0.54, p > .05 interaction: F (2.43) = 2.01, p > .05 between-subject: F (2.43) = 0.16, p > .05
2 8	I have used chat and messaging software to communicate for work or for school.	NSC: 50% SSC: 50% ESC: 38.9%	NSC: 50% SSC: 62.5% ESC: 50%	Within-subject: F (1.44) = 1.87, p > .05 interaction: F (1.44) = 0.09, p > .05 between-subject: F (1.44) = 0.74, p > .05	Within-subject: F (1.43) = 1.49, p > .05 interaction: F (2.43) = 0.12, p > .05 between-subject: F (2.43) = 0.45, p > .05
2 9	I have used chat in another foreign language classroom.	NSC: 0% SSC: 18.8% ESC: 16.7%	NSC: 0% SSC: 25% ESC: 11.11%	Within-subject: F (1.44) = 1.13, p > .05 interaction: F (1.44) = 0.47, p > .05 between-	Within-subject: F (1.43) = 0.64, p > .05 interaction: F (2.43) = 0.27, p > .05 between-

#	Statement	Agree Pre-Survey	Agree Post-Survey	Teacher Difference Significant yes no? P value? F value?	Class Difference Significant yes no? P value? F value?
				subject: F (1.44) = 0.01, p > .05	subject: F (2.43) = 1.52, p > .05
30	My teacher mainly corrects only certain kinds of mistakes I make during class.		NSC: 58.33% SSC: 50% ESC: 66.67%	between-subject: F (1.44) = 0.59, p > .05	Between-subject: F (2.43) = 0.38, p > .05
31	My teacher mainly corrects only certain kinds of mistakes during chat.		NSC: 58.33% SSC: 43.75% ESC: 61.11%	between-subject: F (1.44) = 0.17, p > .05	Between-subject: F (2.43) = 0.59, p > .05
32	When the teacher corrects mistakes during chat it is really unkind to the student.		NSC: 0% SSC: 0% ESC: 11.11%	between-subject: F (1.43) = 0.02, p > .05	Not run
33	In my other language classes, my teachers corrected certain kinds of students' errors in spoken conversations.	NSC: 50% SSC: 87.5% ESC: 88.9%		Not run	Not run
34	In my other language classes, my teachers corrected certain kinds of students' errors in written assignments.	NSC: 66.7% SSC: 87.5% ESC: 94.4%		Not run	Not run
35	In my other language classes, my teachers corrected certain kinds of students' errors during chats.	NSC: 16.7% SSC: 13.3% ESC: 22.2%		Not run	Not run

APPENDIX 15: Students' Comments on Survey

#	Statement	NSC	SSC	ESC
7	When I say something wrong, I like it when the teacher explains to me what is wrong in front of others.	<p>DaniellePre: I think it's beneficial to explain mistakes, but sometimes embarrassing.</p> <p>DaniellePost: It's kind of embarrassing</p> <p>DamionPost: How else will I learn what is right?</p> <p>GeorgePost: It is better to correct me there instead of letting me think that my answer was correct.</p> <p>GretchenPre: You are more likely to remember. Others can learn from mistakes.</p> <p>GretchenPost: It is helpful.</p> <p>JenniferPre: It helps keep the correct information in my head.</p> <p>LauraPre: constructive criticism.</p> <p>LauraPost: Then everyone learns it too.</p> <p>MarkusPre: I'd rather have more one-on-one type stuff because it can create embarrassment in front of the class.</p> <p>MarkusPost: That way everyone will learn.</p> <p>MichellePre: I like to know my mistakes right away.</p> <p>StevePre: I don't feel insecure, and I hope that me being corrected might help a fellow classmate.</p>	<p>AdriennePre: Sometimes it's learning experience, but sometimes embarrassing</p> <p>AdriennePost: sure, don't really care</p> <p>BrendaPre: helps others too</p> <p>BrendaPost: It's the only way to learn.</p> <p>EmilyPre: Although I'd rather have been right in the first place, I need the correction so as not to make the mistake again.</p> <p>GrahamPre: It can be beneficial to others.</p> <p>MartinPre: so I know exactly what was incorrect.</p> <p>SamanthaPre: As long as it's corrected in a positive way</p> <p>SamanthaPost: without saying "that's wrong"</p> <p>TinaPost: I'm a little self conscious</p> <p>WilmaPre: Others can learn</p>	<p>AmandaPre: Others can learn from me</p> <p>BarbaraPre: this helps the rest of the class</p> <p>BarbaraPost: It allows others to understand when a mistake was made.</p> <p>DominiquePre: It doesn't matter, if there are others or not, as long as I get to learn it the right way.</p> <p>DominiquePost: It doesn't matter if it is in front of others, as long as I get to learn.</p> <p>VictoriaPost: I look like a fool saying it wrong over and over.</p> <p>GerhardPost: benefits everyone</p> <p>IanPre: Peer pressure helps me learn</p> <p>IanPost: It helps me learn</p> <p>LancePre: it usually helps everyone</p> <p>LarissaPost: I dunno</p> <p>LisaPre: I feel discouraged from asking questions.</p> <p>LisaPost: I don't like to be embarrassed in front of the class.</p> <p>NinaPre: So I can remember it.</p> <p>TiffanyPre: My mistakes can help others</p> <p>TiffanyPost: I want others to learn from my mistakes.</p> <p>VirginiaPre: Theirs no stupid questions just good feedback.</p> <p>VirginiaPre: German is hard, I'm sure everybody would find</p>

#	Statement	NSC	SSC	ESC
				input beneficial.
8	I like it when my teacher corrects me.	<p>DaniellePre: I would rather learn from a mistake than continue repeating it.</p> <p>DaniellePost: It helps me learn</p> <p>DamionPost: How else will I learn?</p> <p>GretchenPre: I can get it right the next time.</p> <p>GretchenPost: then I know what is wrong</p> <p>JenniferPre: I know that the teacher is paying attention and cares that I learn the language.</p> <p>LauraPre: don't make the same mistake</p> <p>LauraPost: Or I'll make the same mistakes.</p> <p>MarkusPre: If I am not corrected, I will not learn.</p> <p>MarkusPost: How else would I learn?</p> <p>MichellePre: It's good to know what you're doing wrong.</p> <p>StevePre: I really don't mind.</p>	<p>AdriennePre: Sometimes it's learning experience, but sometimes embarrassing</p> <p>AdriennePost: sure, it helps when she also explains why.</p> <p>BrendaPost: the only way to learn</p> <p>EmilyPre: I don't want to learn things incorrectly.</p> <p>GrahamPre: It helps to learn what is wrong</p> <p>WilmaPre: need to learn</p>	<p>BarbaraPre: It helps me to know what I did wrong</p> <p>BarbaraPost: same as above</p> <p>DominiquePost: That's how I learn better to make a mistake with a teacher than in a conversation with a native speaker.</p> <p>IanPost: It helps me learn</p> <p>LancePre: better than being wrong and thinking I'm right.</p> <p>LarissaPost: I dunno</p> <p>LisaPre: I don't want to keep making mistakes.</p> <p>LisaPost: I don't want to always make mistakes.</p> <p>NinaPre: So I don't keep saying it wrong.</p> <p>TiffanyPre: I like a teacher with leadership.</p> <p>TiffanyPost: I want the right answer</p> <p>VirginiaPost: If I'm having a hard time understanding, it's always nice to hear I'm not the only one who is having difficulty (when someone else is being corrected)</p>
9	I don't think my classmates should correct me.	<p>DaniellePre: They don't always know the right answer.</p> <p>DaniellePost: They don't know any better than I do.</p> <p>DamionPost: It is really annoying, but it helps.</p> <p>GeorgePost: They are in the same level as I, what makes them so correct?</p> <p>GretchenPre: It's a classroom, you are all learning together.</p> <p>GretchenPost: Because we can all learn together</p>	<p>AdriennePre: unless I ask 4 help, it seem almost degrading.</p> <p>AdriennePost: sure, if they know it's incorrect, why not?</p> <p>BrendaPre: It helps when peers can explain it better</p> <p>BrendaPost: They can teach as well as the teacher sometimes</p> <p>EmilyPre: It's good to be able to help</p>	<p>AmandaPre: Sometimes it's okay, but not always</p> <p>BarbaraPre: what if they are wrong</p> <p>BarbaraPost: How do I know they are correct?</p> <p>DominiquePre: Any help is welcome.</p> <p>DominiquePost: As long as they're correct, it's fine with me.</p> <p>GerhardPost: Some students may have better comprehension</p>

#	Statement	NSC	SSC	ESC
		<p>FrancisPre: That sometimes helps me learn also.</p> <p>FrancisPost: You can learn from your classmates.</p> <p>JenniferPre: If they know what they are talking about, the more help the better.</p> <p>LauraPre: but not in front of class</p> <p>LauraPost: But they should be respectful about it.</p> <p>MarkusPost: Maybe they know, it depends on the classmate.</p> <p>MichellePre: Any help is good.</p> <p>MichellePost: As long as the info they give is true.</p> <p>StevePre: They can help, as long they don't mind being helped back on occasion.</p>	<p>each other instead of letting each other make mistakes.</p> <p>GrahamPre: If I say anything wrong I want to know.</p> <p>SamanthaPre: Unless their advice is asked for</p> <p>TinaPost: As long as they're correct, I don't mind</p> <p>WilmaPre: If they know the right answer, so be it.</p>	<p>IanPre: any help is good help</p> <p>IanPost: They know less than me.</p> <p>LancePre: I'll take all the help I can get.</p> <p>LarissaPost: I feel bad</p> <p>LisaPre: The more help the better.</p> <p>LisaPost: I don't see why not.</p> <p>NinaPre: If they are right they should.</p> <p>NinaPost: They don't know better than me.</p> <p>TiffanyPre: I have no problem unless I feel unrespected.</p> <p>TiffanyPost: I need all the help I can get.</p> <p>VirginiaPost: I think it's embarrassing.</p>
10	When I say something wrong, I like it when the teacher writes the correction on the board.	<p>DaniellePre: She is showing what was done wrong and why.</p> <p>DaniellePost: Then I can see where I messed up</p> <p>DamionPost: It really helps to see it written.</p> <p>GeorgePost: It is a great visual.</p> <p>GretchenPre: Again, it helps the other students, too.</p> <p>GretchenPost: Then I am able to better see what she means.</p> <p>FrancisPre: I'm a visual learner, so to see helps me learn better.</p> <p>FrancisPost: visual and is great; visual learner.</p> <p>JenniferPre: Another way to keep correct info in.</p> <p>LauraPre: visuals help</p> <p>LauraPost: it helps to see it in writing</p> <p>MarkusPost: I learn better by seeing</p> <p>MichellePre: Seeing it spelled helps.</p> <p>StevePre: It can help, I spose.</p>	<p>AdriennePre: Sometimes it's learning experience, but sometimes embarrassing</p> <p>AdriennePost:hmm... maybe not, because I might think its something simple that I don't understand and my classmates know that.</p> <p>BrendaPre: helps to see it</p> <p>BrendaPost: It helps to see it.</p> <p>EmilyPre: Mildly humiliating, but it will help not only me, but others who make the same errors.</p> <p>GrahamPre: I am a visual learner</p> <p>WilmaPre: visual learner</p> <p>WilmaPost: helps me better</p>	<p>AmandaPre: That doesn't help me</p> <p>BarbaraPre: Helps me see what I did</p> <p>BarbaraPost: shows me my mistakes</p> <p>DominiquePost: That way I can see how it is written.</p> <p>GerhardPost: only if I can't spell it.</p> <p>IanPre: visual stuff helps</p> <p>LancePre: Helps me understand it better</p> <p>LarissaPost: I will learn</p> <p>LisaPre: It's helpful.</p> <p>LisaPost: Then I am able to put it in my notes.</p> <p>TiffanyPre: I am a visual learner</p> <p>TiffanyPost: same as above.</p> <p>VirginiaPost: I learn through rutes and studing. It's easier if I have it in notes.</p>

#	Statement	NSC	SSC	ESC
1 1	I like it when my teacher helps me in getting my meaning across rather than fixing every error.	<p>DaniellePre: I don't want any errors in my work.</p> <p>DaniellePost: I liked to know what my errors are AND know he right way to get the meaning across.</p> <p>DamionPost: It takes a little of the pressure off.</p> <p>GretchenPre: Sometimes you just need to get the jist of some things.</p> <p>GretchenPost: I think the overall meaning is more important.</p> <p>JenniferPre: Both correction and getting meaning across are important.</p> <p>JenniferPost: I like to know what I am oing is wrong or right so I can know the right way.</p> <p>MarkusPost: I want to learn correctly. Perfect practice makes perfect.</p> <p>MichellePre: I want to know my errors.</p> <p>MichellePost: I like to know my errors.</p> <p>StevePre: This is another helpful, less patronizing way sometimes.</p>	<p>AdriennePre: I think I learn better that way.</p> <p>AdriennePost: sure, um so long as I understand the general details.</p> <p>BrendaPre: I think that learning the basics is important</p> <p>BrendaPost: I know they're listening then</p> <p>EmilyPre: Although I suppose that at this point, getting the point across is helpful, I love grammar. If I'm making grammatical errors and getting the point across, that's god, but I'm still going to sound "unlearned"</p> <p>SamanthaPost: especially on tests!</p> <p>TinaPost: I am a but of a perfectionist, so I'd like every error to be fixed.</p>	<p>BarbaraPost: Meaning of things is important</p> <p>DominiquePost: If there isn't enough time to correct everything, I can always ask for clarification after class.</p> <p>IanPre: fix my error</p> <p>LancePre: Main ideas are more important.</p> <p>LarissaPost: I will learn</p> <p>LisaPre: We all make mistakes, it might be discouraging to have all your mistakes corrected.</p> <p>TiffanyPre: I like every error corrected.</p> <p>TiffanyPost: I want to see all my errors.</p> <p>VirginiaPost: I learn and wont do it again.</p>
1 2	When I say something wrong, I like it when the teacher tells me that what I said was wrong without telling me the correct form.	<p>DaniellePre: I would like to know why it was wrong.</p> <p>DaniellePost: I'll do it again, because I don't know where I messed up.</p> <p>DamionPost: I won't learn how to say it correctly.</p> <p>GretchenPre: I want to be able to replace my knowledge.</p> <p>GretchenPost: I want the correct form.</p> <p>FrancisPre:everyone deserves to know the answer.</p> <p>JenniferPre: Correction helps one realize what they did wrong.</p> <p>MarkusPost: not cool</p> <p>JamesPre: it gives me a chance to think about my</p>	<p>AdriennePre: No, I like to know how to correct.</p> <p>AdriennePost: need explanation why in addition to correcting it.</p> <p>BrendaPost: It helps to be corrected.</p> <p>EmilyPre: I need to know how to fix it.</p> <p>KenPre: what good does that do?</p> <p>SamanthaPre: Students need to know which is correct.</p> <p>WilmaPre: need to learn</p>	<p>AmandaPre: How does that help?</p> <p>BarbaraPre: They should always correct</p> <p>BarbaraPost: I find it hard sometimes to know my error</p> <p>DominiquePre: I need to know the correct form to improve.</p> <p>DominiquePost: I want to get the correct way to say things also not just that it is wrong.</p> <p>GerhardPost: doesn't accomplish anything</p> <p>IanPre: tell me what is right</p> <p>LancePre: I like knowing what was wrong.</p>

#	Statement	NSC	SSC	ESC
		<p>answer MichellePre: Sometimes it's best to learn on your own. MichellePost: I need to know what I did wrong. StevePre: that usually seems condescending.</p>		<p>LarissaPre: I can't know the correct form LarissaPost: don't like telling me LisaPre: I usually need a clue LisaPost: If I don't say it right, I probably don't know it. NinaPre: I need to learn the correct version. TiffanyPre: I want the corrected form. TiffanyPost: I want the correct forms. VirginiaPre: it's all a learning process. Things need corrections but in a positive way. VirginiaPost: I like to be corrected. It's part of learning, if not a teacher's job to only prove us wrong.</p>
1 3	I believe using technology in the language classroom is beneficial for language learning.	<p>DaniellePre: It helps, but I don't think it's necessary. DaniellePost: It gives a different way to look at the material DamionPost: I much prefer book work to computer work. GeorgePre: You don't necessarily need technology to teach. I learn better when things are explained in English first. GeorgePost: This semester, I don't believe using the computer helped, but it could. GretchenPre: You are able to see it written. JenniferPre: Technology is the future. LauraPost: to some extent MarkusPost: I don't think it's necessary, but sometimes it helps. MichellePre: I am indifferent. StevePre: any tools to help</p>	<p>AdriennePre: just breaks away from tradition class and makes me try harder. AdriennePost: more interactive in a nonconfrontational way with other students EmilyPre: It really depends OpheliaPost: as long as it is working! WilmaPre: visual learner</p>	<p>BarbaraPre: It helps students learn on a different level BarbaraPost: How could it not be DominiquePost: It makes finding words faster and improving accent by hearing native speakers. LancePre: varying techniques makes things more interesting LarissaPre: I love technology LarissaPost: it's easy LisaPre: Technology is everywhere. TiffanyPre: It allows for more opportunities to learn. TiffanyPost: I like using a lot of resources. VirginiaPost: dict.leo helps, online chat helps, its faster and answers are available when you need clarification.</p>

#	Statement	NSC	SSC	ESC
		the process.		
1 4	When I am in a language classroom, I want the teacher to focus on the grammatical accuracy of what I say and not focus on responding to what I am saying in terms of content.	<p>DaniellePre: I think grammar and content are equally important.</p> <p>DaniellePost: The teachers should focus on both.</p> <p>DamionPost: getting us comfortable with speaking is priority.</p> <p>GretchenPre: If it is not grammatically correct, then it may not be easily understood.</p> <p>JenniferPre: Grammatical accuracy and content are important in language classes.</p> <p>JenniferPost: Both ideas of the statement are important to language acquisition.</p> <p>LauraPre: both are nice.</p> <p>LauraPost: both</p> <p>MarkusPost: I am hear to learn proper German</p> <p>MichellePre: My grammar needs work.</p> <p>MichellePost: Both are important.</p> <p>StevePre: it depends.</p>	<p>AdriennePre: I guess don't really care.</p> <p>AdriennePost: should be both</p> <p>BobPre: Grammar is more important at a learning level.</p> <p>EmilyPre: I know it's a little contradictory, but, yes, first and foremost the point needs to be made, However, I don't want to sound like an idiot.</p> <p>GrahamPre: Grammatical accuracy is the foundation for content.</p> <p>KenPre: grammatical accuracy is important but can be refined later.</p> <p>TinaPre: I like both, a teacher should focus on both.</p> <p>WilmaPre: doesn't help with comprehension</p>	<p>BarbaraPre: Content is important, you don't always hear grammar.</p> <p>BarbaraPost: Content is also important.</p> <p>DominiquePost: Should be both, if there is not enough time, address it at the end of class.</p> <p>GerhardPost: a good mixture.</p> <p>IanPre: everything should be corrected</p> <p>IanPost: Corrections must be well rounded.</p> <p>LancePre: Main ideas are more important</p> <p>LarissaPost: I will learn</p> <p>TiffanyPre: I want the teacher to do both.</p> <p>I want the teacher to focus on both.</p> <p>VirginiaPost: Both are important.</p>
1 5	When I say something wrong, I like it when the teacher rephrases what I said and asks if that is what I meant.	<p>DaniellePre: That points out how you should say it and the direct difference.</p> <p>DaniellePost: It's a more subtle way of pointing out an error.</p> <p>DamionPost: It will help me learn.</p> <p>GeorgePost: rephrasing = correcting</p> <p>GretchenPre: Sometimes it's easier to understand.</p> <p>JenniferPre: Teacher is helping me understand and learn.</p> <p>MarkusPost: It is a nicer way of correcting.</p> <p>MichellePre: Hearing the correct term is good.</p> <p>StevePre: sure</p>	<p>AdriennePre: as long as the teacher is not rude about it.</p> <p>AdriennePost: sure I don't care</p> <p>EmilyPre: It tells me that I need to be more clear.</p> <p>WilmaPre: helps</p>	<p>BarbaraPre: It helps me understand.</p> <p>BarbaraPost: helps me clarify my meaning</p> <p>GerhardPost: doesn't always mean what I mean</p> <p>LancePre: It provides other path to learning</p> <p>LarissaPre: It is helpful.</p> <p>LarissaPost: I will learn.</p> <p>LisaPre: Sometimes I get confused on what they asked.</p> <p>TiffanyPre: Sometimes, I'm not on the same track as the teacher.</p> <p>TiffanyPost: I need her feedback.</p> <p>VirginiaPost: If I could</p>

#	Statement	NSC	SSC	ESC
				understand the teacher.
1 6	When the teacher corrects me, I am uncomfortable.	<p>DaniellePre: I have an ego, which leads to embarrassment.</p> <p>DaniellePost: Only if everyone else is paying attention.</p> <p>DamionPost: But there is no other way to do it.</p> <p>GretchenPre: Just trying to help.</p> <p>MarkusPre: only sometimes.</p> <p>MarkusPost: Everyone makes mistakes</p> <p>MichellePre: I need to be corrected.</p> <p>MichellePost: It's part of learning.</p> <p>StevePre: why should I be?</p>	<p>AdriennePre: sometimes it's learning experience but sometimes embarrassing</p> <p>AdriennePost: no, unless she is rude about it,</p> <p>EmilyPre: I'm better off if I'm corrected</p> <p>GrahamPre: slightly</p> <p>SamanthaPost: usually not</p> <p>WilmaPre: embarrassed</p>	<p>AmandaPre: Only when they're mean about it.</p> <p>BarbaraPre: Unless the teacher is mean.</p> <p>BarbaraPost: Unless the teacher is mean about it.</p> <p>ChristinaPre: I am slightly uncomfortable</p> <p>GerhardPost: here to learn</p> <p>LancePre: Corrections are not belittling</p> <p>LarissaPre: I feel like that.</p> <p>LarissaPost: I don't feel good</p> <p>LisaPre: Doesn't mean I don't need it.</p> <p>LisaPost: Yes, but I need it.</p> <p>TiffanyPre: How else will I learn?!</p> <p>TiffanyPost: I like to be corrected.</p> <p>VirginiaPost: I like correction</p>
1 7	In a foreign language class using computers gets in the way of really learning the language.	<p>DaniellePre: it advances some things – helps the teacher broadcast info to everyone more easily.</p> <p>DaniellePost: It gives a new way to look at the language.</p> <p>DamionPost: I am not getting feedback from the computer.</p> <p>GeorgePre: Computers help, but I don't really like using them.</p> <p>GretchenPre: I think the language is better understood by speaking.</p> <p>JenniferPre: Computer is the only way I can communicate with my German friend, so learning to write German on the computer is good,</p> <p>LauraPost: sometimes its more hassle</p> <p>MarkusPost: If the person is</p>	<p>AdriennePre: Just breaks away from tradition class and makes me try harder.</p> <p>AdriennePost: just a different way of communicating</p> <p>EmilyPre: We did computer conversation in my Spanish class and they were a comfortable way to practice writing.</p> <p>KenPre: technology always helps</p> <p>SamanthaPre: As long as everything is explained.</p> <p>WilmaPre: helps a little</p> <p>WilmaPost: might use online dictionaries</p>	<p>BarbaraPost: It can help sometimes</p> <p>DominiquePost: As long as it is one of the tools used and reading and speaking are there also.</p> <p>GerhardPost: the chats were beneficial</p> <p>LancePre: Communicating in the language natively will require comps</p> <p>LarissaPre: I love computers</p> <p>LarissaPost: Technology is always helpful.</p> <p>LisaPre: Computers are everywhere.</p> <p>SabrinaPre: I don't find them necessary however</p> <p>TiffanyPre: Computers</p>

#	Statement	NSC	SSC	ESC
		<p>computer illiterate it can take time away from learning.</p> <p>MichellePre: I am indifferent.</p> <p>MichellePost: I like the chat rooms.</p> <p>StevePre: I wouldn't know</p>		<p>allow me to access information</p> <p>TiffanyPost: I can use a language translator.</p> <p>VirginiaPost: Computers are beneficial because the answers are available if the teacher is not.</p>
18	My classmates can help me by pointing out my errors.	<p>DaniellePre: They may know something I don't.</p> <p>DaniellePost: Only if they know what they are talking about.</p> <p>GeorgePost: Maybe</p> <p>GretchenPre: It always helps to learn.</p> <p>FrancisPre: Everyone can learn from someone.</p> <p>MarkusPre: They aren't always correct.</p> <p>MarkusPost: only if they know</p> <p>MichellePre: Help anywhere is good.</p> <p>StevePre: as long as they're not being arrogant.</p>	<p>AdriennePre: unless I ask 4 help it seem almost degrading</p> <p>AdriennePost: only if they know what is the correct answer and can explain it</p> <p>EmilyPre: Sometimes students can explain things a little differently than the teacher. It could help.</p> <p>KenPre: the best way to learn is from peers.</p> <p>SamanthaPre: Teacher should do that.</p> <p>TinaPost: As long as they're correct.</p>	<p>BarbaraPre: True, but if they are wrong it worsens the situation</p> <p>BarbaraPost: Sometimes</p> <p>ChristinaPost: If they are accurate</p> <p>GerhardPost: only if they're correct</p> <p>LancePre: Learning from all sides is good.</p> <p>LarissaPre: I don't like groups so much</p> <p>LarissaPost: It's better</p> <p>LisaPre: Everyone helps each other.</p> <p>TiffanyPre: I may not see what they see.</p> <p>TiffanyPost: I like different opinions.</p> <p>VirginiaPost: I never received help by my classmates.</p>
19	When I say something wrong, I like it when the teacher rephrases what I said so that it contains no errors and them moves on.	<p>DaniellePre: Only if he/she asks if there are any questions first.</p> <p>DaniellePost: Only if she explains why.</p> <p>GretchenPre: I will learn something new.</p> <p>FrancisPre: I want to know my mistakes so I don't do it again.</p> <p>MarkusPre: That sounds like the best idea. This would be good unless the majority of the class repeatedly makes the same mistakes.</p> <p>MarkusPost: It is a nicer way of correcting.</p> <p>MichellePre: Maybe describe what was wrong or</p>	<p>AdriennePre: as long as the teacher is not rude about it</p> <p>AdriennePost: should explain why something is wrong</p> <p>EmilyPre: I can see the difference in the two "versions."</p> <p>GrahamPre: I like an explanation</p> <p>LindaPost: If she doesn't go over it, then I don't know where I did wrong.</p> <p>TinaPre: I would like the teacher to explain my error.</p> <p>TinaPost: I'd like her to explain a little bit</p>	<p>BarbaraPre: Helps me to improve</p> <p>BarbaraPost: The problem should be explained and corrected.</p> <p>GerhardPost: I'd rather be corrected</p> <p>LancePre: rephrase then correct.</p> <p>LarissaPre: I can learn</p> <p>LarissaPost: I dunno</p> <p>LisaPre: This way I know I got it wrong.</p> <p>SabrinaPre: She should be sure I understand before moving on.</p> <p>TiffanyPre: I like the teacher to move on.</p> <p>TiffanyPost: I don't</p>

#	Statement	NSC	SSC	ESC
		something. StevePre: sure	more than that. WilmaPre: need explanation	want the teacher to be hung up on one point. VirginiaPost: I agree if there is explanation and interest b the teacher.
20	When we chat in class, I like it when the teacher participates actively in our discussion.	DaniellePost: It keeps the conversation moving if one person is slow. GeorgePost: It is a little uncomfortable, but it makes me focus on the task at hand. LauraPost: helps move conversation along MarkusPost: It helps move things along.	AdriennePost: I kind of like only student to student participation	BarbaraPost: Sometimes the topic is difficult and the teacher engages us with questions ChristinaPost: Sometimes!! DominiquePost: As long as it is related to our topic. LarissaPost: I dunno TiffanyPost: I can stay focused. VirginiaPost: Either
21	When we chat in class, I don't like talking out loud with the other students.	DaniellePost: I just don't. DamionPost: I'm nervous. MarkusPost: I don't care either way.	AdriennePost: If I have a question, I like to ask the person sitting next to me.	LarissaPost: I dunno TiffanyPost: I always like talking out loud. VirginiaPost: If I'm confident I like it.
22	Chatting in class is fun.	DaniellePost: Only if the other person responds quickly and accurately. DamionPost: Would rather be getting from the teacher. MarkusPost: You don't have to be so worried about mistakes.	AdriennePost: Talk instead of write an exercise. OpheliaPost: As long as chat partner has a clue	BarbaraPost: Sometimes it is fun, but others it is a hassle. DominiquePost: but it depends on the commitment and interest of the partner GerhardPost: on computer LarissaPost: I don't like it. LisaPost: Sometimes the topics are confusing because we just learned it. NinaPost: My partners were either really dumm or mean or boring. TiffanyPost: I like communicating. VirginiaPost: I'd rather be learning and understanding on paper.
23	When we chat, I like it when the teacher corrects	DaniellePost: It helps me keep conversing and it's not embarrassing	AdriennePost: as long as she doesn't correct every single	ChristinaPost: Sometimes LarissaPost: I will learn

#	Statement	NSC	SSC	ESC
	my mistakes.	StevePost: sometimes	mistake, it is a learning/mistake experience OpheliaPost: lots of mistakes in chat, but that's okay SamanthaPost: rephrases my sentences	TiffanyPost: I can stay focused. VirginiaPost: She never corrected me.
2 4	When we chat in class, I correct other people's mistakes.	DamionPost: Not my place when I'm not sure myself MarkusPost: only sometimes. MichellePost: only sometimes... StevePost: not usually, only sometimes	AdriennePost: sometimes, of its like spelling or the meaning of the word TinaPost: Sometimes and only if I know I'm right.	DominiquePost: If they ask for help. GerhardPost: sometimes IanPost: I let the teacher do that. LarissaPost: I don't like it. TiffanyPost: I liked to help others. VirginiaPost: I never did.
2 5	When we chat in class, I notice my own mistakes and the mistakes of other students.	GeorgePost: Sometimes StevePost: sometimes	AdriennePost: Yep, because sometimes I won't know what tense to use and my partner will copy the tense I choose to use	LarissaPost: I don't care TiffanyPost: Verbalizing helps me learn. VirginiaPost: Sometimes. I try to be as accurate as possible.
2 6	My German improved through the chatting in class.	DaniellePost: I think my written German has NOT spoken GeorgePost: I guess	AdriennePost: I suppose, new way of interaction, is I remember things better after chatting. OpheliaPost: When I had a good partner WilmaPost: I'm more of a visual learner	BarbaraPost: Obviously I was forced to practice the language this giving me more practice enabling me to become better. ChristianPost: Not enough time. LarissaPost: I don't learn anything TiffanyPost: Verbalizing helps me learn. VirginiaPost: A little bit. My German improved when I studied.
2 7	I have used chat/messaging software (ICQ, Instant Messenger, etc.)	DaniellePre: MSn, Yahoo, AIM DaniellePost: not often GretchenPre: easy when living far away – cheaper,	AdriennePre: busy AdriennePost: lazy KenPre: MSN Messenger SamanthaPost: AIM	BarbaraPre: Aber nicht auf deutsch ChristinaPost: My kids do. LancePre: daily, many

#	Statement	NSC	SSC	ESC
	to communicate with friends.	too. FrancisPre: I used instant messaging often. JenniferPre: I like computers better than phones. MarkusPost: I used to a lot. StevePre: Yeah quite frequently.		times a day, but it's not exclusive LarissaPost: I like it LisaPre: This is how I talk to my friends. TiffanyPre: Instant Messenger TiffanyPost: I'm on AOL frequently.
28	I have used chat and messaging software to communicate for work or for school.	DaniellePre: I never thought it appropriate DaniellePost: this semester GeorgePost: only in German class on Wednesdays GretchenPre: not as professional FrancisPre: Worked on homework with a fellow classmate this summer during summer school JenniferPre: It is usually easier to get a hold of my friends in classes this way. StevePre: never have	AdriennePre: busy with better things to do AdriennePost: email very useful and necessary SamanthaPre: only for language classes here at U	LancePre: see above LarissaPost: I dunno LisaPre: email TiffanyPost: Never before this. VirginiaPost: only this class.
29	I have used chat in another foreign language classroom.	DaniellePre: It's never been offered. DaniellePost: not other foreign language FrancisPre: may have used this from but called by a different name JenniferPre: high school was not funded enough to have good computers StevePre: not available	AdriennePre: don't know/wasn't offered that program AdriennePost: teacher never offered it. EmilyPre: Soan 251, about once or twice a month SamanthaPost: only German 102	ChristinaPost: In Ger 102 LarissaPost: I dunno TiffanyPost: Never before this. VirginiaPost: not last semester
30	My teacher mainly corrects only certain kinds of mistakes I make during class.	DaniellePre: Class just started DaniellePost: She corrects all mistakes GeorgePost: She corrects ALL mistakes. JenniferPre: She would correct all mistakes JenniferPost: Usually she corrects any she sees. LauraPost: corrects a lot MarkusPost: Usually only big mistakes. MichellePost: She gets a variety of my mistakes.	AdriennePre: don't remember AdriennePost: corrects various mistakes SamanthaPost: she corrects most TinaPost: She corrects any mistake	ChristinaPost: don't know GerhardPre: usually always with past teachers. GerhardPost: all mistakes IanPre: she corrects them all IanPost: She corrects most mistakes LancePre: all mistakes are corrected LarissaPost: I dunno TiffanyPost: She is often busy with other

#	Statement	NSC	SSC	ESC
				things to correct ALL mistakes. VirginiaPost: once or twice
3 1	My teacher mainly corrects only certain kinds of mistakes during chat.	DaniellePre: Class just started DaniellePost: She corrects what she catches. DamionPost: Only gets us moving again. FrancisPre: never used chats before. JenniferPre: didn't have chat JenniferPost: Usually she corrects any she sees. LauraPost: mostly asks more questions MichellePost: She gets a variety of my mistakes.	AdriennePre: ? don't know AdriennePost: corrects various mistakes of my own and other students EmilyPre: teacher never made corrections TinaPost: She corrects any mistake	ChristinaPost: don't know GerhardPost: all mistakes LarissaPost: I dunno TiffanyPost: Whenever she gets a chance to correct. VirginiaPost: never been corrected
3 2	When the teacher corrects mistakes during chat it is really unkind to the student.	DaniellePre: Class just started DaniellePost: It's helpful GeorgePost: You need to know the grammar. JenniferPre: didn't have chat MarkusPost: Always respectful and nice. MichellePre: They are supposed to help.	AdriennePre: as long as the teacher is not rude about it AdriennePost: don't think so, unless the teacher is constantly correcting that student's mistakes. GrahamPre: It helps to know mistakes, even during chat. LindaPre: I don't think so, just shows where one was wrong. OpheliaPost: don't really need to correct chat mistakes SamanthaPre: It's helpful	TiffanyPost: She is teaching – it's not rude. VirginiaPost: never happened
3 3	In my other language classes, my teachers corrected certain kinds of students' errors in spoken conversations.	DaniellePre: Usually errors that were common among students JenniferPre: corrected all mistakes	AdriennePre: doing interactive assignments in class EmilyPre: they just wanted to get us talking	VictoriaPre: corrected all errors LancePre: when the errors disrupt communication
3 4	In my other language classes, my teachers	DaniellePre: Red marks all over papers JenniferPre: corrected all	AdriennePre: don't really remember	LancePre: almost all, but not always.

#	Statement	NSC	SSC	ESC
	corrected certain kinds of students' errors in written assignments.	mistakes LauraPre: which helps remember these mistakes.		
3 5	In my other language classes, my teachers corrected certain kinds of students' errors during chats.	DaniellePre: never had chats. JenniferPre: didn't have chat.	AdriennePre: don't know	
3 6	What did your teacher do during chatting? Did you like what she did?	DaniellePost: She said hello, asked friendly questions, made small corrections. Yes. DamionPost: She would log on ask a question and disappear. No. GeorgePost: She would ask questions to facilitate conversation It did help me get on the right track. GretchenPost: help us along JenniferPost: She would add questions for us to answer and correct mistakes. LauraPost: Asked more questions, which I liked because it moved the conversation along. MarkusPost: Pop in every few minutes to make sure we were moving along. Yes, it was fun to chat with her because she is fluent and other students are not. MikePost: She helped contributing questions to move the conversation along or pointing out grammatical errors. JamesPost: She sometimes participated in the chat, helping with grammar and stuff. I liked that. MichellePost: She asked questions relating to conversation and corrected sentences. StevePost: Just pop in and comment on occasion.	VeronicaPost: Brought us back to topic. Sometimes. AdriennePost: answer questions, walk around, chat in the rooms, sure, it helped fix computer problems, and make corrections. BrendaPost: She would help the flow of discussion. I thought it helped. BobPost: She participated in the chat and helped promote conversation. Yes. EmilyPost: She added comments to the conversation as well as corrections; yes. GrahamPost: She participated and asked questions, in addition to correcting us. I liked what she did. KenPost: She watched what we were saying, occasionally correcting us. Yes, that was fine. LindaPost: She got conversation started and she asked questions so that they	AmandaPost: She participated and would throw out subjects to get the chat going again. Yes. BarbaraPost: Yes ChristianPost: Mostly offered chat/subject suggestions. Some correction ChristinaPost: She went from channel to channel. It was good to have her involved, DominiquePost: She asked questions, and gave her opinions. Not usually, as they would have usually nothing to do with out conversation. VictoriaPost: She participated and kept the flow going. FionaPost: She participated in the discussion. Yes. GerhardPost: Provided verbal props through questions. Yes IanPost: She helped keep the conversation going. Yes. JamesPost: Posed questions LancePost: Asked questions to stimulate conversation LarissaPost: She involved. Yes

#	Statement	NSC	SSC	ESC
			<p>had correction. I liked it cuz I knew where I was doing errors.</p> <p>MartinPost: She participated during some chats. I would when she corrects my errors.</p> <p>NigelPost: Participated in discussions and corrected grammar, yes.</p> <p>OpheliaPost: Asked questions, participated. Yes, liked it.</p> <p>PhilipPost: She usually corrects, but sometimes she helps us when we are stuck and don't know how to proceed.</p> <p>SamanthaPost: she rephrased our sentences if incorrect; yes</p> <p>GinaPost: She would sometimes try to get the conversation going, or perhaps comment on someones response. She might also ask another question, for clarification sake or for her own interest.</p> <p>TinaPost: She chatted with us and corrected our errors. Yes.</p> <p>WilmaPost: She corrected grammar. Yes</p>	<p>LisaPost: If there was no chatting she would ask us questions.</p> <p>NinaPost: She brought up questions that we should be asking each other.</p> <p>PatrickPost: She helped and participated. I liked it.</p> <p>SabrinaPost: participated, yes</p> <p>TiffanyPost: She corrected when we were unfocused. Yes.</p> <p>VirginiaPost: She probably chatted, but not with me.</p>
3 7	How would you describe your teacher's role during the chatting? What role would you have liked her to play?	<p>DaniellePost: Minimal. That same role.</p> <p>DamionPost: She was a teamster hearing us along. I think she should have slowed down to actually chat.</p> <p>GeorgePost: She was a</p>	<p>VeronicaPost: didn't do much.</p> <p>AdriennePost: observer/corrector, the role was fine.</p> <p>BrendaPost: I think she helped in any way she could</p>	<p>AmandaPost: fairly active and it worked for me.</p> <p>BarbaraPost: She did fine. No improvements</p> <p>ChristianPost: Suggested subjects and examples</p>

#	Statement	NSC	SSC	ESC
		<p>monitor. She's fine as being a monitor.</p> <p>GretchenPost: discrete</p> <p>JenniferPost: She would drop in our chat for a minute or two and help us with grammar or add a question.</p> <p>LauraPost: Prompted thought</p> <p>MikePost: She regulated the relevance of our topic, which kept things moving.</p> <p>JamesPost: She was he administrator which I liked, we were already prompted.</p> <p>MichellePost: Adviser which works.</p> <p>StevePost: I dunno. She just helped is sometimes.</p>	<p>BobPost: As a conversation helper.</p> <p>EmilyPost: correcting, stimulating. She did just fine.</p> <p>GrahamPost: She helped us ask the right questions, steered us in the right way and corrected us. I think that is what she did and should have been doing.</p> <p>KenPost: Her role was a helpful one. Although I think it was hard for her to correct everybody.</p> <p>LindaPost: She just supervises. She die the right role.</p> <p>MartinPost: She would sometimes participate. I would have liked her to overview my work and correct it.</p> <p>NigelPost: She played the role of a student chatting partly and partly as the teacher by correcting mistakes. I thought what she did was appropriate.</p> <p>OpheliaPost: Added a little to the chat. It was OK.</p> <p>SamanthaPost: helpful, but not pushy.</p> <p>GinaPost: She was a moderator, which was what I would expect from her.</p> <p>TinaPost: She was a participant and a teacher which was the perfect role for her to play</p> <p>WilmaPost: An</p>	<p>ChristinaPost: She would start the chat, if weren't saying it right.</p> <p>DominiquePost: to correct chat conversations</p> <p>VictoriaPost: God. The one she did play.</p> <p>FionaPost: She acted as kind of a monitor making sure everyone was participating and giving questions and/or comments</p> <p>GerhardPost: Stimulate conversations</p> <p>IanPost: She help keep the conversation on topic and moving ahead. The role was good.</p> <p>JamesPost: She led it ... didn't really get involved in the chat</p> <p>LancePost: active but not overbearing. That was good.</p> <p>LarissaPost: Good she helped.</p> <p>LisaPost: It was helpful</p> <p>NinaPost: Usually just describing rules.</p> <p>PatrickPost: Helper and corrector. I liked that role.</p> <p>SabrinaPost: great</p> <p>TiffanyPost: She is omnipotent. None other. ..</p> <p>VirginiaPost: Don't know, she sounded like she enjoyed helping other students though.</p>

#	Statement	NSC	SSC	ESC
			observer. I would have liked her to participate actively.	
3 8	If you were the teacher in the class, how would you change the chat sessions?	<p>DaniellePost: I would make sure different people chatted with each other more often.</p> <p>DamionPost: I wouldn't use computers.</p> <p>GeorgePost: Since my vocab in Deutsch is not good, I would like computer instructions to be in English as well as in German.</p> <p>GretchenPost: nothing</p> <p>JenniferPost: I would make the chat topics more interesting.</p> <p>LauraPost: I would make the topics easier to talk about for long periods of time.</p> <p>MarkusPost: I would not.</p> <p>MikePost: I wouldn't.</p> <p>JamesPost: no</p> <p>MichellePost: I wouldn't.</p> <p>StevePost: I dunno. Make the chat more open, and less restricted to topics.</p>	<p>VeronicaPost: not have them.</p> <p>AdriennePost: um, maybe have everyone chat in the same chat room</p> <p>BrendaPost: I wouldn't</p> <p>BobPost: I wouldn't</p> <p>EmilyPost: not sure.</p> <p>GrahamPost: I wouldn't, they are fine.</p> <p>KenPost: I would have somebody explain the subject of chat more clearly and give key words that might be used for that subject.</p> <p>LindaPost: Have it more clear as to what students are supposed to do.</p> <p>MartinPost: I would tru to be more involved and correct discussions more often by printing them out and discussing the mistakes.</p> <p>NigelPost: I would not change them.</p> <p>OpheliaPost: Pairing together people with similar skill level.</p> <p>SamanthaPost: I wouldn't; they were very helpful – nice change from classroom setting ☺</p> <p>GinaPost: I would make them for less times, sometimes we ran out of things to say.</p> <p>TinaPost: I don't think I would have.</p>	<p>AmandaPost: I wouldn't</p> <p>BarbaraPost: different topics.</p> <p>ChristianPost: Allow greater time</p> <p>ChristinaPost: Nothing, I think it is fine.</p> <p>DominiquePost: Make it fun/interesting, not sound as if it was something required only</p> <p>VictoriaPost: I wouldn't have it at the end of class.</p> <p>FionaPost: I wouldn't change them.</p> <p>IanPost: I would make sure the people involved, especially in a large chatroom are all mature.</p> <p>JamesPost: wouldn't</p> <p>LancePost: not quite as long</p> <p>LarissaPost: There is no chat session</p> <p>LisaPost: I honestly don't know.</p> <p>NinaPost: Let them choose their own chat partners.</p> <p>SabrinaPost: not at all</p> <p>TiffanyPost: I wouldn't</p> <p>VirginiaPost: I wouldn't have it as much. I like reviews because I feel German is hard.</p>

#	Statement	NSC	SSC	ESC
			WilmaPost: I don't know.	
3 9	Is there anything else you would like me to know?	DaniellePost: nope ☺ GretchenPost: no	AdriennePost: nope, it was a fun experience ☺ BrendaPost: I really liked chatting, but some of the prompts were too hard. BobPost: Danke MartinPost: Until this 201 class I have no had German for 2 years. This class has been difficult for me however I believe MorningTeacher helped me out tremendously, without her, who knows how lost I could be. Thank you.	AmandaPost: I enjoyed the chats, Most of the time. The only time I didn't was when I got partner who wouldn't respond to what I said. ChristinaPre: I enjoy chatting but I think it should be only ¼ of class time. Technical difficulties make it sometimes hard to enjoy the chat times during class. GerhardPost: Maybe find a way so that the teacher(s) could have more chat time w/ all students. Improbable because of class size. JamesPost: No. LarissaPost: I don't like chat sessions. It's boring. TiffanyPost: No. VirginiaPost: No.

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