

From chatting to confidence: A case study of the impact of online chatting on international teaching assistants' willingness to communicate, confidence level and fluency in oral communication

by

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ABSTRACT

This study investigates the potential impact of online chat on the learners' willingness to communicate and state communicative self-confidence. It also analyzes the transfer of language experience from written mode (chat) to spoken mode (oral) and the impact of chat on oral fluency. Five male international teaching assistants from China were selected as participants to see if the chat experience helped to reduce their state anxiety and increase their state self-perceived competence so that they felt confident and willing to participate in class discussions. Audio recordings made of the first three sessions were transcribed and analyzed to determine the number of words per minute while the transcripts from the last two sessions were used to determine the percentage of turns and the percentage of words uttered by each participant. Chat transcripts were compared with the transcripts of oral reports to investigate the language experience that was transferred from the chat. Finally, the ratings of four raters were used to provide fluency scores from a listener's perspective.

The findings showed that the impact of chat varies from learner to learner and is dependent on variables like topic of discussion and partner's attitude. Willingness to communicate appears to be higher after the chat experience if learners managed to obtain useful information during the chat discussion. An increase in state communicative self-confidence is the result of an increase in state self-perceived competence rather than a decrease in state anxiety. In general, learners found that the chat experience allowed them time to organize their thoughts and provided them with the necessary vocabulary to express their thoughts, making them confident enough to participate in the speaking task. The results also showed a great deal of language transfer between written and spoken mode. Learners

transferred both their own lexical phrases and their partner's lexical phrases from the chat discussion into their oral reports. In terms of fluency, raters were consistent in deciding the fluency level based on linguistic aspects like stress, intonation and vocabulary, and non-linguistic aspects like speed, pauses and rhythm.

These findings will be beneficial for L2 instructors who are looking for ways to improve their learners' speaking ability by promoting positive learning experiences. Instructors who are interested in using online chat as an alternative teaching tool can also use this study as a guide for practical considerations.

CHAPTER 1. INTRODUCTION

I feel so dumb in my German class. I went to sit in the back of the room so maybe I won't get called on to speak. When I know I am going to have to say something, I spend what seems like eternity thinking of how it should be said and when I say it, it still doesn't come out right.

(Horwitz & Young, 1991: xiii)

Why do some language learners avoid speaking in the target language (TL) even when they know that "practice makes perfect"? Why do other language learners write, read and listen with ease but have so much difficulty speaking? How can language teachers ensure that their students improve their speaking skills? While teaching English as a second language (ESL) in Malaysia, I discovered many of my students who were in similar situations. They would often look down to avoid being called upon to answer or speak in English. Teaching English 180 (Speaking for International Teaching Assistants) at Iowa State University has again allowed me to see the same condition among the international teaching assistants (ITAs). It was difficult to get the ITAs to participate in class discussions willingly even though they knew that their purpose in that class was to improve their speaking skills. Hence, it was necessary to investigate the source of this avoidance and the possible ways to overcome this unwillingness to speak.

Computer-assisted language learning (CALL) has been an area of interest for many language researchers. Several studies have sought to investigate how CALL can be used effectively in a language classroom. Yet Chapelle (2001:44) points out that there is a "lack of substantive progress in educational technology." She quotes Clark (1994) who believes that

the reason for this lack in progress is because we tend to identify some possible instructional solutions and then search for problems that can validate the solutions. In doing so, "we are less open to evidence that our intuitions might be very far from the mark" (Clark, 1994:28 cited in Chapelle, 2001:44). Therefore, it was essential that this study began with the identification of a problem. Following that, I wanted to explore the possibility of CALL as a solution to the problem above. Specifically, I wanted to investigate the potential of chat software in helping learners improve their speaking skills.

In the midst of my initial research, I discovered that programs and software facilitating asynchronous communication (e-mails, bulletin/message boards) and synchronous communication (IRC, MOOs, MUDs) have been used in several studies pertaining to teaching writing/composition, increasing student participation and improving grammatical competence. They have also been used in second/foreign language classrooms. Interestingly, while no specific research of CALL has investigated the use of these programs and software to improve speaking skills, there is an assumption from some of these studies that synchronous communication, particularly chatting, is likely to improve one's speaking ability due to the strong resemblance between chatting and speaking. According to Chun, (1994:29),

"since these types of sentences [in the chat discourse] strongly resemble what would be said in a spoken conversation, the hope that the written competence gained from CACD [Computer-Assisted Classroom Discourse] can gradually be transferred to the students' speaking competence as well."

Similarly, Pellettieri (2000, 59) says that.

“because synchronous NBC [Network-based Communication], such as chatting, bears a striking resemblance to oral interaction, it seems logical to assume that the language practice through NBC will reap some of the benefits for second language development as practice through oral interaction.”

These assumptions became a springboard for this study as I knew of a free downloadable software which would serve as the perfect opportunity to test these assumptions. This software, ICQ, not only allows synchronous communication, but also allows every letter to be viewed by the other user in real-time.

Having the technology alone is insufficient to address the problems faced by the learners in a speaking classroom. Essentially, learners avoid speaking in class because they are afraid to be seen grappling with words or feel embarrassed with their inadequate ability to construct sentences or express themselves. Some studies have attributed this apprehension as language anxiety, which is affected by the learners' level of self-confidence. This study was therefore designed to investigate the impact of CALL, specifically the impact of chat on learners' self-confidence and speaking skills.

Objectives of this study

According to Chapelle (2001:45), the “evaluation of CALL (Computer-assisted Language Learning) as a solution to the problem in instructed SLA (Second Language Acquisition) needs to begin with an understanding of, or at least hypotheses about, the conditions that ideally should be created for instructed SLA.” She lists socio-affective conditions as some conditions that should be addressed for successful SLA. This study is intended to address the issue of willingness to communicate (WTC) and investigate whether

CALL has a positive impact on the socio-affective state of the learners, specifically their self-confidence, so that the learners will be willing to engage themselves in the learning experience. It is hoped that this study will provide some insights into the effectiveness of using chat software in the ESL speaking classroom. In keeping with these goals, this study poses the following four research questions:

1. Are learners more willing to communicate after chatting?
2. Do learners who have participated in chat tasks, feel more confident with their speaking ability?
3. Does the language experience of the chat actually transfer from the written mode into spoken language?
4. Does chatting improve learners' fluency in oral communication?

External and internal validity of this study

Chapelle and Jamieson (1991:37) point out that "in conducting and interpreting CALL research studies, a primary concern is that research results accurately reflect the phenomenon under investigation (i.e., that the research is valid.)" They list internal validity and external validity as two types of validity. While the internal validity "refers to the extent to which research results are attributable to the factors studied in the investigation" (p. 38), external validity addresses "generalizability of CALL research" (p. 49). Since this study is carried out as part of a curriculum for an ESL speaking class, the descriptive nature of the study has enabled a detailed description of "the context of language acquisition, learner characteristics, and CALL activities", all of which contribute to the external validity of this research (Chapelle and Jamieson, 1991:37). However, it is more difficult to ensure the internal validity of the research since there are many possible factors affecting the results of

the study, especially when the focus of research deals with something as intangible and subjective as attitudes. This study did not include a control group, which would have enabled a comparison of language experience between students who have used CALL and those who have not. To ensure that the internal validity is not at risk, steps are taken to control some variables, for example in the selection of participants. Since the "internal validity of research based on students' reports also depends on the truthfulness and accuracy of the students' reports", it is necessary to increase the validity of these self-reports (Chapelle and Jamieson, 1991:45). Therefore, more than one type of report is used to infer the participants' attitudes towards the CALL task, for example, journal entries are used as supporting evidence for the participants' responses in the questionnaires. In addition, participants are assured that their responses will be kept confidential. Participants' actual behaviors are examined based on the comparison of language quantity and language quality in their chat and oral report transcripts. Finally, statistical analysis is included to ensure the reliability of assessment procedures.

Organization of this study

The following chapters will begin with Chapter 2, which summarizes the relevant literature pertaining to the issues of willingness to communicate, language anxiety and fluency. In Chapter 3, I will provide a detailed description of the methodology used for this investigation. This will include a description of the course in which the participants were enrolled, the selection of participants, the tasks and instruments used for data gathering, the procedures involved in data collection and the methods of analysis to answer the four research questions. In Chapter 4, I will present and discuss the quantitative and qualitative results of the study, which include observation of participants' chat and oral output,

participants' responses in terms of questionnaire responses and journal entries, as well as statistical analysis and scores from raters. Finally, Chapter 5 will conclude this study with some limitations and provide recommendations for further research. In addition, I will also present some implications for ESL or EFL (English as a foreign language) teachers who are interested in using similar software to encourage active participation in a speaking class.

CHAPTER 2. LITERATURE REVIEW

This chapter explains the major constructs used in this study. In the first section, I will discuss in detail the Heuristic Model of Variables Influencing Willingness To Communicate as proposed by MacIntyre, Clément, Dörnyei and Noels (1998). The second section will cover the studies on language anxiety with particular attention to studies concerned with the constructs of self-perceived competence and self-confidence as they affect speaking. The final section concentrates on issues concerning fluency, particularly the difficulties in defining fluency and how it can be viewed from the perspective of the listener. As indicated in the previous chapter, most of the current computer-mediated communication (CMC) studies have investigated the use of asynchronous and synchronous communication to improve the teaching of writing/composition, student participation and grammatical competence but I have not been able to locate any CMC studies which focus on the improvement of speaking skills as intended by this present study. However, in order to ensure the manageability of this study, this chapter will not include any literature reviews about CMC even though this research utilizes a chat software.

Willingness to communicate

MacIntyre, Clément, Dörnyei and Noels (1998:545) indicate that many language teachers "have encountered students high in linguistic competence who are unwilling to use their L2 [second language] for communication whereas other students, with only minimal linguistic knowledge, seem to communicate in the L2 whenever possible." It appears that the spontaneous and continuous use of L2 by these learners is not ensured based on their level of

communicative competence alone. On this premise, they seek to investigate the relationships between linguistic, communicative, and social psychological variables that might affect the willingness to communicate (WTC) by outlining a comprehensive conceptual model to be used as a basis for research. Their Heuristic Model of Variables Influencing Willingness To Communicate presented in Figure 2.1, shows the potential influences on WTC in the L2 and their anticipated interrelations among the constructs. Their choice of a pyramid-shaped structure allows them to begin their discussion at the moment of communication (top of pyramid) as well as to show the immediacy of some factors compared to others.

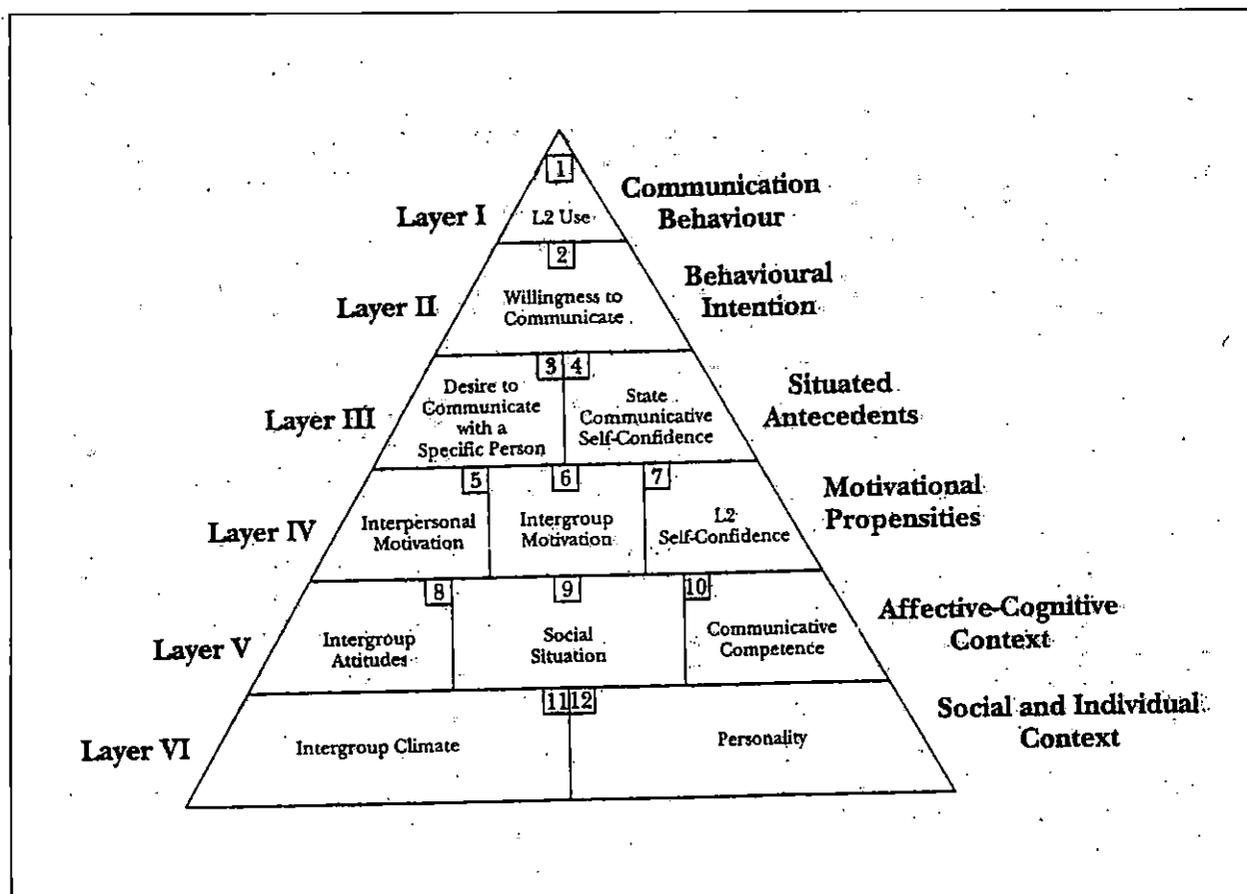


Figure 2.1 Heuristic Model of Variables Influencing Willingness To Communicate (MacIntyre, Clément, Dörnyei and Noels, 1998:547)

This model is divided into six layers of variables. MacIntyre et al. divide these variables into two main categories. The first category consists of enduring influences that "represent stable, long-term properties of the environment or person that would apply to almost any situation" while the second category includes situational influences that "are seen as more transient and dependent on the specific context in which a person functions at a given time" (p. 546). Therefore, the first three layers (I, II, & III) in the model represent situation-specific influences on WTC at a given moment in time while the last three layers (IV, V, & VI) reflect the stable enduring influences on the process.

Situational influences

Communication behavior in Layer I is treated in the broad sense to include any L2 activities such as speaking in the L2 class, reading L2 newspapers or utilizing L2 on the job. Since language teachers are only able to create a limited array of opportunities for L2 communication, MacIntyre et al. argue that willingness to seek out communication opportunities and willingness to use the L2 should be the ultimate goal of any language learning process so that learners would be able to progress beyond the classroom.

Layer II focuses on WTC, defined as "a readiness to enter into discourse at a particular time with a specific person or persons, using a L2" (p. 547). According to MacIntyre et al., the opportunity to communicate is not absolutely necessary to possess WTC. For example, if several students raise their hands but only one student is selected to verbalize the answer, then all the students who have raised their hands have expressed WTC. Therefore, WTC includes nonverbal communicative events such as hand-raising as a reflection of WTC in the L2. This present study will extend this premise of WTC in terms of turn taking during an open discussion. If students take a turn to present their opinions or

respond to someone's comments, they will be seen as willing to communicate. In the event that their attempt to take a turn is not successful because someone else was trying to take a turn at the same time, their unsuccessful attempt will also reflect WTC since the opportunity to communicate is not the absolute indication of WTC.

In Layer III, the model shows two immediate situated antecedents of communication: (a) the desire to communicate with a specific person and (b) state self-confidence. Although desire to communicate depends on variables in Layer IV, the researchers, drawing on studies in sociolinguistics, propose that affiliation could lead to a strong tendency to converge linguistically by using the L2. This affiliation usually occurs "with persons who are physically nearby, persons who are encountered frequently, physically attractive persons, and those who are similar to us in a variety of ways" (Lippa, 1994 cited in MacIntyre, Clément, Dörnyei and Noels, 1998: 548-9). Figure 2.2 summarizes the types of affiliation affecting the desire to communicate.

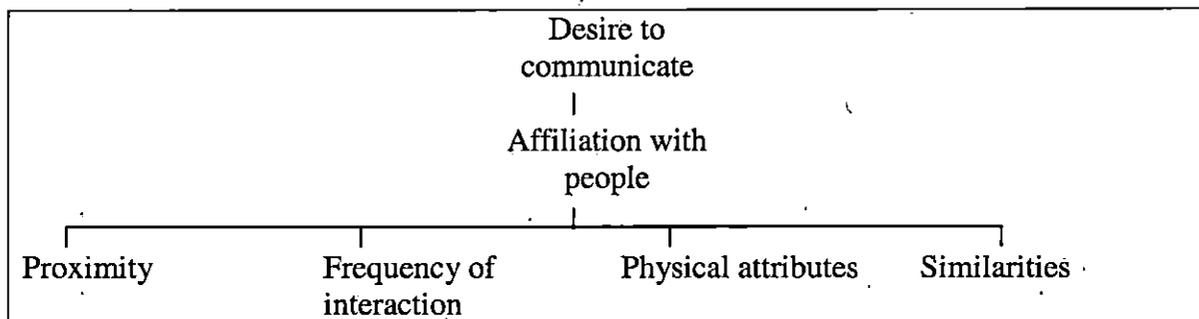


Figure 2.2 Types of affiliation affecting desire to communicate
(as defined by MacIntyre, et al, 1998)

The second variable in Layer III is state communicative self-confidence. This variable is based on Clément's (1980, 1986) study of self-confidence that is further divided into two

key constructs: (a) perceived competence and (b) a lack of anxiety. However, they differentiate Clément's concept of self-confidence from state communicative self-confidence. While self-confidence is seen as a stable characteristic, state communicative self-confidence refers to the momentary and transient feeling of confidence within a given situation. Similarly, the two key constructs of Clément's concept of self-confidence (perceived competence and lack of anxiety) are also differentiated from state perceived competence and state anxiety.

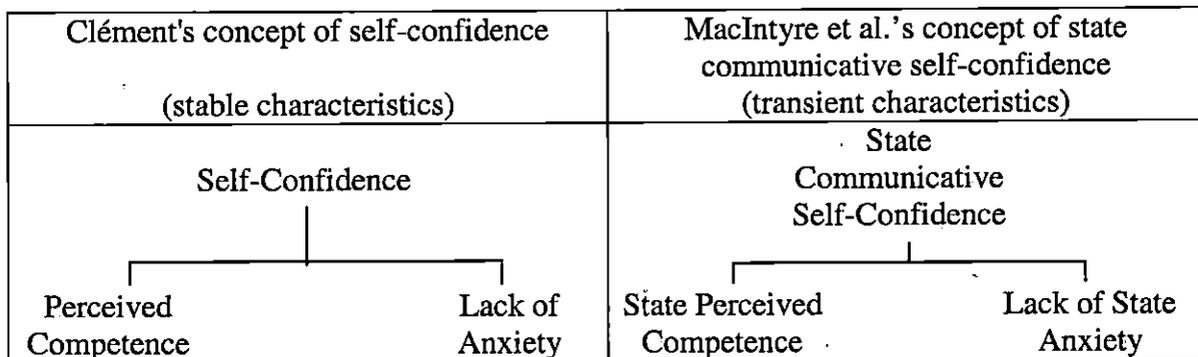


Figure 2.3 Comparison of stable vs. state self-confidence

Figure 2.3 shows the comparison between self-confidence and state communicative self-confidence. They adapt Spielberger's (1983) definition of state anxiety, which is "the transient emotional reaction defined by feelings of tension and apprehension, accompanied by autonomic nervous system arousal" (p. 549). Figure 2.4 illustrates the relationship between state anxiety and state communicative self-confidence where a high level of state anxiety will lead to a low level of state communicative self-confidence while a low level of state anxiety will lead to a high level of state communicative self-confidence.

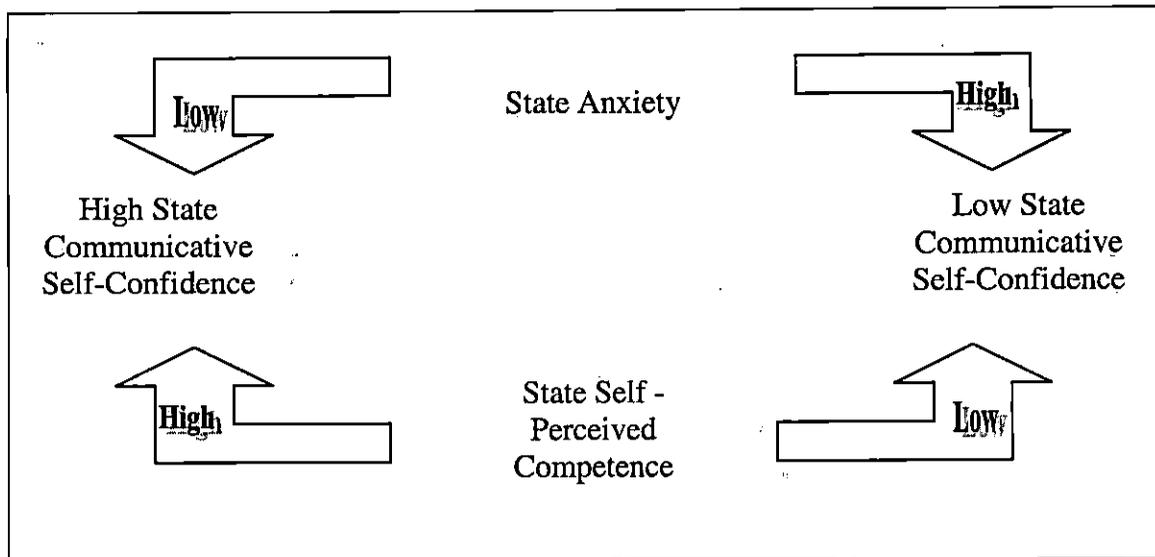


Figure 2.4 Factors affecting state communicative self-confidence

Figure 2.4 also illustrates the relationship between state self-perceived competence and state communicative self-confidence. If one's level of state self-perceived competence, which is defined as "the feelings that one has the capacity to communicate effectively at a particular moment", is high, then the level of state communicative self-confidence will be high. On the contrary, a low level of state self-perceived competence will lead to a low level of state communicative self-confidence. MacIntyre et al. propose that learners with higher state communicative self-confidence will be more willing to communicate at a particular moment because they believe they are able to express themselves effectively and they are not nervous or worried about making mistakes during their attempt to communicate. This present study will attempt to investigate if chat experiences will boost participants' level of state communicative self-confidence so that their level of WTC will increase.

Enduring influences

Layer IV provides three variables of motivational propensity that are seen as enduring influences as they are often stable individual differences: (a) interpersonal motivation, (b) intergroup motivation, and (c) L2 self-confidence. Based on studies in social psychology and interaction (Patterson, 1990; Wieman & Giles, 1988), MacIntyre et al. conclude that two purposes, control and affiliation, contribute to interpersonal motivation. They suggest that control instigates communication behavior that is commonly found in “hierarchical, interpersonal, task-related situations and emanates from the more powerful party” (p. 550). For example, teachers exercise control over students. When students express their opinions in class, their communication behavior will be either encouraged or discouraged by nonverbal and verbal cues by either party. Hence, social roles of both interlocutors are conceptualized as cross-situational influences on WTC. The second aspect of interpersonal motivation, affiliation, stems from the degree of interest in establishing a relationship with the interlocutor. Based on studies in social psychology (Dion, Berscheid, & Walster, 1972; Byrne, 1971; Newcomb, 1961; Zajonc, 1968), MacIntyre et al. list attractiveness, similarity, physical proximity and repeated exposure as affiliation motives. However, in task-oriented situations, these motives are manifested less readily compared to control motives (for example, teachers), while individual differences such as personality traits (introversion or extroversion) do contribute to the degree of affiliation tendencies.

The next motivational variable in this layer is the intergroup motivation that is influenced by the intergroup climate and attitudes. Thus, it is regarded as a direct result from the individual's belonging to a particular group. The researchers cite learning L2 for friendship or pragmatic reasons as motivational factors for L2 speech. Similar to

interpersonal motivation, control and affiliation are seen as the basic components. While the motivation to control would lead to similar types of communicative behaviors as in the interpersonal situation, the basis for contact in the intergroup situation stems from the power relationship between groups. On the other hand, "the desire to affiliate with people who use another language, and to participate in another culture" are regarded as influential forces on language learning and communicative behavior (MacIntyre et al., 1998:551). In the case of this present study, the participants' intergroup motivation would be a result of power that their test raters have over them. Since their assistantships depend on their ability to instruct undergraduates using a L2 (in this case, English), their desire to pass the language requirement for international teaching assistants (ITAs), would motivate their use of the L2 and participation in the target language culture.

The final variable in this layer is L2 self-confidence which relates to the individual's perception of his or her mastery of the L2. This confidence differs from the situation-specific, state communicative self-confidence in Layer III. Combining cognitive and affective aspects of the learners' L2 self-confidence "corresponds to the overall belief in being able to communicate in the L2 in an adaptive and efficient manner" (MacIntyre et al., 1998:551). While the cognitive component corresponds to the self-evaluation of L2 skills, the affective component corresponds to language anxiety. In other words, the judgment about the degree of mastery of L2 by the speaker and the discomfort experienced when the speaker uses the L2 will affect the L2 self-confidence. MacIntyre et al. sum up these three variables:

"Communicative competence and communication experience, along with the interlocutor's pattern of personality variables, help determine L2 self-confidence, which is primarily defined by judgments of proficiency and feelings of apprehension" (1998:551).

Table 2.1 below shows the summary of motivational propensities and the outcomes of each component as discussed in this section.

Table 2.1 Summary of the influences of motivational propensities

Motivational Propensities	Components	Outcome
Interpersonal motivation	Control	The more powerful interlocutor usually initiates communication.
	Affiliation	Attractiveness, similarity, physical proximity and repeated exposure are factors that promote the degree of interest in establishing a relationship with the interlocutor.
Intergroup motivation	Control	Communication is initiated with another party as a means of maintaining and reinforcing social positions.
	Affiliation	The desire to interact with the people of the target language and participate in their culture influence language learning.
L2 self-confidence	Cognitive	A high self-evaluation of L2 skills promotes the L2 self-confidence.
	Affective	The discomfort experienced when using a L2 reduces the L2 self-confidence.

(as defined by MacIntyre et.al, 1998)

Layer V consists of three less situation-specific variables: (a) intergroup attitudes, (b) social situation, and (c) communicative competence. Intergroup attitudes involve two opposing constructs, integrativeness and fear of assimilation. While integrativeness reflects the desire to be a part of the L2 community, the fear of assimilation refers to the fear of losing one's identity and the involvement with the L1 community by acquiring a L2. The nature of this conflict is closely linked to the status of the language groups involved. If a minority group member believes that communication in L2 will lead to assimilation in the majority group, resulting in the loss of cultural heritage, a resistance towards L2

communication may arise. However, if a majority group member learns to use the language of a minority group, there is a lesser threat to the cultural identity and, therefore, less resistance, at least based on a fear of identity loss. Besides these opposing forces, the attitudes towards the L2 itself could be contributing factors towards motivation to learn. A positive attitude resulting from positive experiences in the language classroom, for example, may lead to enjoyment and satisfaction in learning. This motivation for language learning may take on the form of WTC if the student sees using the L2 as a “more intense and thorough effort to the learning process” (MacIntyre et al., 1998:552) compared to mere comprehension of instruction by the teacher. In other words, the student will seize every opportunity to practice using the L2 because he believes that understanding the rules of the language alone will not be enough to help him improve in his L2 ability.

The next variable in this layer, social situation, is linked to research in sociolinguistics and the study of various language requirements and constraints associated with different social situations. Several classification schemes have been presented by researchers like Hymes (1972a, b), Brown and Fraser (1979), and Biber (1994). However, MacIntyre et al. draw five central components from the three mentioned frameworks as most relevant: the participants, the settings, the purpose, the topic, and the channel of communication. Table 2.2 summarizes the variables for each of these components.

Each variable will influence situational variation. Participants in any social encounter bring together several variables that will determine the nature of interaction. According to Hatch (1992), in interactions between native speakers (NSs) and nonnative speakers (NNSs), the NNSs tend to perform in a relatively passive manner, for example, avoiding topic initiations. Bardovi-Harlig and Hartford (1990) argue that there are a certain number of

congruent speech acts that are associated with specific contexts, for instance in an academic advising session, advisors give advice or warning and students request information, permission or advice. The goals or purpose of discourse can also direct the communication activities of the participants. These goals include persuasion, transfer of information, entertainment and revelation of self. The level of self-confidence can be affected by the

Table 2.2 Central components and variables affecting social situations

Components	Variables
Participant	Speaker's age, gender, social class Relationship between participants Power relationship between participants Level of intimacy Extent of shared knowledge Social distance between participants L2 proficiency level of the interlocutor relative to the speaker Status of interlocutor (native speaker or non native speaker of L2)
Setting	Place and time of communication Location- Six primary domains Business/workplace Education/academic Government/legal Religious Art/Entertainment Domestic/personal
Purpose	Four main categories of purpose Persuade Transfer information Entertain Reveal self
Topic	Identification or recognition of topic Topical expertise Familiarity with registers Individual styles
Channel of communication	Two main channels Speaking Writing

(as defined by MacIntyre et al., 1998)

topical expertise and familiarity with a certain register. Speakers who are familiar with the topic and register usually tend to be more linguistically self-confident while the lack of these may inhibit them, even if they are generally confident speakers. Lastly, the two main mediums of communication, speaking and writing, are further divided into subtypes that might cause more variation. For instance, a telephone conversation through the oral/aural channel may present more of a challenge to L2 learners because it lacks nonverbal support compared to a face-to-face conversation. Regardless of the effects of these variables, the important point here is that they may generate different levels of WTC in various social situations.

The last variable in this layer, communicative competence, entails five main constituent competencies: (a) linguistic competence, (b) discourse competence, (c) pragmatic competence, (d) sociocultural competence, and (e) strategic competence. MacIntyre et al. argue that some development in linguistic competence, which includes syntax and lexis, is a precondition of WTC. Meanwhile, familiarity with discourse areas such as cohesion, deixis, coherence, generic structure, and the conversational structure may affect WTC because these areas govern the organization of both written and oral discourse. Next, pragmatic competence refers to the usage of speech acts sets that are conventionalized patterns and sequences of speech acts to accomplish a goal. Sociocultural competence involves the knowledge of expressing messages appropriately within a given social and cultural context, for instance the way of requesting a favor from a close friend is likely to differ from the way of requesting a favor from a professor. Finally, strategic competence refers to knowledge of communication strategies used as compensation devices for deficiencies in any of the other competences. Therefore, the development of this competence could contribute to the linguistic self-

confidence of the learners. However, it is necessary to note that WTC will depend more on how the individuals perceive their competence rather than the actual development. In other words, it is possible that incompetent communicators who perceived their competence level to be high, may show a high level of WTC while competent speakers who have inappropriate low estimation of their competence may underachieve. Table 2.3 provides the summary of the five main constituent competencies of communicative competence and their influence on WTC.

Table 2.3 Competencies and their influence on WTC

Competence	Sub-areas of competencies	Influence on WTC
Linguistic	Syntactic and morphological rules Lexical resources Phonological and orthographic systems	Knowledge in these areas are preconditions of WTC.
Discourse	Cohesion Deixis Coherence Generic Structure Conversational structure	Familiarity with these discourse areas will influence WTC because they govern the organization of both written and oral discourse.
Pragmatic	Speech acts	Knowledge of conventionalized patterns and sequences of speech acts can help to accomplish the goal of communication.
Sociocultural	Social contextual factors Stylistic appropriateness factors Cultural factors Nonverbal communicative factors	Knowledge of these factors will enable the speaker to communicate appropriately within a specific situation.
Strategic	Verbal devices Non verbal devices	The ability to cope with language-related problems during the course of communication will increase the speaker's linguistic self-confidence and WTC.

(as defined by MacIntyre et al., 1998)

The final layer, Layer VI, focuses on variables in societal and individual contexts, specifically the intergroup climate and the stable personality characteristics of the individuals. The intergroup climate is defined along two complementary dimensions, the structural characteristics of the community and their “perceptual and affective correlates” (MacIntyre et al., 1998:555). MacIntyre et al. (1998) believe that this intergroup climate results from the conditions that favor or do not favor the use of L2 and these conditions depend on the ethnolinguistic vitality, defined as the relative socioeconomic power of two communities and the extent of representation in social institutions, and communication networks that refer to the groups people communicate with regularly. In other words, “the language of a group with high ethnolinguistic vitality would retain greater prestige and attract more speakers and would, in general, be used more frequently in daily exchanges” (MacIntyre et al., 1998: 555). In addition, the intergroup climate also depends on the “perceptual and affective correlates” that result from “the role of attitudes and values regarding the L2 community and the motivation to adapt and reduce social distance between ethnic groups” (MacIntyre et al., 1998: 555). Prejudiced attitudes towards other language groups for example, may affect the L2 learning motivation and reduce the level of WTC.

The final variable in this model relates to the personality of individuals. MacIntyre and Charos (1996) conclude that extraversion, agreeableness, conscientiousness, emotional stability, and openness to new experiences contribute to the development of language learning motivation and L2 WTC. However, they note that the effect of personality appears to surface through more specific variables such as intergroup attitudes and L2 confidence.

Overall, this WTC model has identified twelve possible variables, transient and situational or enduring, in an attempt to explain the great variability in people’s propensity to

communicate. This attempt to summarize existing literature and integrate them into a single framework has revealed the complexity of relationships among the variables and that the transfer of WTC from L1 to L2 is not as simple and straightforward as one might assume.

Language anxiety

According to Gardner, Day and MacIntyre (1992), over the past three decades, the study of individual differences has expanded from cognitive factors such as aptitude and intelligence to affective factors such as motivation and anxiety. However, Gardner points out that while measures of language class anxiety and language use anxiety had been included by his colleagues and himself in many of their studies, "language anxiety has never really been integrated into [their] socio-educational model of second language acquisition" (Gardner, 1991:vii). Horwitz and Young (1991) add that while "language teachers have long been aware of the fact that many of their students experience discomfort in the course of language learning,... researchers have been unable to establish a clear picture of how anxiety affects language learning and performance" (p. xiii). In view of the complexities of relationship between anxiety and performance, I will highlight the findings of academic literature concerned with the general issue of anxiety in a foreign or second language context and then focus on the areas of direct relevance to this study, namely self-confidence, self-perceived competence and WTC.

Language anxiety and learning

The socio-educational model of second language acquisition in existing studies proposes that attitudes toward the language learning context influence motivation in several cultural contexts. While Gardner admits that language anxiety is "another important affective component in the model that is correlated with the various attitudinal and motivational

characteristics," he points out the difficulty in determining the role of language anxiety in this conceptualization (Gardner, 1991:vii).

Anxiety is defined as "the subjective feeling of tension, apprehension, nervousness, and worry associated with an arousal of the autonomic nervous system" (Spielberger, 1983 cited in Horwitz, Horwitz and Cope, 1986). However, Horwitz et al. (1986) propose that foreign language anxiety is separate and distinct from other academic anxieties such as those associated with mathematics and science. They argue that problems in authentic communication arising from "the immature command of second language relative to the first" causes the self-esteem of adults, who "typically perceived themselves as reasonably intelligent, socially adept individuals, sensitive to sociocultural mores" to be vulnerable and threatened as any performance in a second language is likely to challenge that self-concept. This view is supported by Gardner, (1985:34) who maintains that language anxiety, "a construct of anxiety which is not general but instead is specific to the language acquisition context is related to second language achievement". Horwitz et al. (1986) define foreign language anxiety as "a distinct complex of self-perceptions, beliefs, feelings and behaviors related to classroom language learning arising from the uniqueness of the language learning process" (p. 31), and not merely the transfer of three related performance anxieties (communicative apprehension, test anxiety and fear of negative evaluation) to foreign language learning.

MacIntyre and Gardner (1991a) proceed to examine foreign language anxiety from three perspectives, namely trait, state and situation specific perspectives. Trait anxiety is defined as "an individual's likelihood of becoming anxious in any situation" (Spielberger, 1983 in MacIntyre and Gardner, 1991a:87) while state anxiety is "apprehension experienced

at a particular moment in time, for example, prior to taking examinations" (Spielberger, 1983 in MacIntyre and Gardner, 1991a:90). Gardner and MacIntyre (1993) suggest that anxiety becomes a trait rather than a state when repeated occurrences cause language learners to associate anxiety with language performance. Oxford (1999:60) states that "once language anxiety has evolved into a lasting trait, it can have pervasive effects on language learning and language performance." Determining sources of anxiety can be tricky since traits need to be examined in interactions (Mischel and Peake, 1982 ; Endler,1980) and state anxiety fails to attribute the experience to any particular source. MacIntyre and Gardner (1991a:90) propose the use of better alternatives of measurement such as situation specific constructs that are "seen as trait anxiety measures limited to a given context" because respondents are queried about various aspects in attempt to determine the sources of anxiety.

Language anxiety and speaking

Cheng, Horwitz and Schallert (1999) claim that second language classroom anxiety has a strong speaking anxiety element. Horwitz, Horwitz and Cope (1986) and MacIntyre and Gardner (1991b) support this view, citing listening and speaking as the main sources of anxiety. Young (1991) lists some obvious manifestations of this anxiety that include "the form of distortion of sounds, inability to reproduce the intonation and rhythm of the language, 'freezing up' when called on to perform, and forgetting words or phrases just learned or simply refusing to speak or remaining silent" (p. 430). In other studies examining language anxiety and speaking, low self-confidence and self-perceived competence, manifested in learners' unwillingness to communicate, seem to be key components. (Clément, Gardner & Smythe, 1980; Daly & Wilson, 1983; MacIntyre, Noels & Clément, 1997; Cheng, 1998; Cohen & Norst, 1989; Price, 1991; Clément & Kruidenier, 1985). These

studies report evidence of a consistent negative correlation between language anxiety and perceived competence in the L2 and low self-confidence. Horwitz, Horwitz and Cope (1986) and Schlenker and Leary (1985) believe that the frustration faced by students attempting to communicate, leads to apprehension about future attempts that causes students to avoid classroom participation.

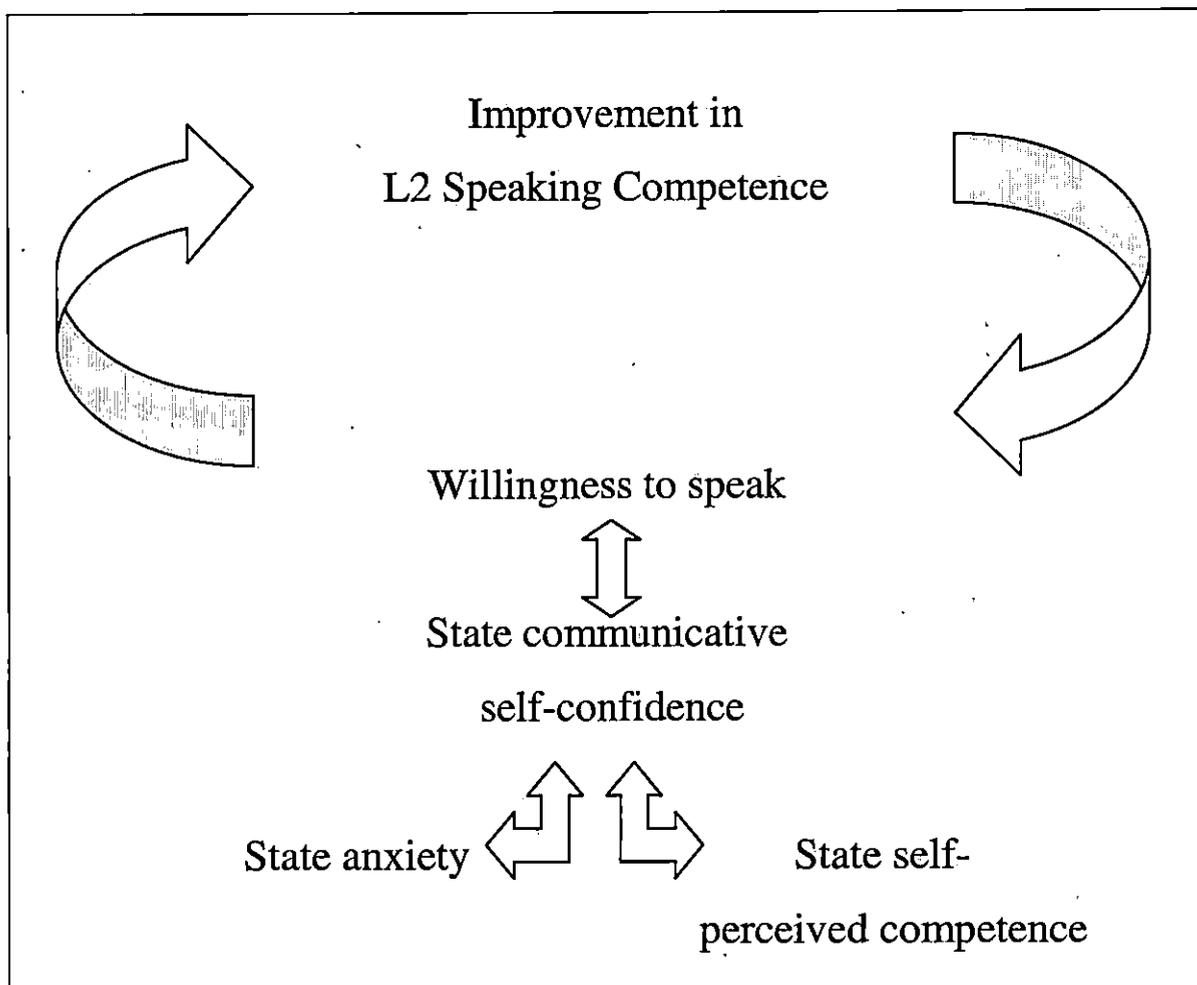


Figure 2.5 Factors influencing the improvement of speaking skills

Figure 2.5 illustrates the relationships between state anxiety, state self-perceived competence and state communicative self-confidence, and how these relationships can affect

the WTC which then affects the improvement in L2 speaking competence. Starting from the bottom of the diagram, Figure 2.5 shows that any changes in state anxiety or state self-perceived competence can lead to a change in state communicative self-confidence. As shown earlier in Figure 2.4, an increase in state anxiety will result in a lowering of state communicative self-confidence, but an increase in state self-perceived competence will lead to an increase in state communicative self-confidence. When a learner feels self-confident at a particular moment, he will be willing to speak, and the more he attempts to speak in the L2, the more likely his L2 speaking competence will improve. As he continues to see improvement in his own speaking ability, he will be more willing seek out opportunities to communicate, reinforcing the increase in his state communicative self-confidence which then leads to lower levels of state anxiety and higher levels of state self-perceived competence.

The relationships among the constructs in Figure 2.5 unveil a big problem. If students are required to practice speaking in order to improve their L2 speaking competence, they must first be willing to speak. However, if their state self-confidence is low due to high state anxiety and low state self-perceived competence, they may simply refuse to speak or remain in silent, which in return affects their speaking improvement. Consequently, a vicious cycle begins as pointed out by MacIntyre, Noels & Clément (1997:278),

"If language learners do not choose to communicate, they cannot re-assess their competence. Thus begins a vicious cycle, wherein the anxiety level remains high because the anxious student does not accept evidence of increasing proficiency that might reduce anxiety."

Therefore, if we wish to ensure that students are able to make progress in their speaking abilities, steps should be taken to minimize their state anxiety and increase their state self-

perceived competence so as to ensure their willingness to seek out communication opportunities and willingness to use the L2 as stressed by MacIntyre et al., (1998). This present study will attempt to investigate if chat experiences have a positive impact on state communicative self-confidence so that learners will be more willing to use the L2 in the classroom.

Self-perceived competence and L2 self-confidence

In the beginning of this chapter, I discussed the heuristic model of variables influencing WTC. One of the variables listed is L2 Self-confidence, which consists of two components, cognitive and affective. While the affective component is linked to "language anxiety, specifically the discomfort experienced while using a L2" (MacIntyre et al., 1998:551), the cognitive component is based on the speaker's self-evaluation of his L2 skills. Since not many existing studies have looked at state anxiety and state self-perceived competence, I will assume that the findings regarding language anxiety and perceived competence are relevant to this study of state anxiety and state self-perceived competence. This section will review the interrelations between perceived competence and language anxiety and L2 self-confidence.

Studies have shown that self-perceived L2 competence is closely linked to language anxiety (MacIntyre, Noels & Clément, 1997; Clément, Gardner & Smythe, 1980; Clément & Kruidenier, 1985; Clément, 1980). In fact, Clément, Dörnyei and Noels (1994) and Clément & Kruidenier (1985) have found that perceived competence is more closely related to anxiety than objective achievement.

MacIntyre, Noels and Clément (1997) indicate that self-perceptions mediate between actual competence and eventual achievement in several social psychological models of

motivation. Bandura's model of self-regulation, for instance, proposes that the perception of competence, which will "determine the amount of effort expended in pursuing a goal" and "the belief that one can control desired outcomes constitute critical components of one's expectations for given success at a given task" (Bandura, 1986, 1988 cited in MacIntyre, Noels and Clément, 1997:268). Therefore, if learners have higher expectations, they will expend more effort, which, in return, will result in greater likelihood of success. Conversely, learners with lower expectations are likely to expend less effort, resulting in less success. Fiske and Taylor (1991:216) support this view, proposing that "by leading the self to expect poor outcomes or poor performance, one lays the groundwork for defending against the loss of self-esteem in the event of failure." On the other hand, Schwarzer (1986) believes that anxious learners, who have low perceptions of their competence, will divide their mental resources to focus on their imagined failure and its consequences rather than concentrating on the task. Hence, their performance will suffer.

Although language learners usually overestimate or underestimate their language ability, researchers have used self-perceptions of competence as "an effective mechanism for placing students at appropriate levels" (MacIntyre, Noels & Clément, 1997:266) and informal assessment of certain skills (Yli-Renko, 1988). MacIntyre, Noels and Clément (1997) believe that if learners were given specific assessment tools, they would be able to assess their own abilities. Blanche and Merino (1989:315) conclude that "there is consistent overall agreement between self-assessments and rating based on a variety of external criteria."

According to Sparks and Ganschow (1991), certain coding deficits in the learners' first language (L1) that make L2 learning more difficult, could lead to language anxiety when the learners perceived their competence to be lower than desired and consequently causing

them to be more reluctant to speak. Of course, the situation is less problematic if the learners overestimate their competence. In fact, MacIntyre and Charos (1996) believe that even though the result of the overestimation is likely to be failure, they suggest that this positive bias may actually increase the learners' WTC, which will facilitate the learning process.

Language anxiety and L2 self-confidence

The affective component of L2 self-confidence, language anxiety, has a major influence on speaking performance. This section will highlight the interrelations between language anxiety and L2 self-confidence. Daly (1991) states that changing skills alone will not affect people's WTC because "if people don't want to talk, they won't" (p. 9). Steinberg and Horwitz (1986) attribute this avoidance to language anxiety, claiming that the more anxious students avoid producing difficult target language utterances. Before students are ready to speak, they need to feel confident with their language ability to understand the question and formulate a reasonable answer that results in a desire to speak.

Clément (1980, 1986) uses a concept of self-confidence that subsumes both language anxiety and self-perceived evaluations in his causal model. The key characteristic in this model is the lack of anxiety. He proposes that self-confident learners lack anxiety, which "leads to a motivation to use the language that, through linguistic and especially nonlinguistic factors, predict language achievement" (MacIntyre and Gardner, 1991a:100). This model is not unidirectional since this self-confidence could result from and lead to motivation to interact with the target language group. Clément and Kruidenier (1985) using causal modeling techniques to examine Clément's model, confirm that self-confidence is an important link in the motivational chain.

Meanwhile, Cheng, Horwitz and Schallert (1999), subsuming self-confidence as a subcomponent of the second language classroom anxiety, provide evidence that "some anxious students in second language classes may be afflicted primarily by low self-confidence in speaking the target language, whereas others may be largely influenced by concern about possibilities of failure, flawed performance, and negative evaluation" (p. 436). Their findings provide additional endorsement to the consistent association between low self-confidence and language anxiety, highlighting the importance of considering the role of low self-confidence in the language learning process.

On the other hand, Ely (1986) claims that classroom participation is influenced by risk taking, among other factors. Therefore, if the learners are anxious and have low self-confidence, they may be unwilling to take risks, resulting in minimal classroom participation and unwillingness to volunteer answers. In addition, anxious students tend to communicate less information (Steinberg & Horwitz, 1986; MacIntyre, LaLonde, Moorcroft & Evers, 1987; MacIntyre & Gardner, 1994; MacIntyre, Noels & Clément, 1997) and avoid difficult linguistic structures (Kleinmann, 1977). As stated by MacIntyre, Noels & Clément (1997:278), "the consistent negative correlation between anxiety and output quality indicate that anxious students tend not to express themselves as well as more relaxed students." For this reason, it is likely that language anxiety correlates negatively with course grades (Aida, 1994; Horwitz, 1986; Trylong, 1987) and proficiency test performance (Ganschow, Sparks, Anderson, Javorsky, Skinner and Patton, 1994; MacIntyre, Lalonde, Moorcroft and Evers, 1987).

MacIntyre, Clément, Dörnyei and Noels (1998) hypothesize that students who raise their hands in class must feel confident enough with the language in general to understand

the question and formulate a response. They argue that the WTC in the target language should be the ultimate goal of the language learning process. As mentioned earlier, their heuristic model includes the L2 confidence variable that corresponds to self-perception and language anxiety. They differentiate this confidence from another variable, state communicative self-confidence that is more transient and situational. This state self-confidence consists of two components, state anxiety and state perceived competence. They argue that this state anxiety can vary in degree and fluctuate over time resulting in a decrease of self-confidence and WTC. As such, they see state self-confidence together with the desire to interact with a specific person as the most immediate determinant of WTC.

MacIntyre and Gardner (1991b: 303) suggest that "if teachers can promote the more positive speaking experiences rather than the anxiety-provoking ones, the students will feel better and may learn more efficiently as well. Similar suggestions about promoting confidence-building experiences have also been put forth by Campbell and Ortiz (1991) and Lucas (1984). If these experiences can be promoted, then learners will be more willing "to take moderate but intelligent risks, such as ... speaking up despite the possibility of making occasional mistakes, rather than taking no risks at all or taking extreme, uninformed risks" (Oxford, 1999:63). As such, this present study hopes to promote these positive experiences through the use of online chat software.

Pedagogical challenges

The studies highlighted in the previous sections have shown how language anxiety can impair language learning and production, particularly in the area of speaking. It is undeniable based on the studies reviewed, that foreign language anxiety, distinguishable from other forms of anxiety, can have a negative effect on the language learning process.

However, it is also necessary to point out that there are contradictory conclusions in other related studies, making language anxiety a pervasive and illusive variable often swept under the general term "affect" (see Scovel, 1978). Scovel notes some contradictory studies that found positive correlations between language anxiety and language learning. For instance, he cites Chastain (1975) who concluded that mild amounts of anxiety could be seen as facilitative anxiety that produced beneficial results.

Yet, the question whether or not language anxiety does facilitate learning should not be a prioritized concern since language anxiety will always exist at some level. Instead, the main concern in a language classroom should be whether students are willing to seek out opportunities for practice in order to improve their performance. Oral production, being the most daunting skill, is often avoided by learners, particularly adults because it is a threat to their self-concept. However, unwillingness to communicate leads to minimal practice, which in return, hinders the learners' ability to improve their oral skills. The vicious cycle soon begins; since these learners would have little self-confidence and low self-perceived competence, causing them to feel anxious when they are in the language classroom.

Therefore, one of the major challenges in second or foreign language teaching is to identify the possible sources of language anxiety as a starting point to break this vicious cycle. As indicated by Cheng, Horwitz and Schallert (1999:437),

"Pedagogically, the identification of the link between low self-confidence and anxiety [and low self-perception] underscores the importance of providing a nonthreatening and supportive instructional environment where a boost to learners' self-confidence is likely to occur."

MacIntyre and Gardner (1991a) believe that learners do not begin their learning experience with language anxiety. Rather, their language anxiety only develops after they begin to form attitudes towards the learning experience. Young (1991) makes a critical observation when she points out:

"If MacIntyre and Gardner's theory is correct, this suggests that the problem is not so much in the student but in the language learning experience, i.e., the methodology. Student language anxiety might be an indication that we are doing something fundamentally unnatural in our methodology" (p. 429).

Her point is echoed by MacIntyre, Clément, Dörnyei and Noels (1998) who believe that "a program that fails to produce students who are willing to use the language is simply a failed program" (p. 547). While this view sounds a little harsh, it is quite necessary to keep this view in mind since students who avoid using the target language will be unlikely to succeed in learning the target language.

Fluency

Fluency is one of the key concepts in any language study. Guillot (1999) calls fluency an elusive notion since it is recognizable but difficult to determine its constituents. While practicing to be fluent is possible, without understanding the linguistic and paralinguistic operations that are involved, it would be difficult to teach others, or ourselves, to be fluent. In the following section, I will attempt to look at the different associations and ideas related to the term "fluency" as put forth by the existing academic literature. I will then discuss some components of fluency, as well as fluency from the perspective of the listener.

Definition of fluency

"Fluency" and "fluent" are ordinary language terms that are commonly used in academic discourse. Yet, the vagueness of these terms has made it difficult to define the

concept of fluency. How do we measure fluency? Schmidt (2000) poses the following questions:

1. Is it reasonable to say that someone speaks a language fluently but not very grammatically?
2. Does fluency imply a large vocabulary, or can one make use of a small vocabulary fluently or a large one disfluently?
3. Does fluency in language include the use of gestures, proxemics, intonation, pragmatic markers, cultural conventions, discourse schemata, interpersonal sensitivity, and an air of confidence, or should the term be restricted to the smooth operation of the psycholinguistic processes underlying speech production?
4. Is it possible to speak of fluency in reading, writing, and listening, as well as speaking, or is fluency a concept that is only applicable to oral production?
5. If the concept is only relevant to speech, how does it differ from global oral proficiency?
6. Can we define fluency in terms of measurable properties of speech, or is it rather an impression upon listeners that we are after?

(Schmidt, 2000 : v)

These questions capture the complexity of defining fluency as there is a complex network of ideas that has to be dealt with. While this section will provide some insights into the existing discussion regarding the definition of fluency, it will not attempt to address all the questions above or provide an absolute definition of fluency. Instead, I will provide a working definition of fluency for the purpose of this investigation after discussing some components related to fluency in the next two sections.

Koponen and Riggensbach (2000) attempt to present the varying perspectives on fluency and argue that “it is not possible to isolate a single unitary concept of fluency” (p. 5). They point out that in the late 1800s, fluency was associated with the notions of rapidity and automaticity while in lay terminology, fluency is closely linked to the terms “flow”, “continuity,” “automaticity,” or “smoothness of speech”. Fillmore (1979) approaches fluency from three additional dimensions: (a) semantic density, (b) sociolinguistic appropriateness,

and (c) creativity in use. Specifically, he views fluent speakers as those who speak concisely, speakers who speak appropriately in a wide range of contexts, or speakers who can express their ideas in novel ways such as puns, jokes, metaphors and so on.

Perhaps the most common notion included in the definition of fluency is the “smoothness” or continuity of speech. This notion is especially common in the language-teaching domain where fluency is defined in terms of “ease and rapidity of speaking, a continuous flow with little hesitation, and a good command of grammar and vocabulary” (Kopponen and Riggensbach, 2000:7). In addition, this notion is more generally associated with nonnative or learner speech in the language-teaching literature even though historically it was applicable to native speaker speech. Today, NSs are considered eloquent or articulate rather than fluent, so the term “fluent” is more reserved for NNSs who can speak smoothly with little hesitation and are not seen as “groping for words”. However, even the notion of smoothness is not as clear-cut. In oral language assessments, for instance, smoothness can be broken down into several categories that focus on evidence of lack of hesitation, use of cohesive devices and fillers, speed and length. Hedge (1993) distinguishes three types of “fluencies” involving the act of linking or connecting: (a) semantic fluency, (b) lexical-syntactic fluency, and (c) articulatory fluency. Semantic fluency refers to the linking of propositions and speech acts while lexical-syntactic fluency involves the linking of syntactic constituents and words. Articulatory fluency, on the other hand, refers to the linking of speech segments. Meanwhile, Towell, Hawkins and Bazergui (1996) state that the length of uninterrupted “runs” in speech is an indication of fluency while Hedge (1993) views frequent pauses, repetitions, and self-corrections as indications of nonfluency. She proposes that a

fluent speaker should be able to use compensatory devices such as fillers (e.g. "you know," "you see") and paraphrasing strategies rather than pausing.

However, there are several weaknesses that surface the whole notion of smoothness in terms of hesitations, pauses, repetitions, speed and length. As pointed out by Lehtonen et al. (1977:20-22 cited in Koponen and Riggenbach, 2000:14),

“Hesitation and pauses as well as false starts and rephrasing are natural phenomena in native speaker performance in any language, and in this respect it is wrong to assume that a foreign-language performance would be any different. The length of the sentence is an indication of the fact that the speaker obviously governs the generative and recursive powers of the language well, which, however, is only one ingredient of fluency when combined with the acceptability of the utterance at all levels of linguistic description. Speed of delivery does not always mean that the speaker is fluent.”

Clearly, defining fluency is not clear cut since there are overlaps between characteristics of native-like fluency and dysfluencies. If characteristics like false starts and rephrasing are considered natural in native speaker speech, to what extent do we consider it native-like delivery or dysfluency and how do we distinguish between the two? In the following section, I will discuss in more detail some components that are related to the idea of fluency.

Components of fluency

Studies on fluency have often focused on speech rates, pauses and length of uninterrupted utterances. However, fluency is “not an absolute, constant linguistic phenomenon” (Ejzenberg, 2000). Certain communicative behavior and aspects of oral speech such as culturally based expectations, timing, nonverbal gestures and intonation can contribute to impressions of a speaker’s fluency. Table 2.4 presents the findings of four recent studies that used oral speech data to demonstrate the manifestations of these notions.

Doutrich (2000) used international sojourns of Japanese students who were studying nursing in the United States and their reflections on their adjustments after returning to Japan to investigate how culture can affect fluency. She draws upon the study of Poyatos (1984), who talks about "cultural fluency." According to Poyatos (1984), the traditional term, "fluency" is represented by more than just lexical and grammatical structures. He proposes that cultural fluency is required to enable individuals to behave appropriately in different contexts.

Doutrich (2000) compared the different expectations on the sense of self in the American and Japanese cultures. She illustrates through the participants' comments how preservation of group harmony is more important than individuality in the Japanese culture. These Japanese participants had little experience with making independent decisions or expressing personal preferences prior to their arrival in the United States. Their way of life in Japan also taught them to be comfortable with ambiguity, which is contrary to the expectations placed upon students in the United States. Verbalizing opinions was disparaged in Japan but insisted upon in the United States. These Japanese participants adapted to the United States sense of self to survive living in the United States but found it difficult to be accepted fully upon their return home. They were referred to as "Americagaeri", "a mild pejorative Japanese word that literally means 'American returnee'; but it connotes assertive, outspoken, direct, and frank behavior and speaking without knowledge of the context" (Doutrich, 2000:155). She concludes that fluency should encompass more than just linguistic abilities since the speakers' own perceptions of their cultural fluency is more important than how their fluency is perceived by native speakers of the target language.

Table 2.4 Recent studies on Components of Fluency

Study	Focus	Methodology	Participants	Results
Doutrich, 2000	Influences of cultural fluency	Sojourn experiences based on forty-two one- to three-hour interviews.	Twenty five Japanese nurse scholars in the United States.	The concept of fluency encompasses more than linguistic abilities. The different values emphasized in Japanese culture can result in an appearance of lack of fluency.
Fiksdal, 2000	Time or tempo	Four examples from sixteen naturally occurring interviews (Fiksdal, 1990) are played back and participants are asked to provide comments.	NS advisors, NNS students from Taiwan and NS students from Canada and Britain at the University of Michigan	Turn taking, pauses and gestures depend on the tempo. Fluent NNS resolve instances of dysfluency by positive face strategies and maintaining the tempo.
Bavelas, 2000	Nonverbal aspects	Microanalyses of excerpts from videotaped face-to-face conversations.	Acquaintances	NNSs use negative face strategies causing a disruption in the tempo and resulting in moments of dysfluency. Visible acts such as hand gestures and facial displays convey information in synchrony with speech. These nonverbal aspects have a semantic or syntactic role in the dialogue which increases fluency.

Table 2.4 Continued

Study	Focus	Methodology	Participants	Results
Wennerstrom, 2000	Intonation	Analysis of speakers' pitch pattern from ten tapes of informal dialogues between Ns and NNS using Computerized Speech Lab (CSL) machine.	Eleven ESL students from Korea, Japan, China, Thailand, and Switzerland.	The NNSs rated by the two raters as most fluent used differing pitch levels to differentiate new information from function items and to contrast information.
		Two raters rated the language ability of the NNSs within the context of the dialogues.		Tendency to give equal pitch to each word resulting in a flat monotonous string of words or a choppy, word-by-word effect are characteristics of the NNSs rated as low-fluency speakers.

Fiksdal (2000) presents fluency from the speakers' perspective in terms of time and rapport. She proposes that one strategy used by speakers for turn-taking is listening to stressed syllables which form the underlying structure of the discourse. These stressed syllables in turn establish the tempo. Based on participants' comments during the play-back sessions of four naturally occurring interviews, as well as her own observation, she asserts that fluency is created when speakers rely on the established tempo to take turns, time their pauses and provide gestures. Therefore, she proposes that a steady tempo is a measure of fluency since dysfluency will occur when this tempo is disrupted. She also ties in the idea of dysfluency with the notion of rapport and face strategies (See Brown and Levinson (1987) and Scollon (1982). According to Fiksdal, (2000), dysfluencies in conversations are likely to be resolved quickly through positive face strategies like agreement strategies to repair the moment if speakers are using the same rapport system. This repair in dysfluency is more evident in discourse between NSs compared to discourse between NSs and NNSs since NNSs tend to use negative face strategies of deference such as delaying or omitting clarification. These negative face strategies may be common in the NNSs' system but unfamiliar to NSs, resulting in "uncomfortable moments and dysfluency" (p. 138). It appears therefore, the perception of fluency can be influenced by the conventions in their speakers' rapport system. If NNSs are unfamiliar with positive face strategies and rely on negative face strategies as their rapport system, they may appear to be lacking in fluency because they are not conforming to the expectations of the NSs to preserve the rapport system in the same way.

Bavelas (2000:91) proposes that certain nonverbal gestures can be considered linguistic units that contribute to conversational fluency because they "convey meaning and

are tightly synchronized with speech.” Using excerpts from videotaped face-to-face conversations between acquaintances, she provides examples of how hand gestures occur with the related words and how speakers make adjustment to either their hand gestures or words to integrate words and gesture in a synchronized manner. She also demonstrated how hand gestures “convey information that is not in the accompanying words” (p. 93) and so they help to “illustrate, specify, and animate what the speaker is saying” (p. 95). She concludes that speakers use nonverbal acts like hand gestures, head position or movement, eye contact and intonation in synchrony with their speech to enhance their verbal fluency. Since these nonverbal acts are integrated into the oral discourse to assist the speakers in putting their points across to their listeners, she believes that they should not be regarded as acts of dysfluency.

Another study by Wennerstrom (2000) investigated the role of intonation in fluent speech. She used computerized speech equipment to measure the pitch patterns of both NSs and NNSs. She then compared the pitch patterns based on the speakers’ level of fluency as rated by a panel of native speaker judges. The results show that fluent speakers use “differing pitch levels to distinguish new information from function items, to deaccent items given in the context, and to make contrasts” (p. 116). They are also able to use “plateaus and low rises on words” to indicate utterance boundaries and “plateaus on pause fillers to signal the intention to continue” (p. 124). In other words, their ability to use varying pitch levels during pauses prevented them from being interrupted and listeners were able to tolerate the pauses. In contrast, less fluent speakers tend to disregard the role of intonation in oral discourse and give equal pitch to each word resulting in a monotonous or choppy effect. Since they do not have any plateaus and low rises to indicate their utterance boundaries or temporal pause, they

are often interrupted by NSs who do not realize that the speakers are not ready to give up their turns. She concludes that it is the ability to “speak phrasally rather than word-for-word, focusing on the main idea of each utterance in a coherent manner and collaborating in the turn-taking process” and not longer utterances or shorter pauses that contributes to the perception of fluent speech (p. 125).

These studies have shown how fluency cannot be studied merely by addressing the linguistic aspects of language alone. If the target language culture promotes the sense of self rather than sense of group, learners need to be taught to meet that expectation by articulating and verbalizing their opinions rather than being ambiguous. If dysfluency in the United States is to be repaired by using positive face strategies and maintaining the steady tempo of discourse by quickening certain explanations or clarifications, learners need to be made to understand the differences between expectations on the rapport systems. If gestures can contribute to fluency, then learners should be encouraged to use the appropriate gestures to accompany their speech. And if intonation patterns are important to mark boundaries in utterances and pause fillers, learners should be taught to vary their intonation patterns so that they are able to speak without choppy effect or give up their turns prematurely.

While the above implications may help to guide the teachers in their attempt to improve learners' fluency in the target language, they also bring up serious implications for the assessors. Assessors need to be aware that their international learners bring their own ideas of fluency based on their culture and way of living. If they are not comfortable using gestures or positive face strategies, they may appear dysfluent to NSs. If there are instances where pejorative names are given to learners who return home with a less acceptable sense of self, these learners are likely to resist taking on the pitch patterns, using gestures or speaking

up since these behaviors are disparaged in their home country. The mismatch between the assessors' perception of fluency and the learners' perception of fluency will inherently affect the assessors' assessment of learners' language abilities. Although this present study will not investigate these manifestations of fluency, it is necessary to recognize that these psycholinguistic aspects can contribute to the communicative behavior which in return contributes to the listener's perception of the speaker's fluency.

Perspective of the listener

Fluency can be viewed from either "speaker-based" or "listener-based" perspectives. Ejzenberg (2000:287) points out that from a "listener-based, sociolinguistic perspective, fluency is the perception of ease with which a speaker delivers the message, making it appear to be smooth and naturally paced to the listener." In this section, I will discuss fluency from the perspective of the listener. In the case of most ITAs, this perspective is important since they are often required to take language tests to show evidence of their language proficiency. Their testers or assessors are the listeners who will ultimately score them based on certain given criteria. The purpose of this section is to discuss some possible components of fluency that listeners pay attention to in order to judge the fluency of the speaker.

Based on the popular belief that students who study abroad tend to progress in the target language and become fluent, Freed (2000) compared the language of fifteen students who went to France for one semester with the language of fifteen students who remained on campus during that semester. She then enlisted the help of six native speakers of French to rate the students' speech samples. Three of the raters had no professional association with language teaching or learning while the remaining three raters were university professors of French. These raters were asked to evaluate the fluency of the speech samples without any

given definition of fluency. In addition, they were asked to describe the basis of their evaluations.

The results show that the raters are significantly able "to distinguish between students who had been abroad and those who had not" ($t=2.16$; $df=15$, $p=0.04$). The raters perceive students who have been abroad to be "somewhat more fluent" than those who remained home. More importantly, she discovers the criteria used by the raters to be fairly consistent. The raters tend to base their ratings on the complexities of grammar, the richness of vocabulary, the lack of hesitation, the rate of speech and not stumbling over phrases as qualities of fluency. Accent, clarity of voice, enunciation and rhythm as well as the confidence and comfort level also influence some raters.

One major finding of this study is the significant difference in the rate of speech between the two groups of students. The students, who had gone abroad for a semester and were rated as more fluent, produce more words and at a significantly faster rate than those who had remain at home. The analysis of pause profiles is less conclusive since there is a greater variation. However, Freed (2000) points out that "hesitations, filled pauses, grammatical corrections that occur in immediate adjacency and that contribute to the impression of choppy or fragmented speech" are clusters of dysfluencies that affect the perceptions of fluency.

Another study by Ejzenberg (2000) analyzed the fluency ratings of forty-six speakers by four raters with a high interrater reliability of .97. The results show that speakers projected a more favorable "air of fluency" when they interacted with an interlocutor but their ratings decreased when they "produced longer stretches of uninterrupted discourse without any external help" (p. 292). Also, high-fluency speakers speak at a faster rate than low-fluency

speakers. Ejzenberg points out that the amount of speech did not discriminate between high- and low-fluency speakers since the amount of speech was similar for both groups in both dialogues and monologues.

One of the main findings of this study indicates that repetition can have both positive and negative contribution to perceived fluency. On the surface, both high- and low-fluency speakers used repetition in their oral discourse. However, a closer analysis revealed that the use of repetition by high-fluency speakers served to "push the talk forward" while low-fluency speakers used "repetitions, mainly restarts that covered the same semantic ground, thus 'holding the talk back' " (p. 301). In other words, the high-fluency speakers were seen as using repetition as strategic competence while the repetitions by low-fluency speakers came across as debilitating hesitation. Ejzenberg concludes that repetition is "perhaps a more easily identifiable feature" of fluency, yet it does not often appear on fluency rating scales (p. 311).

Operational definition of fluency

In the previous sections, I have presented the complexity of defining fluency. While the term "fluency" is simple to understand and often used, it is difficult to define the concept of fluency since there are many constituents of fluency. The smoothness of speech is perhaps the most common notion associated with the definition of fluency. However, there are other components that can affect the perception of fluency. As discussed in one of the sections, there are the less commonly associated components of fluency that can affect its perception. Gestures, intonation, tempo and culture can affect how speakers perceive fluency, resulting in performance that may appear dysfluent to NSs. On the other hand, listeners pay attention to linguistic abilities such as grammar and vocabulary and also non-linguistic features like hesitation, pauses, rate of speech and accent.

This present study will attempt to look at fluency of ITAs from two aspects. The first aspect will be a quantitative measure based on the speech rate. Unlike other studies that define speech rate in terms of the length of uninterrupted discourse, this study will define speech rate in terms of the amount of words per minute. De Bot (1992:11) claims that the average rate of native-like delivery is "150 words per minute with peak rates of about 300 words per minute." For the operational definition of fluency, repetition will not be considered a strategic competence. Rather, it will be seen as dysfluency since it will be considered as redundant. Eliminating repetitions from the word count will probably decrease the speech rate since the number of words per minute will be lower. Hesitation and pauses will not be measured individually but they will contribute to the length of time and inevitably affect the speech rate.

Fluency will also be analyzed from the perspective of the listeners since the ITAs language abilities are based on ratings given by raters. This perspective will provide some insights into the qualities of speech that are accepted as fluent for NNSs, particularly the ITAs within the context of this study. More specifically, this study hopes to confirm if listeners consider the notions of "smoothness", "fluidity", "continuity of speech" as the primary qualities of fluency. This qualitative measure of fluency may also reveal the impact of repetition on the perceived fluency. While I recognize the other constituents that contribute to the fluency of a speaker such as culture, timing, gestures and intonation, I will not attempt to investigate their influences to ensure the manageability of this research.

CHAPTER 3. METHODOLOGY

This chapter addresses the methods used for gathering data for this study. It is divided into seven sections. In the first section, I will describe the English 180A course that the participants of this study were taking. The second section will address my rationale for selecting the five participants. The third section will describe the tasks that I created for this study while the fourth section will describe the software and hardware configuration used. In the fifth section, I will describe the questionnaires used for data gathering. The sixth section will address the procedures of gathering data over five sessions. Finally, in the last section, I will describe the procedure in analyzing the data according to the four research questions. I will also include the criteria I established for the determination of units of analysis, the raters and the statistics used.

English 180A English for international teaching assistants

The research investigated chat tasks for students in English 180A, a course for international teaching assistants (ITAs) at Iowa State University who have taken a SPEAK test, a modified version of the Education Testing Services' Speaking Proficiency English Assessment Kit test and a TEACH test. In the SPEAK test, the ITAs were asked to answer some questions based on a map, tell a story from a series of pictures, answer, answer description and opinion questions, and role play a TA giving a class announcement. These ITAs were rated based on "pronunciation, fluency and comprehensibility, although comprehensibility scores are used to calculate the final SPEAK scores. For the TEACH test, the ITAs were given a topic from their field of study during the day of registration. The next

day, the ITAS were required to give a five-minute presentation on that topic and respond to questions in the following three minutes. These ITAs were rated based on the overall effectiveness and comprehensibility of the spoken language and their ability to understand and respond to questions effectively.

The maximum score for both tests is 300. Appendix 1 shows the SPEAK rating guide. The final score based on this guide is multiplied by 100 to get the maximum score of 300. Appendix 2 shows the TEACH rating criteria and descriptors of Band 3 or excellent performance. The final score is also multiplied by 100 to get the maximum score of 300. Although the TEACH ratings include the communication skills and cultural ability, the final score is mainly dependent on the language effectiveness and comprehensibility which is based on the SPEAK rating guide, as well as the listening and responding skills. ITAs who passed both tests with 220 or higher will be fully certified as Level 1. ITAs who passed one of the two tests with a score of 220 or higher and score between 190-220 on the other would be certified with restrictions at Level 2 while ITAs who scored between 170-210 on each test would be certified with restrictions at Level 3. Finally, ITAS who received scores below 170 on one or both tests would not be certified. Table 3.1 shows the summary of certification based on SPEAK/TEACH scores while Appendix 3 provides a full description of certification.

The section of English 180A selected for this study consisted of two Koreans and eight Chinese who met for lessons every Monday, Wednesday and Friday for fifty minutes from August 2001 till December 2001.

Table 3.1 Summary of certification based on SPEAK/TEACH (Graduate college, Iowa State University)

Certification	SPEAK/TEACH scores	Classes Required	Restrictions
Level 1	220 or higher on both tests	None	None
Level 2	220 or higher on one test and 190-220 on the other test	1 semester of English 180 (usually Section D)	No retesting needed. Advance to Level 1 upon completion of one semester of English 180 with teacher's recommendation.
Level 3	170-210 on both tests	1-2 semesters of English 180 (usually Sections A-C)	Retesting required.
Not certified	Below 170 on one or both tests	1-2 semesters of English 180 (usually Section A)	Retesting required.

Participants

Five male students from China taking an English 180A course at Iowa State University were selected as participants for this study. I decided to use only Chinese students to eliminate one variable in the study. Another criteria used for the selection of participants were based on their SPEAK/TEACH scores. One of the eight Chinese students was excluded because he did not have SPEAK/TEACH scores as he had been admitted into the class upon the request of his professor. Another two of the eight Chinese students were not used because they did not attend one of the five sessions. Therefore, the remaining five Chinese students were selected as participants for this case study. Since the two Chinese students had a high averaged SPEAK/TEACH score of 170 and 175 respectively, it is possible to say that the five selected participants had the lowest averaged SPEAK/TEACH scores among the seven

Chinese students in the class. Their averaged scores ranged from 160 to 175. Table 3.2 shows a breakdown of each participant's score.

Table 3.2 SPEAK/TEACH and averaged scores of participants

<i>Participant</i>	<i>SPEAK</i>	<i>TEACH</i>	<i>Average</i>
1	170	150	160
2	150	170	160
3	160	170	165
4	180	150	165
5	180	160	170

Tasks

During each of the five fifty-minute sessions, the subjects participated in two tasks. The first task was a communicative task, in which the subjects exchanged information about a specific topic with a partner through ICQ chat software. This task was allocated a maximum of fifteen minutes. When they had completed the task, they came together as a class to carry out the second task. Table 3.3 presents a summarized description of the tasks for the five sessions. (See Appendix 4A-4E for complete instructions for students.)

Table 3.3 Description of communicative tasks used as the first task for five sessions

<i>SESSION</i>	<i>DESCRIPTION</i>
1	Each of the students will share with their partners three qualities of a roommate and they will rank the six qualities according to their level of importance.
2	Each student will take a role of a main character or the character's brother. Together, they must decide which of their six family members will get the three available life jackets when their boat capsizes.
3	Students take on the role as representatives of international teaching assistants on a student committee to propose a lower tuition hike and present the consequences of a higher tuition hike.
4	Each student will present either three advantages or disadvantages of the Internet on people's social life and persuade their respective partners to change their minds.
5	Each student will present their argument whether work experience or paper qualification is more important as a career requirement.

The second task for the first three sessions (Sessions 1-3) entailed a report from each student in the class (participants and non-participants) regarding their chat discussion with their partners. The students were not given any time limit but the oral reports spanned between one to three minutes. For the last two sessions (Session 4-5), students participated in an open discussion based on the assigned topic. The open discussion included references from the chats with their partners and any immediate responses towards statements made by other students during the open discussion.

Software and hardware configuration

The chat sessions required the use of ten Intel computers with a minimum of Windows 95 and Internet access to run the chat software. In addition, printer access and Notepad software were needed to get a printout transcript of the chat session which helped to minimize the amount of transcribing. Finally, ICQ, a type of chat software was installed in each computer. Unlike other synchronous chat programs such as Daedalus InterChange or Yahoo instant Messengers which only allowed users to view the final version of their partners' composed utterances, ICQ presents the user with a split screen where they view their own messages in the top box as each letter is typed as well as each letter in their partners' composed utterances in the bottom box as they are typed. Hence, speakers can choose to co-construct the discourse and turn-taking is not restricted by the mode of communication, resulting in a closer resemblance to oral conversation.¹ Each student was provided access to an ICQ account that was set-up in advance.

Questionnaires

Three questionnaires were administered to the class. The first questionnaire, administered during the first session, was to get background information of each student. The questionnaire (See Appendix 5) was used to see the amount of English the students used daily and their familiarity with computers, Internet and chat software.

During the five sessions, participants completed two sets of questionnaires, a pre-chat and a post-report questionnaire. The pre-chat questionnaire was designed to indicate the level of state anxiety, state self-perceived competence and state communicative self-confidence before they carried out both Tasks 1 and 2. The post-report questionnaire was designed to indicate the level of state anxiety, state self-perceived competence and state communicative self-confidence after they have participated in the chat task and presented an oral report or participated in the open discussion.

The pre-chat (see Appendix 6) and post-report questionnaires (See Appendix 7) made use of twenty-five items that were rated on a 5-point Likert scale ranging from (1) Strongly Agree to (5) Strongly Disagree. Responses were recoded before scoring so that a higher point would reflect a higher level of state communicative self-confidence. For example, Item 3 in the Pre-Chat Questionnaire (See Appendix 6), "*I am not worried about making mistakes when I talk about this topic in class.*" was recoded so that 1 on the Likert scale will be scored as 5 points to indicate a high level of state communicative self-confidence.

To gain content evidence for the validity of the questionnaires, six professors in the TESL/Applied Linguistics program from the English Department at Iowa State University were asked to categorize the twenty-five items from each questionnaire into the three

categories that they were intended to measure, Category A-State anxiety, Category B-State self-perceived competence, and Category C-Combination of state anxiety and state self-perceived competence. Their responses were then compared with my initial categorization of the twenty-five items to evaluate the validity.

Based on the comparison in Table 3.4, the content evidence for validity for the items in Category B was stronger than Category A for both questionnaires (See also Appendix 8 and Appendix 9). Six out of seven items (86%) in the pre-chat questionnaire and ten out of eleven items (91%) in the post-report questionnaire that were used for measuring state self-perceived competence received more than sixty-seven percent agreement from the professors. Only one item from each questionnaire in this category (14% in pre-chat and 9% in post-report) did not receive support. On the other hand, only nine out of fifteen items (60%) in the pre-chat questionnaire and eight out of eleven items (73%) in the post-report questionnaire that were used to measure state anxiety received more than sixty-seven percent agreement from the professors. Six items (40%) in the pre-chat questionnaire and three items (23%) in the post-report questionnaire in this category showed low content evidence for validity. There were also more instances of full agreement among the professors on the construct of state self-perceived competence (3 items for pre-chat and 7 items for post-report) compared to state anxiety (1 item for pre-chat). Items used to measure both state anxiety and state self-perceived competence had low construct validity as there was a great disparity between the professors' responses and my initial categorization.

Table 3.4 Content evidence for validity of questionnaire items based on responses from six professors at Iowa State University

	Category A State Anxiety		Category B State Self- Perceived Competence		Category C Combined	
	% profs. agree	Total items	% profs. agree	Total items	% profs. agree	Total items
Pre-chat Questionnaire	100 %	1	100 %	3	100 %	0
	> 67 %	8	> 67 %	3	> 67 %	1
	< 67 %	6	< 67 %	1	< 67 %	2
Post-report Questionnaire	100 %	0	100 %	7	100 %	0
	> 67 %	8	> 67 %	3	> 67 %	0
	< 67 %	3	< 67 %	1	< 67 %	3

The averaged score of all twenty-five items were be used to represent the level of state communicative self-confidence. If a participant received a low averaged score due to a high level of state anxiety or low level of state self-perceived competence or both, then he would be seen as lacking in state communicative self-confidence. The averaged score in Category A was also used to reflect the level of state anxiety while the averaged score in Category B reflected the level of state self-perceived competence. If the participant received a low averaged score in Category A, it meant that the participant had a high level of state anxiety which reduced the level of state communicative self-confidence. Conversely, a high averaged score in Category A would indicate a low level of state anxiety resulting in a high level of state communicative self-confidence. However, a low averaged score in Category B would reflect a low level of state self-perceived competence which reduced the level of state communicative self-confidence while a high averaged score in Category B would be regarded as a high state self-perceived competence that reflected a high level of state communicative self-confidence.

Procedures

The five sessions were carried out at the same time and place over five consecutive Fridays in a research computer laboratory. These sessions were conducted as regular class activities since they were in line with the course syllabus. All ten students were informed about the study so they did not know that only five students were selected for the study. Throughout the five sessions, each student carried out two tasks (Task 1 Chat Discussion, Task 2 Oral Report/Open Discussion) as if he was part of the study.

In the beginning of every session, students were directed to the task page online where they read the instructions. After that, I explained the task again to ensure that they understood their roles for the first task. I also informed them about the second task before they started the first task so they would have some initial responses to the second task. Following that, they were asked to complete the pre-chat questionnaire based on how they felt about performing the second task at that moment. Once they completed the questionnaire, they proceeded with the first task. Since the students had to complete the background questionnaire and learn to use the chat software, time was more restricted during the first session. Besides Session 1 which only allowed ten minutes for the chat, all other sessions allowed students fifteen minutes.

During the first session, students were given a brief introduction to the chat software. Students were guided through a step-by-step process on how to log into their account with their password and to send a chat invitation to their partner. Students were also instructed on how to save their chat at the end of their first task. Each student was assigned to a specific computer for all sessions since their account had been set up in advance. The students also had the same partner throughout the five sessions. However, during Session 2, one of the

Chinese students was absent. Since it was necessary that I collect three samples of oral report from my participants, I had to eliminate him from the list of possible subjects. I paired up his partner, Student 1 with another Chinese student who was a potential subject, while I took over his place to chat with his partner, a Korean student who was not a potential participant. This student was subsequently eliminated from the list of potential subjects because he was not able to turn up during the final session. However, since his regular partner was a Korean student, there was no need to switch other students around. Instead, I took over his role in the chat task.

Once the first task in each session was completed, students were instructed to save the transcript and gather in the center of the computer laboratory for the second task. For the first three sessions, students were instructed to take turns in reporting their findings and thoughts about the topic in the first task. No time limit was set, so students spoke as much as they wanted. These oral reports were recorded and used for two analyses: (a) the transfer of language experience from chat to oral, and (b) the impact of chat on fluency. For the last two sessions, students were instructed to carry out an open discussion where students were not required to speak and participate unless they wanted to. These two sessions were recorded and analyzed for number of turns and number of words as an indication of willingness to communicate.

During the second task, a microphone was set in the center of the table to record the students' oral reports (Sessions 1-3) and open discussions (Sessions 4-5). A video camera was also set in front of the class to record the second task. The video recording serves as a backup for the audio recording as well as a means of identifying the participants as they took turns, particularly during the open discussions.

When the second task had been completed, the post-report questionnaire was administered to gather the students' responses to the second task. Following that, they were asked to write a short journal about their experience during the sessions. They were given guidelines to help them for the first four sessions. (See Appendix 8) During the final session, students were instructed to reflect on the whole five sessions. No guidelines were given so that they could write anything they felt or recalled at that time.

Analysis

This study attempts to seek both qualitative and quantitative results through triangulation to answer the four research question. In this section, I will present the methods of analysis for each research question.

Research Question 1: Are learners more willing to communicate after chatting?

In order to look at the WTC of the participants, I analyzed the transcripts of the open discussions from Sessions 4 and 5. Based on these transcripts, I calculated the number of turns taken by each of the five participants and compared the numbers with the total number of turns in each session. Since participants were not required to speak unless they wished to, any attempt to take a turn was regarded as an expression of WTC. As pointed out in the previous chapter, the opportunity to communicate is not absolutely necessary to possess WTC. Therefore, if the video recording showed evidence of participants' unsuccessful attempt to take a turn, that attempt would be included in the calculation of number of turns. Besides that, the number of words produced by each of the five participants in Sessions 4 and 5 were also compared with the total number of words in each session. The comparisons, which will be presented in raw scores and percentages, would be used to indicate the

participants' WTC. If the percentages are high, it will mean that the participants are very willing to communicate.

Guidelines for determining the number of turns and number of words were set to ensure the consistency of calculation. The number of turns was based on the times participants take the floor. Words produced in an uninterrupted stretch constituted a turn. An interruption to another speaker's turn was also considered a turn. If a speaker offered a word or phrase while another speaker was speaking, it would be regarded as a turn since the attempt to help would reflect willingness to communicate. However, laughter was not considered a turn and a stretch of words that was continued with another stretch of words due to an interruption by laughter was still considered the same turn.

The number of words was based on complete words uttered by the participants regardless of its accuracy or intended meaning. Words that lacked final consonants or syllables were completed if the speaker's intended words were obvious, and these words were included in the count. In addition, only words produced in stretches of talk longer than one word were counted. Words that were unclear and not transcribed were excluded. Obvious cases of word repetition, for example, "*The Internet discouraged...discouraged youngsters*" were excluded as well. Finally, false starts ("*The Internet... In my opinion, youngsters...*") and non lexical pause fillers ("*uh*" and "*um*") were also excluded. Besides the transcripts, reflections from the participants' journal entries were included where they were relevant.

Research Question 2: Do learners who have participated in chat tasks, feel more confident with their speaking ability?

The responses from the pre-chat and post-report questionnaires were the main source of data. The average scores for the two questionnaires that were based on the twenty-five items were used to indicate the level of state communicative self-confidence before the chat task and after the oral reports or open discussions respectively. Since a high averaged score would indicate a high level of state communicative self-confidence while a low averaged score would indicate a low level of state communicative self-confidence, the difference between the two averaged scores over the five sessions were used to reveal the overall impact of chat on the participants' state communicative self-confidence.

The items in the two questionnaires had also been categorized into three categories as stated before. The scores for items in Category A (State Anxiety) and Category B (State Self-Perceived Competence) were averaged separately. The difference in averaged scores from the pre-chat and post-report questionnaires were compared across the five sessions to see if the chat had more impact on either constructs. In addition, reflections from the participants' journal entries were included where relevant.

Research Question 3: Does the language experience of the chat actually transfer from the written mode into spoken language?

Transcripts from the chat sessions and oral reports for Sessions 1 to 3 were used to address this research questions. Transfer of language experience was looked at in terms of lexical phrases and paraphrased ideas that appeared in the chat transcripts and oral report transcripts.

In order to ensure consistency in determining the number of lexical phrases that were transferred from chat to speech, guidelines were set to identify each unit of lexical phrase. The definition of a lexical phrase used for this study was adapted from Lewis' (1993) description of lexical items. A lexical phrase consisted of a minimum of one word that was considered high information content word. Therefore, zero or low information content words such as articles, prepositions and conjunctions were not considered a lexical phrase on their own. In addition, a change of pronouns from the chat transcript to the oral report transcript, for example "I" and "you" (chat) to "he" and "we" were accepted as part of the lexical phrase. Multi-word units that were perceived as fixed phrases with little variation were regarded as single units, for example "internet shopping". Polywords which were short and fixed phrases that often carried different meanings from the regular rules of syntax, were considered as single lexical phrases. Idioms, euphemisms, slang, two- and three-part verbs fell into this category. Collocations and institutionalized expressions were also considered single units. For instance, "In my opinion" or "The main thing is that" were expressions that were counted as one unit.

The identification of a paraphrased idea included several changes in terms of word choice, sentence structure and organization. However, these changes did not affect the main idea of the utterance.

Since determining the instances of lexical phrases and paraphrased ideas was complex, a second rater evaluated the data. The second rater is a temporary instructor who had graduated from the TESL/Applied Linguistic program at Iowa State University a semester before. He was briefed on the set of criteria and presented with examples from the data. After the initial rating, he evaluated the list of lexical phrases and paraphrased ideas that

I had identified based on the chat and oral report transcripts. To ensure reliability, only the lexical phrases and paraphrased ideas that were verified by the second rater were evaluated in this study.

Research Question 4: Does chatting improve learners' fluency in oral communication?

Transcripts of oral reports from Sessions 1-3 were used to address this research question. Based on these transcripts, the number of words per minute for the three sessions were used to indicate the progress of the participants. The formula for the number of words per minute was the number of words divided by the amount of time as indicated in Figure 3.1 below.

Number of words per minute	=	$\frac{\text{Number of words}}{\text{Amount of time}}$
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Figure 3.1 Formula for the number of words per minute

The number of words was calculated based on the same guidelines set for the first research question while the amount of time measured in minutes, referred to the time taken by the participant to give the complete oral report from the first utterance to the last utterance for the respective sessions.

Besides that, a panel of four raters rated the recordings of the oral reports from Sessions 1-3. The ratings of these four raters would reveal the impact of chat on fluency from the perspective of a listener. The four raters selected were educated native speakers of English who had more than fifteen years of experience in English as a Second Language (ESL) teaching and learning. In addition, they have many years of experience working with

ITAs and rating the SPEAK/TEACH tests. Table 3.5 shows the summarized background of the four raters.

Table 3.5 Summary of raters' relevant experiences

<i>Rater</i>	<i>No. of years of ESL experience</i>	<i>No. of years working with ITAs</i>	<i>No. of years rating SPEAK/TEACH</i>
1	20	3	13
2	15	5	5
3	20	15	(a few)
4	25	5	12

Each rater was given a tape which had eighteen speech samples. The first three speech samples that had been pre-rated were included to help raters anchor their ratings. The raters then listened to the remaining fifteen samples (three samples of speech for each of the five participants) which were randomly organized on the same tape. Each speech sample was between one to three minutes long. No definition of fluency was provided in order to measure fluency from the perspective of a listener. The raters were asked to listen to the speech samples in their own time but within a time frame of one week. They were also instructed to indicate their subjective evaluations of the fluency of each student on a linear scale of 1 ("not at all fluent") to 7 ("extremely fluent"). The scores from the three raters were then averaged and compared across the three sessions to evaluate the impact of chat on fluency.

Besides indicating on the linear scale, the raters were also asked to describe the basis on which the evaluations are made. These individual subjective explanations served to indicate the perceived fluency from the perspective of a listener.

Statistical methods

Since four sets of ratings were used to determine the level of fluency of the participants, an inter-rater reliability test was used to examine the inter-rater consistency. In order to do so, the “coefficient alpha” also known as “Cronbach’s alpha” (Bachman, 1990:177) was used to estimate the consistency. The formula was as below:

$$\alpha = \frac{k}{k-1} \left[1 - \frac{\sum s_i^2}{s_x^2} \right]$$

“where k was the number of raters, s_i^2 was the variance of the ratings for a given rater, $\sum s_i^2$ was the sum of the variances of different raters’ ratings, and s_x^2 was the variance of the summed ratings” (Bachman, 1990:181).

The coefficient alpha was then adjusted with the “Spearman-Brown prophecy” formula to obtain a “conservative reliability estimate” (Brown, 1996:205). The Spearman-Brown prophecy formula was as below:

$$r_{xx'} = \frac{n \times r}{(n - 1) r + 1}$$

where $r_{xx'}$ was the full-test reliability, r was the correlation between test parts (in this case, $r = \alpha$) and n was the number of raters.

The following chapter will present the results of the study based on the questionnaires, transcripts of chat and oral reports, journal entries and fluency ratings by raters. These results will be used to answer the four proposed research questions.

CHAPTER 4. RESULTS AND DISCUSSION

This chapter reports the results investigating the impact of chat on willingness to communicate (WTC), self-confidence, the transfer of language experience from chat to speech and fluency in oral communication. It is divided into four sessions to address the four research questions. The results show that chat did help to increase the WTC and the state communicative self-confidence of certain learners. Learners transferred their language experience which includes their partner's lexical phrases. Participants' oral fluency did not improve a lot in terms of number of words per minute but raters did have similar notions of fluency from the perspective of a listener.

Impact of chat on willingness to communicate (WTC)

The first research question for this study asks whether learners are more willing to communicate after chatting. In Session 4 and Session 5, participants and the rest of the class were asked to participate in an open discussion after they had completed their chat task. As discussed in the previous two chapters, any initiative (including unsuccessful attempts to take a turn) taken to participate in this open discussion would be taken to represent learners' willingness to participate and it was assumed that this WTC could be prompted at least in part by the preceding chat. To consider this question, we will look at the percentage of number of turns taken and the percentage of number of words uttered during the two sessions.

Table 4.1 Number and percentage of turns and words in Session 4 and Session 5

Participants	TURNS				WORDS			
	Session 4		Session 5		Session 4		Session 5	
	#	%	#	%	#	%	#	%
1	1	2.33	4	13.33	2	0.14	221	17.89
2	7	16.28	5	16.67	181	13.11	283	22.91
3	0	0.00	1	3.33	0	0.00	6	0.49
4	1	2.33	0	0.00	61	4.42	0	0.00
5	10	23.26	8	26.67	307	22.23	295	23.89
Others	24	55.81	12	40.00	830	60.10	430	34.82
Total	43	100	30	100	1381	100	1235	100

Table 4.1 presents the total number and percentage of turns and words by each participant in Session 4 and Session 5. The figures under "Others" account for the number and percentage of turns and words by the remaining 5 students (4 in Session 5 as one non-participant was absent).

Overall, Participant 2 and Participant 5 who were chat partners, were consistently taking more turns and producing more words than the other participants in both sessions while Participant 3 and 4 who were chat partners chose not to participate. Participant 1, on the other hand, took fewer turns in Session 4 compared to Session 5.

The impact of chat on WTC could be either positive or negative, depending on the perception of the learner towards the chat experience. Participant 2, for instance, took more than 16% of the total turns in both sessions. His WTC is higher because he feels more prepared to speak after chatting. His sentiment is indicated in his final journal entry as he points out below:

"It is a excellent form for us to speak. Because we have already write down the words. We can also easily to speak it out."

Participant 1 also shows a high level of WTC as he takes more turns and produces more words in Session 5. He feels more prepared to speak because the chat sessions have helped the organization of his ideas as indicated in his journal entry, *"I think it is good to help organize ideas."* In addition, his experience with technology seems to be quite positive as he suggests the use of more sophisticated technology as indicated in his journal entry below:

"If we speak on the microphone and the word would appear on screen and also we can hear from the partner. That would be great."

Participant 3 and Participant 4 did not display a high level of WTC as they took very little initiative to participate in the open discussion. However, it is interesting to note that Participant 4 indicated in his journal entry that he liked the open discussions the best yet he did not participate much in the sessions. Similarly, Participant 3 said that he had *"many points of view on this topic"* but he did not choose to share them verbally during the sessions. Since their chat transcripts for these two sessions showed evidence of discussion and there was no explanation in their journal entries as to why they were reluctant to speak, we can only assume that the chat did not have a positive impact on their WTC.

The results in Table 4.1 show that the impact of chat on WTC can vary greatly from learner to learner. These results also indicate that the chat experience alone will not necessarily guarantee an increase in WTC. The attitudes of partners seem to play a role in determining the impact of chat as well. For example, Participant 5 who took about a quarter of the total turns in each session, reflected a great deal of enthusiasm in his chat session as seen in his message to his partner in his chat transcript, *"come on, come on, we will fight each other on some hot topic, guy, I do not be afraid of you."* Together with his partner,

Participant 2, they contributed to approximately half of the open discussions in both turns and words. On the other hand, Participant 3 and Participant 4 who were chat partners, participated in less than 5% of the open discussion.

Based on the analysis above, it seems that chat can have a positive impact on WTC particularly if learners receive adequate constructive input from their partners through the chat discussion. This input will serve to help learners organize their ideas and make them feel more prepared and therefore more willing to communicate.

Impact of chat on state communicative self-confidence

The second research question asks whether chatting helps to increase state self-confidence. In every session, the participants completed a pre-chat questionnaire and a post-report questionnaire. The average score of the twenty-five items in each questionnaire is used to measure the state self-confidence of the participants before they began chatting and after they had given their oral report or participated in the open discussion. In this section, the average score from the pre-chat questionnaire will be subtracted from the average score of the post-report questionnaire (Post Report - Pre Chat).

Since the time allotted for chat is so short, the expected difference in the average score will be minimal. In the event that a participant has marked "3" on the Likert Scale in the pre-chat questionnaire, his average score would be 3.00. If he marks a "4" in at least half of the total items in the post-report questionnaire, his average score would be 3.50, bringing the difference between the questionnaires to a total of 0.50. Therefore, any positive difference higher than 0.50 would be regarded as a positive impact while any negative score higher than -0.50 would be regarded as a negative impact.

Table 4.2 Difference between average scores (Post Report - Pre Chat)

<i>Participant</i>	<i>Session 1</i>	<i>Session 2</i>	<i>Session 3</i>	<i>Session 4</i>	<i>Session 5</i>
1	0.76	0.96	0.64	0.72	1.00
2	0.20	0.08	0.36	0.00	0.04
3	0.52	-0.16	-0.40	-0.40	-0.44
4	-0.56	0.24	-0.16	0.00	-0.68
5	0.40	0.04	0.28	0.08	0.28

The results in Table 4.2 show Participant 1 as the only participant who consistently experienced a positive impact. Since his SPEAK/TEACH score ranked the lowest among the five participants, it is possible that his low self-perception of his language abilities contributed to his low state communicative self-confidence and the chat experience helped the participant to increase his state communicative self-confidence. The positive impact of chat on his state communicative self-confidence is also reflected in his journal entries as he notes *"the chatting part"* as the part of the lesson he liked the most. He also felt *"a little better than before"* and *"more prepared"* after chatting about the topic.

Participant 3 experienced a positive impact only in the first session. It is likely that he was excited with the idea of using computers in class because it was different from the regular class activities. On the other hand, Participant 4 experienced a negative impact on two occasions, the first and last sessions. His journal entry for Session 1, *"chatting o not very helpful to our oral english"*, indicates that he did not see how chatting could improve his oral skills. In Session 5, he finds the topic to be difficult as indicated in his journal entry, *"the topic on paper qualification and working experience is difficult to discuss."* These comments would probably explain why he displayed a negative reaction in the two sessions.

Although the results do not show much evidence of the chat impact on state communicative self-confidence, they do reflect some similarities in results for Participants 2

and 5. This similarity could be due to two factors: (a) response to the task, and (b) response to the partner. The topic assigned for Session 1 was about the qualities in a roommate while the topic assigned for Session 3 was regarding the increase in tuition fee. Both of these tasks were real life situations and relevant to the participants as they were graduate students who could see themselves going through the process of searching for a roommate and feeling the effect of the tuition hike. Thus, their interest in these topics could easily motivate their discussion and cause them to be confident with their opinions even before chatting with their partners.

In Session 2, the topic dealt with choosing three members out of six to wear life jackets while in Session 4 and Session 5, the topics involved general issues such as the advantages and disadvantages of the Internet on social life and the importance of paper qualification versus work experience as a career requirement. Since the topic in Session 2 was hypothetical in nature and the participants were assigned to take a specific position for Session 4 and Session 5, they felt the topics to be challenging and restrictive. For instance, the comment by Participant 5 in his journal entry for Session 5, "*Probably we can find some problems which have no special results, and we can give reasonable opinion standing in opposite position.*" seem to indicate his preference for more open-ended problems and freedom to choose his position on the issue. Participant 4 who reacted most negatively in Session 5 echoes this opinion. He writes the following in his final journal entry:

"For all the students to participate in discussion, I think we should choose some more debatable topics to discuss. For example, the last topic on paper qualification and working experience is difficult to discuss."

The second possible reason for the similarity in results is the influence of partners. Participant 2 and Participant 5 were chat partners for all five sessions. From their chat transcript, it was evident that they wasted no time on off-task topics and were very involved in their discussions. Therefore, the points that were discussed during the chats were helpful in organizing their ideas and familiarizing them with the required vocabulary which in turn helped them to be more confident at the time of reporting or participating in the oral discussion. In contrast, Participant 3 and Participant 4 who were partners displayed a more negative reaction to the chat task. In the first session, Participant 3 was more responsive to the chat experience and this response is substantiated by his journal entry, *"I feel it is interesting and easy to talk with computer."* While this positive response could be due to the novelty of using chat as part of the lesson, his consistent negative response for Sessions 2-5 would suggest that there was another factor influencing his state communicative self-confidence. This factor is likely to be the attitude of his partner, Participant 4, who did not see the relevance of chat in a speaking class. For example, in their chat transcript for Session 2, Participant 4 said, *"i think this is not a good topic to talk on net...the situation is a lillte strange."* He often initiated the chat with off-task conversations such as *"listening to mp3¹"* while his partner tries to keep him on-task. Participant 3 expresses this in his oral report as he says *"My brother doesn't like to talk with this topic and I give him one suggestion, just take it as a hypothesis"* (Oral report 2) and *"So I find three reasons to object so great an increase, and my partner didn't give one"* (Oral report 3). The lack of useful input from his partner would have caused him to rely more on his own opinions. Therefore, he was not able to feel

¹ an extension for audio format for example .wav, and .au

confident while giving his oral report or participating in the open discussion. His state communicative self-confidence continues to decrease as he finds the chat to be meaningless and a waste of time.

Impact of chat on state anxiety

In order to get a better idea of the impact of chat on state communicative self-confidence, I will look at the impact of chat on state anxiety and state self-perceived competence separately. Since state anxiety and state self-perceived competence influence state communicative self-confidence, it is perceivable that a positive impact of chat on state communicative self-confidence can be due to a decrease in state anxiety or an increase in state self-perceived competence or both. In the previous chapter, I discussed the categorization of items in the pre-chat and post-report questionnaires into three categories (See Appendix 8 and Appendix 9). Category A includes items that measured state anxiety while Category B includes items that measured state self-perceived competence. Category C includes items that measured both constructs.

In this section, I will investigate whether the state anxiety of the participants is associated with the increase or decrease in state communicative self-confidence. To do so, I will compare the difference between the average score of Category A for the post-report questionnaire and the pre-chat questionnaire (Post Report - Pre Chat). Since the scoring for the items have been reversed, a higher score in this category would indicate a lower state anxiety and vice-versa. Therefore, a positive score for the difference between the post-report and pre-chat average score will indicate a reduction in state anxiety. Like the section before, only results higher than 0.50 or lower than -0.50 will be regarded as a change in state anxiety.

The results in Table 4.3 show similar patterns to the results in Table 4.2. Participant 1 is again the only one who consistently felt the positive influence of chat in reducing his state anxiety. Like before, it is likely that Participant 1 is highly anxious in speaking classes because he is aware of his lack of speaking ability in English. Hence, he is more susceptible to the influence of chat compared to the participant with the highest SPEAK/TEACH average, Participant 5. As can be seen in Table 4.3, the chat influence did not have very much impact on Participant 5 other than the first session. Since he has the highest SPEAK/TEACH score among the five participants, it is possible that he is not as nervous or anxious as Participant 1 during any oral communication attempts. Therefore, the chat experience would not affect his level of state anxiety much.

Table 4.3 Difference in average scores for Category A State Anxiety
(Post Report - Pre Chat)

<i>Participant</i>	<i>Session 1</i>	<i>Session 2</i>	<i>Session 3</i>	<i>Session 4</i>	<i>Session 5</i>
1	0.89	1.11	0.33	0.67	0.67
2	0.22	0.22	-0.22	-0.11	-0.22
3	0.78	-0.33	-0.22	-1.11	-0.56
4	-0.56	0.11	-0.22	0.00	-0.78
5	0.67	-0.22	0.11	0.00	-0.11

The results also indicate that Participant 4, who had the second highest SPEAK/TEACH average, received a negative score during the first and last sessions. His resistance towards the use of chat for a speaking class in Session 1 and the difficulty of topic in Session 5 as discussed in the previous section would account for the negative scores. Participant 3 who partnered Participant 4 in the chat task shows a positive response only in the first session. His level of state anxiety increased over the subsequent four sessions with the highest negative score of -1.11 for Session 4. As discussed in the previous section, his

negative reaction is likely due to the ineffective chat discussion he had with his partner, resulting in a lack of useful input. This is further confirmed by his comment in his fourth journal entry that he had "*many points of view*" on the topic yet chose not to participate at all in the open discussion in Session 4 (See Table 4.1).

Impact of chat on state self-perceived competence

In this section, I will look at whether the chat experience has influenced the state self-perceived competence of the participants, which in return contributed to the increase, or decrease of state communicative self-confidence. Table 4.4 below shows the difference between the average scores for Category B for post-report and pre-chat questionnaires. Like the previous discussion, any scores higher than 0.50 or lower than -0.50 will be regarded as impact of chat on state self-perceived competence.

Table 4.4 Difference in average scores for Category B State Self-Perceived Competence (Post Report - Pre Chat)

<i>Participant</i>	<i>Session 1</i>	<i>Session 2</i>	<i>Session 3</i>	<i>Session 4</i>	<i>Session 5</i>
1	1.38	0.99	1.02	1.55	1.61
2	0.26	0.18	0.93	0.38	-0.25
3	0.46	-0.19	-0.54	0.07	-0.70
4	-0.26	0.67	0.01	0.12	-0.61
5	0.75	0.12	0.83	0.52	0.86

Overall, the results in Table 4.4 show eleven instances of positive scores (> 0.50) and only three negative scores (< -0.50). The positive scores are also higher than those in Table 4.3, which indicates that the chat had a more positive impact on state self-perceived competence compared to state anxiety. Participant 1 and Participant 5 believe that the chatting did help them tremendously in their organization and expression of ideas, sentence

construction and use of related vocabulary. These beliefs are reflected in their journal entries below.

"It's [The chat] good to help us develop idea."

(Participant 1, Journal Entry 2)

"The lesson is good to organize idea."

(Participant 1, Journal Entry 3)

"I believe it would be better if we have longer time to first discuss by ICQ, it is constructive."

(Participant 5, Journal Entry 1)

"I am familiar with those words now, eg tuition fee."

(Participant 5, Journal Entry 3)

Since the content evidence for validity for the items in this category was established as high (See Chapter 3), it is possible to conclude that the impact of chat on state self-perceived competence as reflected in the results in Table 4.4 can be very positive.

Transfer of language experience from written mode to spoken mode

The third research question in this study seeks to investigate the transfer of language experience from the written mode (chat) to spoken language (oral). In order to address this question, I will identify the number of lexical items and paraphrased ideas that appear in both chat and oral report transcripts. The analyzed data can be divided into three categories. The first category is the direct transfer of lexical phrases. This category includes identical or almost identical lexical phrases that appear in both chat and oral transcripts. These phrases from the participants' oral transcripts could have been typed by either the participant or the participant's partner during the chat. In Table 4.5, the first two examples of direct transfer are written by the participant himself in the chat and used in the oral report while the third example is a direct transfer of a lexical phrase that is written by the partner but uttered by the participant during the oral report.

Table 4.5 Examples of direct transfer

	Chat Transcript	Oral Report by Participant	Categorization
Participant 1	<u>I live in UV</u> Formerly, <u>I have a roommate</u> , who liked to put things everywhere.	...before my wife arrived, <u>I have a roommate</u> . At that point, <u>I live in university village</u> and that guy put everything everywhere.	Direct transfer 1. I live in UV/University Village 2. I have a roommate
Participant 1	<Partner> In fact, <u>I do not think</u> it will be much difference for 15% or 18% <Participant> No. It is a big difference.	Another thing is <u>I don't think</u> there is no great difference between 15.5% and 18.8%.	Direct transfer (partner's) 3. I do not think/I don't think

The second category of lexical phrases is substitution/ellipsis. This category is includes four subcategories: (a) pronoun, (b) synonym, (c) expression, and (d) ellipsis. The lexical phrases in this category are based on units in the oral report transcript that are almost identical to the written units in the chat transcript except for a slight substitution or ellipsis. Pronouns include the substitution of “you and I” for “we” while synonyms include the use of one or two different nouns, verbs or adjectives but similar in meaning. Expressions include the substitution of modals or short phrases of expression while ellipsis refers to the omission of one or more low information words like “very”. Besides the substitution or ellipsis, the overall structure of the unit in the oral report is identical to the chat so they are very close to a direct transfer unit. Table 4.6 shows four examples of items in this category.

Table 4.6 Examples of substitution/ellipsis

	Chat Transcript	Oral Report by Participant	Categorization
Participant 3	you can <u>use it to check your email</u>	I hope she only <u>use my PC to check email</u>	Substitution (pronoun) 1. use it/my PC to check
Participant 1	<Partner> In fact, I do not think it will be <u>much difference for 15% or 18%</u>	Another thing is I don't <u>think there is no great difference between 15.5% and 18.8%</u> .	Substitution (synonym-partner's) 2. much/great difference for 15%/15.5 and 18%/18.8%
Participant 3	<u>i have a suggestion</u> : you just take it as a hypothesis	<u>I give him one suggestion</u> , just take it as a hypothesis	Substitution (expression) 3. i have a/give him one suggestion
Participant 3	the <u>rent in UV is awlay increased by 8%</u>	Such as our <u>rent in UV is increase 8%</u> every year	Substitution (ellipsis) 4. rent in UV is awlay/Ø increased by/Ø 8%

In some instances where two types of substitution/ellipsis occur within a sentence either in the chat or oral report transcript, the sentence will be considered as one unit since the whole sentence works together as a unit. The example in Table 4.7 illustrates a unit consisting two types of substitution/ellipsis.

Table 4.7 Example of one unit with two types of substitution/ellipsis

	Chat Transcript	Oral Report by Participant	Categorization
Participant 3	<Partner> i think it's <u>not a good idea for you to share the apartment with me</u>	And then he told me that's <u>not a good idea for me to share with him</u>	Substitution (pronoun, ellipsis- partner's) 1. not a good idea for you/me to share the apartment/Ø with me/him

However, if two types of substitution/ellipsis occur within separate units in one sentence either in the chat or oral report transcripts, the lexical phrases will be considered as two units as seen in the two examples in Table 4.8.

Table 4.8 Examples of two units of substitution/ellipsis within a sentence

	Chat Transcript	Oral Report by Participant	Categorization
Participant 3	<u>some of us have couples</u> (wives or husbands as F2) are studing in ISU, so <u>the incese in tutuion will be doubled</u> as to this family, and this will make life difficult	The second one, <u>some of the graduate students</u> has a wife or husbands to study in ISU. In this case, <u>the increase in tuition fees means double increase</u> with this family, so it is very difficult to live well	Substitution (pronoun, expression) 1. Some of us/the graduate students 2. the increase in tutuion/tuition will be doubled/means double increase

The third category, paraphrased ideas, looks at ideas that are paraphrased in terms of word choice, sentence structure and organization. Although some words may be similar, they may appear in different forms for example different tenses. The sentence structure and organization of utterance in the oral report is quite different from the chat transcript. However, the underlying idea is the same. Table 4.9 shows an example of a paraphrased idea.

Table 4.9 Example of a unit of paraphrased idea

	Chat Transcript	Oral Report by Participant	Categorization
Participant 1	You know, the universities <u>raise</u> tuition fee every year. If they <u>raise 18%</u> , they probily do the <u>same thing</u> next year.	So if you <u>increase 18.8%</u> , that means if this year they can <u>increase</u> this much, that means they also can <u>increase as much</u> as this year.	Paraphrased 1. raise/increase, 18%/18.8%, same thing/as much

Based on these categorizations, the total units for each category are calculated for each participant and summarized in Table 4.10 below. (See Appendix 11 for detailed categorization.) Since the units in the second category (substitution/ellipsis) are almost identical to direct transfer units in terms of the percentage of language transfer, the two categories are added together as a subtotal. This subtotal is then compared with the total of paraphrased ideas to compare the transfer of language experience in terms of language versus content.

Table 4.10 Transfer of language experience from written mode to spoken mode

Participant	Transfer of written mode (chat) to spoken language (oral)						TOTAL TRANSFER	
	Direct Transfer	Substitution /Ellipsis	SUBTOTAL (Direct Transfer + Substitution/ Ellipsis)		Paraphrased		Direct Transfer + Substitution /Ellipsis+ Paraphrased	
	#	#	#	%	#	%	#	%
1	3	5	8	66.67	4	33.33	12	100
2	11	7	18	75.00	6	25.00	24	100
3	13	11	24	88.89	3	11.11	27	100
4	5	7	12	80.00	3	20.00	15	100
5	7	8	15	65.22	8	34.78	23	100

Overall, all the participants relied more on direct transfer or substitution/ellipsis compared to paraphrasing ideas. The results in Table 4.10 show that Participants 2 and 3 rely quite heavily on the chat experience to form their oral report as they transfer the most number of lexical phrases, 18 units and 24 units respectively, from their chat discussion into their oral reports. This transfer from written mode to spoken mode reflects a very positive impact of chat on these participants in terms of transfer of language experience. Since the percentage of

paraphrased ideas is so much lower for these two participants, it is likely that the rate of direct transfer and substitution/ellipsis is higher because they do not have the language ability to produce spoken utterances spontaneously.

Participant 5, on the other hand, has a slightly lower percentage of direct transfer and substitution/ellipsis (65.22%). However, he has the highest total units of paraphrased ideas. It is possible that he is more able to paraphrase ideas because he has a higher level of spoken abilities compared to the rest of the participants. In fact, his transcripts show evidence of effective paraphrasing as he not only paraphrases ideas on the same issue from the chat, but rather, he paraphrases the ideas from different parts of the chat and organizes these ideas to support his statements during his oral report.

Table 4.11 Example of effective paraphrasing by Participant 5

<p>Excerpt from the first part of the chat discussion:- <PARTICIPANT 2> But I think the first is that he is neat. <i>**(Several lines later...)</i> <PARTICIPANT 5> I agree with the first point, so he should be neat. <PARTICIPANT 5> and I think he also should have <u>no religious tendency</u>. <PARTICIPANT 2> Yes, I think I agree with you. <u>If he is not neat, we can regulate some rules.</u> Such as clean the table, clean the room in some time. If he can not obey that, We can drive him out.</p>
<p>Excerpt from the second part of the chat discussion:- <PARTICIPANT 5> I withdraw form my position. ok. first, clean. second , I do not think so. I need a chinese guy. <PARTICIPANT 2> The second, <u>I think we can ask him be a American.</u> So that we can talk with him in English. So that can improve our spoken english. <i>**(The discussion on this point continues for several lines before the third part.)</i></p>
<p>Excerpt from Participant 5's oral report:- My partner said that <u>our future roommate must be American</u> but I don't think so because our home is the place for us to relax and not a place for us to study. He said if we have American roommate we can study English, we can study culture—American culture. I don't think so. I believe we can make friends with many Americans but if we stay with American at home there may be some problem—many problem because maybe the guy have <u>some religious tendency</u> or other problems.</p>

In Table 4.11, Participant 5 raises the issue about “religious tendency” in the first part of his chat when he and his partner were discussing about the criteria of having a neat roommate. However, his partner does not pick up that issue as a discussion point. In the second part of the chat discussion, they proceed to the criteria of the nationality of the roommate. However, in his oral report, Participant 5 uses “religious tendency” from the first part of the chat discussion as support for the second criteria.

Participant 1 only had 8 units of direct transfer and substitution/ellipsis and 4 units of paraphrased ideas. Since his level of spoken ability is considered the lowest among the five participants, I would have expected results similar to those for Participant 2 and 3, i.e. a higher rate of direct transfer and substitution/ellipsis. A closer look at his transcript reveals the reason for this low figure. In his first report, he begins by saying that he had forgotten what he and his partner had discussed. However, he clearly wanted to contribute more to the session, so he continued his oral report by coming up with a new point. In his third report, he also brings up new points which had not been discussed with his partner. These two instances explain why there are fewer units of language transfer. It is also important to note that there are more hesitation markers and false starts when he tries to bring up new points in the oral report. Since he has not had time to prepare himself on these points, it is not surprising that he finds it more difficult to express himself.

Finally, Participant 4 who has a relatively high level of spoken ability only transferred 12 units through direct transfer and substitution/ellipsis and 3 units through paraphrased ideas. As discussed in the previous sections, he is not very responsive to the chat task and quite frequently off-task. Since he does not produce a lot of relevant input in the chat, it is not surprising that the total units of transferred language is lower than the other participants.

However, a comparison between the percentage of direct transfer and substitution/ellipsis with paraphrased ideas shows that he does transfer a lot more language directly than rely on his spoken ability to paraphrase ideas.

Table 4.12 Number of direct transfer and substitution/ellipsis transferred from partner's chat text

Participant	Direct Transfer		Substitution/Ellipsis	
	Total Units	Partner's	Total Units	Partner's
1	3	1	5	1
2	11	2	7	2
3	13	1	11	1
4	5	1	7	0
5	7	1	8	2

Participants also transfer their partners' written text into their oral reports. Table 4.12 shows the number of units from the total units for direct transfer and substitution/ellipsis that are actually transfers of partners' written input. The result shows that all participants have at least on one occasion transferred their partners' contribution either through direct transfer or substitution/ellipsis.

Overall, the results indicate that there is a transfer of language experience from written mode to spoken mode. Not only do participants transfer their own written text into speech, they also transfer their partners' written text. Therefore, not only can learners benefit from this chat experience in terms of language transfer, but less proficient learners who are paired up with more proficient learners can also benefit from their partners' language ability.

Impact of chat on fluency in oral communication

The final research question asks whether the chat experience helps to improve fluency in oral communication. To answer this question, I will divide this section into two sections.

In the first section, I will use number of words per minute to measure fluency in oral communication. Based on the oral report in Sessions 1 to 3, I will see if the number of words per minute increases over the three sessions. In the second section, I will look at the ratings and comments of four raters to see if the participants' fluency in oral communication has improved according to the perspective of a listener.

Number of words per minute

Since nonnative speakers who can speak smoothly, with little hesitations, few false starts and not seen as "groping for words" are considered to be fluent, they would be able to produce more completed utterances in less time compared to non fluent speakers who take up more time due to hesitations, false starts and try to search for words yet produce fewer completed utterances.

Table 4.13 Number of words per minute for Sessions 1 to 3

<i>Participant</i>	<i>Session 1</i>	<i>Session 2</i>	<i>Session 3</i>
1	69.62	72.30	87.37
2	106.33	92.04	71.69
3	102.08	98.29	78.45
4	111.97	104.93	98.64
5	99.58	108.63	87.22

The results in Table 4.13 show that the fluency of oral communication has gradually decreased for Participants 2, 3 and 4 while Participant 5 displayed an improvement in Session 2 but became less fluent in Session 3. Participant 1 is the only one who displayed a gradual improvement in his oral fluency. These results are likely to be affected by two factors: (a) the topic, and (b) the participants' response to the chat task.

The topic for the first session is about the characteristics of a roommate while the second topic involves decision making about members of a family who should receive the life jackets. The third topic required the participants to consider the reasons to advocate an increase of 15.5% instead of 18.5% in the tuition fee. This topic requires more thought since the difference in increase does not appear to be significant to the participants. In general, the level of difficulty for the three topics appears to increase over the three sessions while the level of familiarity with the topics is lower over the three sessions. Three participants indicated in their journal entry that they were familiar with the first topic while only one participant (Participant 3) indicated that he was familiar with the second and third topics. It is possible that Participant 3 reported that he was familiar with all three topics with the intended meaning of his familiarity with the topic after the chat discussion instead of before the chat discussion. In any case, the level of difficulty may have caused the reduction in the number of words and the increase in the number of minutes taken by each participant to complete their report causing the decrease in the number of words per minute.

The second explanation for the results in Table 4.13 could be related to the participants' response to the chat task. For example, Participants 2, 3 and 4 spoke more than 100 words per minute (Session 1) which could be due to the interest in participating in the study or the novelty of using computer and chat software as part of their lesson. However, in the subsequent sessions, the novelty of being part of the study or the novelty of using computer and chat software begin to wane, causing the enthusiasm to decline. The decrease in enthusiasm will then manifest in fewer words or a slower pace of talking. On the other hand, Participant 5 displayed more enthusiasm in Session 2 because it was more challenging and interesting to work with a hypothetical question as indicated in his journal entry, "*It's*

very interesting and needs judgement and thinking at the same time.” This enthusiasm led to the production of more words, which then increased the number of words per minute.

Fluency from the perspective of a listener

In this section, I will present the results of fluency scores by a panel of raters. Since the perception of fluency is partly decided from the listener’s perspective, four raters were enlisted in this study to rate the samples of oral report from Sessions 1 to 3. These raters were carefully selected based on their experience with ESL, SPEAK/TEACH tests and ITAs. Their ratings were then scored and tested for inter-rater reliability using the “coefficient alpha” also known as “Cronbach’s alpha” (Bachman,1990:177). This formula was applied to the ratings by all four raters as well as every possible combination of three raters. Since the reliability of ratings by every combination of three raters that included one particular rater was less than .60, it appears that the ratings of this rater were less consistent. Hence, her set of ratings was dropped and did not figure into the total score. Furthermore, the selected combination of three raters produced a reliability of .746 compared to .669 for all four raters so the ratings by the selected three raters were used instead of four sets of ratings. The coefficient alpha of .746 was then applied to the Spearman-Brown prophecy formula (Brown, 1996: 205) to adjust it for the number of raters and the adjusted reliability scored was .90.

Table 4.14 Fluency scores by raters for Sessions 1 to 3

<i>Participant</i>	<i>Session 1</i>	<i>Session 2</i>	<i>Session 3</i>
1	2.00	2.33	3.00
2	3.33	2.67	2.33
3	3.33	3.00	3.00
4	3.00	4.00	4.00
5	5.33	3.67	5.00

Table 4.14 summarizes the ratings by the three selected raters showing that the results are not consistent. The results appear to be similar to those in Table 4.13. Participant 1 who produced more words per minute from Session 1 to Session 3 also showed an improvement in his oral fluency from the perspective of the listener. This result confirms that his fluency has gradually improved and based on his responses in his journal entries, it is likely that his improvement is partially due to the chat experience.

The results also display a gradual decrease in fluency for Participants 2 and 3 which is reflective of their results for the number of words per minute. It is interesting to note that for Participant 5, the results are contradictory. While in Table 4.13, he produced the highest number of words per minute in Session 2, he received the lowest score among the three sessions. A look at the comments by raters showed that he was rated very low by one rater who said that he had "*a TON of repetition and halting*" (emphasis in original) which made it difficult for her to understand. This score then affected his final rating. Other raters reported similar observations but gave him a higher score because of his "*rhythm is fairly smooth for NNS*" and his use of "*natural phrases*" as well as "*well developed explanation.*"

Participant 4 also had contrasting results. In Table 4.13, his scores were gradually decreasing over the three sessions. However, the raters indicated that his fluency improved over the three sessions. In the first session, all three raters noted that the speed was "*fairly smooth*" and in fact, "*almost too fast*". However, the low rating on his fluency was due to lack of intonation, which caused the raters to find difficulty in discerning the "*use of natural thought groups.*" Another factor that affected his low score in Session 1 was the incomprehensibility of his speech, which is also closely related to the lack of intonation as well as "*missing final consonants [that] cause the words to all run together.*" In his

subsequent two samples, the raters gave him a higher score because his “*speed*”, “*rhythm*” and “*multisyllable stress*” were good. Although there were some “*hesitations*” and “*awkward pauses*”, his “*good vocabulary*” and enunciation compensated for the comprehensibility.

Overall, the raters’ written responses were fairly consistent. It appears that the fluency of a speaker from the perspective of a listener is affected by a list of factors. These factors include speed, rhythm, intonation and articulation. Hesitation and stress can also affect a listener’s perception of fluency. Sometimes, having a good vocabulary or an organized speech can compensate for the lack in other areas because they improve the comprehensibility of the speaker’s utterance, which in return, make them appear to be more fluent.

In the following chapter, I will review the main findings in this study and discuss the implications for teaching. In addition, I will identify the limitations of this study and provide some suggestions for future research.

CHAPTER 5. CONCLUSION

Learners' WTC is crucial in any speaking classroom because only through speaking can they improve their speaking abilities. However, before learners are willing to speak in class, they need to feel confident. This study sought to investigate the impact of chat on learners' state communicative self-confidence and WTC as well as the transfer of the language experience from chat to speech and the impact of chat on oral fluency.

Major findings

The transfer of language experience from written mode (chat) to spoken mode (oral) is perhaps the most tangible finding in this study. The analyses of the results in the previous chapter revealed that learners transferred their language from chat to speech in three different ways, which are direct transfer, substitution/ellipsis and paraphrasing. Learners appear to transfer more of their language through direct transfer and substitution/ellipsis than paraphrasing. Learners who have a good command of English may paraphrase more than learners who are less proficient in English. In addition, learners not only transfer their language from chat to speech, they also transfer their partners' language into their own speech.

In terms of state communicative self-confidence, chat appears to have more impact on increasing self-perceived competence than decreasing state anxiety. Learners who have gone through a similar chat experience would be able to organize their thoughts and ideas before speaking in class. Seeing the words on the computer screen would help them prepare their spoken utterances visually. This process of preparation would in turn help them to have a

high level of self-perceived competence since they would have thought of the necessary vocabulary and sentence structures while they were chatting online.

Another finding is that learners with low speaking abilities and low state communicative self-confidence will find the chat task more helpful in lowering their state anxiety and increasing their state self-perceived competence as they will feel more prepared to speak after sorting out their ideas and thoughts, constructing sentences and receiving relevant and useful input from their partners. Therefore, chat tasks may be more beneficial in beginning or lower intermediate classes compared to upper intermediate or advanced classes.

The next finding is that chat experience was more effective in increasing state self-perceived competence than in reducing state anxiety. Consequently, teachers who wish to boost the state communicative self-confidence of learners by reducing state anxiety, need to look at other ways of doing so instead of relying on the chat experience to attend to both state anxiety and state self-perceived competence.

In terms of oral fluency, the impact of chat can vary from learner to learner. While some learners can produce more words per minute, they may still be perceived as not fluent because listeners take several factors into consideration when they evaluate the fluency of the speaker. Besides the speed that will affect the number of words spoken per minute, the rhythm, intonation, stress patterns and enunciation can affect the fluency of speech. Comprehensibility is another important issue that is closely related to fluency. Although fluency is more dependent on the pace of speech, comprehensibility can also influence the listeners' perception of the speaker's fluency. In the event that a speaker can speak rapidly but without appropriate pauses, comprehensibility can be highly affected resulting in a lower perceived level of fluency. This study has reaffirmed the difficulty in assessing the construct

of fluency through the raters' comments, which indicated the different criteria used to evaluate oral fluency.

Pedagogical implications

The findings of this study raise a few pedagogical implications. If learners do transfer their language experiences from chat to speech, teachers of mixed ability classes may find it useful to pair proficient learners with less proficient learners so that the less proficient learners can benefit from the chat session. However, teachers need to ensure that the proficient learners are confident with their language abilities so as not to be influenced by the incorrect language structures used by the less proficient learners. Learners who have similar language abilities can also be paired together since they will both contribute to the language experience.

Today, the use of chat via the Internet has enabled the classroom to be expanded beyond its physical location. Teachers can encourage collaborative learning between their students with students in other geographical locations. For example, pairing ESL learners with native speakers of English who are taking a course on foreign culture would not only promote authentic and purposeful learning, it would provide benefits for both parties. The ESL learners would be able to transfer the language experience while the native speakers would be able to gather the information necessary for a project or paper.

Attitudes of partners are a consideration for teachers who wish to use chat in their classroom. The chat software serves as a medium that can facilitate the preparation process, provided both learners have positive attitudes towards the chat experience. The willingness of the learners to speak up after the chat experience is highly dependent on the quality and quantity of input received during the chat experience. The results in this study have shown

both extremes in the reactions of two pairs of learners. If one or both partners are extremely enthusiastic and take active roles during the chat session, the levels of WTC and state communicative self-confidence are likely to increase. On the contrary, a negative attitude of a partner in a chat task can influence the perception of the other partner and also cause the partner to feel less prepared to speak since he has not received enough input during the chat. Hence, teachers who plan to use similar chat tasks in the speaking classroom should pair students up carefully. They should also consider the attitudes of their students towards technology before choosing to use chat tasks in the speaking classroom.

Teachers also need to consider the authenticity of the topic to match the objectives of the course as well as the chat situation. In this particular study, the chat topics were more relevant for a general ESL course. Learners may not have found it useful to be talking about general topics that did not help them in their roles as graduate students and teaching assistants. A problem-solving question may have been more authentic as a topic of discussion since these ITAs would have to explain concepts to undergraduates during office hours. Also, the use of chat to negotiate the distribution of life jackets in a hypothetical situation in which a boat is sinking is a mismatch between topic and medium resulting in confusion for some learners. Furthermore, for topics that lend to opposing views, learners should be allowed to select their own position rather than being assigned a position. Learners who are in higher level classes should be given more open-ended topics to simulate and challenge their thinking abilities.

Limitations of this study

One major limitation of this study is caused by the lack of consistency in the topics of discussion. The topics used for this study included two real-life situations, two general

debatable topics and one hypothetical situation. Furthermore, the required vocabulary for some topics was simpler, while others required more difficult vocabulary making it more difficult for participants to express themselves. The inconsistent level of difficulty and the nature of topics and task would have affected the responses of the participants, therefore affecting the internal validity of the findings. For instance, the reported results of state anxiety after an easy topic of discussion as in Session 1 were more positive than the reported results in Session 5 where the topic was more difficult. Therefore, the participants' responses in the questionnaire may have been due to other factors such as familiarity with topic rather than the impact of chat.

The next major limitation to the study was the selection of sample oral reports that were included on the rating tapes to help raters anchor the ratings. While it is necessary to include the samples to minimize inconsistency among the raters, the ratings that I assigned would have revealed my perspective of factors influencing fluency and this revelation may then influence the raters to rate based on my perspectives rather than their own. For example, one of the three samples was a report by a Korean student. His pace was extremely fast and smooth, but his speech was lacking in intonation and stress. The lack in intonation and stress affected the comprehensibility tremendously. My suggested score for that sample had taken the incomprehensibility into account as I perceived that to be part of fluency. However, the raters may not have done so had they not listened to the sample and seen the suggested score. Two raters noted that they might have given that sample a higher rating if they did not take incomprehensibility into account. This would suggest that they associated fluency mostly on the speed and smoothness of the speech and not comprehensibility. In this case, it was a tradeoff between reliability and validity. If I did not provide the sample ratings, the raters

would not have an idea of scoring that I was expecting based on my rating scale which would have led to less inter-rater reliability. However, by providing the sample ratings, the revelation of my perception as a listener would have affected the validity of the ratings because the raters rated according to my perception and not their own, which was the intention of the research.

Another limitation of the study is due to the amount of time allotted for the two tasks. Since each session was only fifty minutes long, and some students failed to arrive on time, the students only had ten minutes to chat and limited time to participate in the open discussions. Had participants been given more time, they might have continued taking turns to talk. Since the participants had to complete a questionnaire and a journal entry after the second task, they might have avoided speaking up in order to avoid staying back to complete the paperwork. This limited time may have hampered the display of participants' WTC.

This case study is limited to five participants over a period of five sessions. A longer investigation period would have produced more valid and reliable results. While I encountered no difficulties throughout the data collection, a study with a longer investigation period would require careful considerations about the software and hardware requirements as well as the possibility of facing technical difficulties. Hence, backup plans should be made in preparation for these difficulties.

Suggestions for future research

Due to the limitations of this study, the findings must be interpreted with caution. Since there are many variables influencing WTC, there needs to be more careful study on controlling the variables in order to strengthen the internal validity of the research. While the

results are not conclusive, they provide initial support for the development of more elaborate research in using chat to improve L2 speaking skills.

Perhaps the most interesting finding in this study is the transfer of language experience from written mode to spoken mode. The evidence provided by this study indicates that there is indeed a transfer of language experience. While this research question has been addressed in detail in this study, it would be helpful to replicate this study to confirm the findings. Future research could also investigate the transfer of language experience from written mode to spoken mode between native and non-native chat partners. Positive results from these studies could serve to promote collaborative learning and distance learning.

The results of this study have also shown the inadequate measurement of language anxiety as well as the ineffective attempt to reduce language anxiety. Recognizing the established finding of other studies that there is a negative correlation between anxiety and performance, such research should be made to study other ways of using CALL to minimize language anxiety so that learners will be more willing to seek out opportunities for practice.

The resemblance of chat language to spoken discourse needs to be further “harnessed” for positive benefits in any ESL/EFL speaking classroom. If learners do perceive the chat language as similar to spoken language, they may be willing to acquire the language through this electronic medium. In addition, chat software supporting voice conversations could be evaluated for their potential benefits in improving L2 speaking abilities.

A case study of this size is easily replicable. Replications of this case study would definitely help to substantiate its findings. In addition, an extension of this research would be

to study the impact of chat on different groups of learners. Gender, age group, nationality and personality are some variables that can be added to future studies. Would female learners respond to chat in the same way? Would adult learners appreciate the privacy of chat to prepare them before having to grapple with words during an oral session? Would the transfer of language experience be as positive for participants from Korea, Japan or India? Would introverts benefit more from the chat experience compared to extroverts? These are some of the questions that can be addressed through a replication of this study. Whatever the future research questions may be, it is undeniable that online chat for language teaching presents a vast area of further research.

APPENDIX 1: SPEAK RATING GUIDE (4/98)

Score	Communication effectiveness and comprehensibility
3	<p>Communication always effective, free, and may go even beyond the task No effort needed to understand Very strong responses with effective use of all competencies (strategic, functional, sociolinguistic, discourse, and linguistic) Uses sophisticated expressions Flu: smooth, effortless flow makes understanding easy; native-like delivery Pron: always intelligible with only very minor problems</p>
2.5	<p>Communication generally effective and fairly free Listener must make little effort to understand Strong responses although linguistically a few unusual expressions or minor probs; usually good range in vocab & grammar; may be a few errors too Good use of other competencies; generally appropriate and coherent Flu: smooth delivery generally, but some unnatural pauses or awkward flow Pron. easily intelligible, but may have some consistent and/or minor probs.</p>
2	<p>Communication somewhat effective; speaker needs to make effort and Listener must make some effort to understand Adequate responses, but may show problems with other competencies, e.g. be overly simple, disconnected, or use distracting repair strategies Linguistically fairly limited, with less range of vocab & grammar, and errors present Flu: pauses & choppy flow; delivery overly slow or fast, but doesn't strongly interfere Pron. generally intelligible, but some errors or a fairly strong accent hinders understanding</p>
1.5	<p>Although communication is generally ineffective, some takes place A lot of effort needed by listener, and exerted by speaker Weak, unclear responses that may not fully address the task Limited linguistic competency masks the other competencies; disjointed, simple answers with a lot of errors possible; limited vocab and grammar Flu: pauses, hesitant flow or speed interfere with communication Pron: frequent errors or heavy accent often makes communication unintelligible</p>
1	<p>Ineffective communication, even when speaker makes great effort Listener must make a huge effort and then can get some of the response Fragmented, incomplete, rambling or not relevant responses Little linguistic competency, with vocab lacking and frequent grammar errors Flu: many pauses and halting delivery severely interfere with communication Pron. errors and a heavy accent make much of the response unintelligible</p>
0.5	<p>Very ineffective communication, with speaker mostly silent or repeating prompt Listener can catch only a few words, even with a supreme effort Responses seem not to fulfill task; lack of linguistic control Flu: very halting and fragmented delivery Pron. almost unintelligible; only a few words can be understood</p>
0	<p>No answer given</p>

APPENDIX 2: TEACH RATING CRITERIA AND DESCRIPTORS OF EXCELLENT PERFORMANCE

Criteria	Descriptors of Band 3 or Excellent Performance
1. Language Effectiveness and Comprehensibility	(see red SPEAK Communication Rating Guide)
2. Listening Ability	Comprehends student questions easily. This is seen in quickly-given, appropriate responses and effective negotiation with the questioner about unclear questions.
3. Question Handling and Responding	Fields all the various questions flexibly and effectively, quickly giving appropriate, thoughtful answers that try to satisfy the questioner and yet show who is in charge. Can negotiate effectively with questioner when doesn't fully understand what has been asked. May restate some questions to focus them more clearly and let class hear/understand question. For clarity, gives complete answers to yes/no and negative questions <i>e.g. aren't your office hours on Mondays? Yes, Mondays I've office hours.</i> In complex situations, checks questioner is satisfied with answer. May stimulate student learning with partial answers or clues, or by asking other students to respond.
4. Communication Skills	
A. Development of Explanation	Develops ideas and explanations in a logical, sequential and complete way, which is generally easy to follow. Defines terms early, begins lesson with familiar or previously covered material, and generally moves from concrete to abstract.
B. Clarity of Expression	Competent in use of synonyms, paraphrasings and transitions. Important ideas stand out. Emphasizes and repeats important and/or confusing points. Able to choose precise vocab. and to avoid ambiguity
C. Use of Supporting Evidence	Translates abstract concepts into understandable ideas by the use of examples, details, illustrations, analogies or definitions
D. Eye Contact	Makes eye contact with all members of the audience, not favoring one individual or area. Does not talk to chalkboard or read from notes, except momentarily
E. Use of Chalkboard	Displays items or problems clearly, logically, and efficiently. Writes large enough to be seen from back of room. Doesn't use board as a substitute for talking. Doesn't erase important material without checking with class. (Spelling and grammar mistakes, or squeaky chalk may lower score slightly)
F. Enthusiasm/ Presence	Identifies readily with the role of a US College teacher. Has many "good" teaching qualities, e.g, confident, animated style, enthusiasm, a strong grasp of material, empathy for students, and concern with communicating the material and motivating students. This is seen in varied, well-modulated speaking style, & effective interaction with students.
5. Cultural Ability	
A. Familiarity with cultural code	Native-like familiarity with a US college classroom and expected teacher-student relationships: Demonstrates politeness, tact, patience and tolerance. Shows appropriate "teacher distance" (not too authoritarian or stiff, nor too friendly, nor timid). Knows typical classroom procedures, idiomatic English and common student expressions.
B. Appropriate non-verbal behavior	Uses body language appropriate for a US college classroom. Appears not to be nervous. Has no distracting mannerisms.
C. Rapport with class	Shows interest in students and concern that they understand. Tries to aim instruction to a class of typical U.S. undergrads. This is seen in content background expected and given, appropriate, non-jargon vocab, and interaction such as comprehension checks.

APPENDIX 3: UNDERSTANDING SPEAK/TEACH

Fully Certified, Level-1

Score: the examinee passed both the SPEAK and the TEACH tests with 220 or higher (on a scale 0-300).

Teaching duties: whatever the department needs, but some personal support is recommended in the first semester.

Classes required: none

Certified with Restrictions, Level-2 (No retesting needed)

Score: The examinee passed one of the two tests with a score of 220 or higher and obtained between 190 and 220 on the other; or received borderline scores on both tests. For example, the examinee passed the SPEAK test with 230, but received a score of 200 on TEACH (on a scale 0-300).

Teaching duties: may be a recitation or discussion leader, an occasional presenter, or any of the duties described in the lower certification levels. (But the examinee may not be the sole, stand-alone instructor of a class.)

Classes required: one semester of U St 180 (3 credits), usually section D. This must be taken during or before the first semester of teaching duties. On successful completion of this course and the teacher's recommendation, students advance to level-1, fully certified.

Certified with Restrictions, Level-3 (Retesting required)

Score: the examinee received scores between 170 and 210 on each test (on a scale 0-300).

Teaching duties: may work as a laboratory instructor reviewing assignments and helping with experiments, or individually with students as a tutor or in a help-room, or do any of the duties described in the not certified level.

Classes required: 1-2 semesters of U St 180 (3 credits each) usually sections A-C with retesting at the end of each semester. Classes must be taken during or before the first semester of teaching duties and continue for a second semester, unless the person retests at level-1.

Not-Certified

Score: the examinee received scores below 170 on one or both tests (on a scale 0-300).

Teaching duties: those that do not require oral proficiency, such as taking care of equipment or setting it up; grading; and proctoring examinations.

Classes required: if the examinee is on a TAship and will be interacting with students, 1-2 semesters of U St 180 (3 credits), usually section A, with retesting at the end of each semester. Classes must be taken during or before the first semester of teaching duties and continue for a second semester, unless the person retests at level-1.

Registration for University Studies/English 180 takes place in the SPEAK/TEACH office from 2-4pm on the Thurs and Fri before the semester begins and all day on the first class day of fall and spring semesters. Several different classes are offered each semester, and students are assigned to the one that best fits their oral communication skills and needs. The classes are graded on a satisfactory-fail basis and the 3 credits do not apply towards graduation requirements. 2 semesters of 180 is generally the maximum available.

(revised 4/01)

APPENDIX 4A: INSTRUCTIONS FOR STUDENTS (SESSION 1, TASK 1)

Who's a suitable roommate?

A communicative task using computer-mediated communication

Instructions for Students

Task Situation

It is spring and you and your current roommate (your partner) are looking for a third roommate to share a place for next year. You will prepare a list of three qualities in a roommate which are the most important to you and the reasons why those qualities are important. For instance, you might say *"I want a roommate who is honest so that I don't have to worry about him/her stealing my things."* Your partner will also prepare a list of three different qualities and reasons. Your task is to share with your partner your list of qualities and for your partner to do the same with his/her list.

What you need to do

1. Click on the **Start Menu** at the bottom left corner of the screen to start the **ICQ** program.
2. Enter your password.
3. If you are assigned as **Student A**, send a **Chat Request** by clicking the left button of the mouse next to your partner's name. If you have been assigned as Student B, you may skip this step.
4. When you are in chat mode, share and discuss each of your three qualities listed and why each of these qualities is more or less important in your search for the future roommate.
5. Together, decide which of these six qualities are the most important in your future roommate, and rank these qualities in order of their importance to you from most important to least important.
6. After you and your partner have completed the task, click on **"File"** and **"Save Buffer"**.
7. Save the chat on the **Desktop** under the file name **Eng180a**.
8. When you close the chat box, click on **"Save Chat"**.
9. You have 20 minutes to complete the task.

APPENDIX 4B: INSTRUCTIONS FOR STUDENTS (SESSION 2, TASK 1)

What would you do?

A communicative task using computer-mediated communication

Instructions for Students

Task Situation

You (Student A) have just bought a new boat and you have invited your parents and younger brother (Student B) and his wife to go sailing with your wife and two-year old son. Your mother has decided not to go because she has poor health. However, while you and your family are sailing, you encounter some problems and the boat starts sinking. The rescue team would probably take more than 5 hours to find you. Unfortunately, there are only 3 life-jackets. You and your brother must decide quickly who will wear the jackets and why. The six people on the boat are:

1. You
2. Your wife
3. Your two-year old son
4. Your father
5. Your younger brother
6. Your brother's wife

What you need to do

1. Click on the **Start Menu** at the bottom left corner of the screen to start the **ICQ** program.
2. Enter your password.
3. If you are assigned as **Student A**, send a **Chat Request** by clicking the left button of the mouse next to your partner's name. If you have been assigned as Student B, you may skip this step.
4. When you are in chat mode, share and discuss who are the three family members who will wear the life-jackets and why each of these three members deserve to wear the jackets more than the rest.
5. Together, decide who are the three family members who will wear the life-jackets.
6. After you and your partner have completed the task, click on "**File**" and "**Save Buffer**".
7. Save the chat on the **Desktop** under the file name **Eng180b**.
8. When you close the chat box, click on "**Save Chat**".
9. You have 20 minutes to complete the task.

APPENDIX 4C: INSTRUCTIONS FOR STUDENTS (SESSION 3, TASK 1)

Budget Cuts

A communicative task using computer-mediated communication

Instructions for Students

Task Situation

The three state university presidents and regents administrative staff are proposing an 18.5 percent hike in tuition next year. The Board of Regents, State of Iowa, will set tuition fees at its next meeting in November. You and your partner have been elected to represent the international teaching assistants in a student committee to propose a 15.5 percent hike. Now you and your partner have to come up with 3 good reasons to support the student committee's proposal. You should include the effects that an 18.5 percent hike will have on international teaching assistants.

What you need to do

1. Click on the **Start Menu** at the bottom left corner of the screen to start the **ICQ** program.
2. Enter your password.
3. If you are assigned as **Student A**, send a **Chat Request** by clicking the left button of the mouse next to your partner's name. If you have been assigned as Student B, you may skip this step.
4. When you are in chat mode, share and discuss the three reasons to support the student committee's proposal..
5. After you and your partner have completed the task, click on "**File**" and "**Save Buffer**".
6. Save the chat on the **Desktop** under the file name **Eng180c**.
7. When you close the chat box, click on "**Save Chat**".
8. You have 20 minutes to complete the task.

APPENDIX 4D: INSTRUCTIONS FOR STUDENTS (SESSION 4, TASK 1)

Internet - For better or for worse?

A communicative task using computer-mediated communication

Instruction for Student A

Task Situation

Internet has been the vehicle for social, political, economical and personal purposes. You need to present three advantages for the **social** use of the Internet and support your opinion. Your partner will present three disadvantages. You need to persuade your partner to change his mind.

Instruction for Student B

Task Situation

Internet has been the vehicle for social, political, economical and personal purposes. Unfortunately, there are also disadvantages. You need to present three **social** disadvantages for the use of the Internet and support your opinion. Your partner will present three advantages. You need to persuade your partner to change his mind.

What you need to do

1. Click on the **Start Menu** at the bottom left corner of the screen to start the **ICQ** program.
2. Enter your password.
3. If you are assigned as **Student A**, send a **Chat Request** by clicking the left button of the mouse next to your partner's name. If you have been assigned as Student B, you may skip this step.
4. When you are in chat mode, share and discuss the three advantages and the reasons.
5. Your partner will present you with three opposing reasons. Try to persuade him to change his mind.
6. After you and your partner have completed the task, click on "**File**" and "**Save Buffer**".
7. Save the chat on the **Desktop** under the file name **Eng180d**.
8. When you close the chat box, click on "**Save Chat**".
9. You have 20 minutes to complete the task.

APPENDIX 4E: INSTRUCTIONS FOR STUDENTS (SESSION 5, TASK 1)

Career Requirement: Experience vs. Paper Qualification *A communicative task using computer-mediated communication*

Instruction for Student A

Task Situation

In today's modern society, career is a big part of people's lives. However, in order to secure a good job, one has to fulfil certain requirements. You believe that a person with working experience can build a better career in a shorter amount of time. You need to present **three** arguments for the importance of work experience over paper qualification. On the other hand, your partner will present three arguments for the importance of paper qualification.

Instruction for Student B

Task Situation

In today's modern society, career is a big part of people's lives. However, in order to secure a good job, one has to fulfil certain requirements. You believe that a person with paper qualifications can build a better career in a shorter amount of time. You need to present **three** arguments for the importance of paper qualification over working experience. On the other hand, your partner will present three arguments for the importance of working experience.

What you need to do

1. Click on the **Start Menu** at the bottom left corner of the screen to start the **ICQ** program.
2. Enter your password.
3. If you are assigned as **Student A**, send a **Chat Request** by clicking the left button of the mouse next to your partner's name. If you have been assigned as Student B, you may skip this step.
4. When you are in chat mode, share and discuss the arguments for the importance of work experience.
5. Your partner will present you with three arguments for the importance of paper qualification. Try to persuade him to change his mind.
6. After you and your partner have completed the task, click on "**File**" and "**Save Buffer**".
7. Save the chat on the **Desktop** under the file name **Eng180e**.
8. When you close the chat box, click on "**Save Chat**".
9. You have 20 minutes to complete the task.

APPENDIX 5: QUESTIONNAIRE FOR BACKGROUND INFORMATION

Directions: Please fill in the information requested below. Your answers will be kept confidential and only the researcher will have access to the information you provide.

Name				Level of education	Masters <input type="checkbox"/>	Ph.D. <input type="checkbox"/>
Age	20-24 <input type="checkbox"/>	29-32 <input type="checkbox"/>	>37 <input type="checkbox"/>	Type of assistantship	Teaching <input type="checkbox"/>	
	25-28 <input type="checkbox"/>	33-37 <input type="checkbox"/>			Research <input type="checkbox"/>	
SPEAK score					Others <input type="checkbox"/>	
	(Date taken: _____)					
Learned English	_____ years			Expect to be a TA in the future?	Yes <input type="checkbox"/>	
Native language	_____				No <input type="checkbox"/>	

1. How much English do you speak daily? [check (√) one]

less than 1 hour <input type="checkbox"/>	1-3 hours <input type="checkbox"/>	3-5 hours <input type="checkbox"/>	more than 5 hours <input type="checkbox"/>
---	------------------------------------	------------------------------------	--

2. Do you speak English to other native speakers? [check (√) one]

a lot <input type="checkbox"/>	often <input type="checkbox"/>	sometimes <input type="checkbox"/>	seldom <input type="checkbox"/>
--------------------------------	--------------------------------	------------------------------------	---------------------------------

3. Do you speak English to other non-native speakers? [check (√) one]

a lot <input type="checkbox"/>	often <input type="checkbox"/>	sometimes <input type="checkbox"/>	seldom <input type="checkbox"/>
--------------------------------	--------------------------------	------------------------------------	---------------------------------

4. Have you ever used a chat program on the Internet? [check (√) one]

Yes <input type="checkbox"/>	No <input type="checkbox"/>
------------------------------	-----------------------------

If your answer for No. 4 is Yes, please proceed to Question 5. If your answer is No, please proceed to Question 6.

5. How often do you use a chat program on the Internet? [check (√) one]

a lot <input type="checkbox"/>	often <input type="checkbox"/>	sometimes <input type="checkbox"/>	seldom <input type="checkbox"/>
--------------------------------	--------------------------------	------------------------------------	---------------------------------

6. Approximately how many hours do you work with computers per day? _____

7. How do you feel about using the computer and Internet? (please circle)

good at it	1	2	3	4	bad at it
love it	1	2	3	4	hate it

8. Which kind of personality do you have? [check (√) one]

Extrovert Introvert

9. Your duties as an assistant this semester include: (Please check any that apply to you)

leading a recitation section		proctoring examinations	
conducting a lab session		doing research	
assisting students in a lab		conducting office hours	
working in a help room		others (please describe)	
tutoring students			
checking/grading papers			

10. Do you see the need to improve your spoken English while you are at Iowa State University? Why?

11. Complete the following sentence:

I try to improve my speaking skills by

APPENDIX 6: PRE-QUESTIONNAIRE

Directions: Please fill in the information requested below. Your answers will be kept confidential and only the researcher will have access to the information you provide.

Name : _____

Instructions: Circle the number that reflects your opinion for each of the statements.

Scale:

1	2	3	4	5
X-----	-----X	-----	X-----	-----X
-----X				
Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree

1. I am not familiar with the vocabulary required for the topic.	1	2	3	4	5
2. I don't like to talk about this topic because I take too much time to construct my sentence.	1	2	3	4	5
3. I am not worried about making mistakes when I talk about this topic in class.	1	2	3	4	5
4. I find it easy to talk about this topic in English.	1	2	3	4	5
5. I worry that my fluency will prevent my classmates from understanding me.	1	2	3	4	5
6. I feel self-conscious when I have to talk about this topic.	1	2	3	4	5
7. I don't feel tense if I have to share my ideas about this topic.	1	2	3	4	5
8. I find it difficult to express my ideas about the topic in English.	1	2	3	4	5
9. I feel comfortable talking about this topic in class.	1	2	3	4	5
10. I know the words required for this topic.	1	2	3	4	5
11. I am not afraid to express my opinions about this topic in English.	1	2	3	4	5
12. I am afraid that my classmates cannot understand when I talk about this topic in English.	1	2	3	4	5

13. I am able to share my opinions about this topic without feeling nervous.	1	2	3	4	5
14. I don't need to improve my English because my classmates can understand me when I talk about this topic.	1	2	3	4	5
15. I feel anxious about speaking English in class.	1	2	3	4	5
16. I won't feel shy if I make mistakes.	1	2	3	4	5
17. I am worried that my classmates will be impatient with me if I don't speak clearly and fluently.	1	2	3	4	5
18. I feel nervous about sharing my views with my classmates.	1	2	3	4	5
19. I think my classmates will understand me easily when I talk about this topic in class.	1	2	3	4	5
20. I feel embarrassed volunteering my opinions about this topic in class.	1	2	3	4	5
21. I will start to panic if I have to talk about this topic in English.	1	2	3	4	5
22. I will speak softly so that my classmates cannot hear my mistakes.	1	2	3	4	5
23. I think my classmates will not understand me because of my poor speaking ability.	1	2	3	4	5
24. I feel relaxed about sharing my ideas on this topic.	1	2	3	4	5
25. I want to share my ideas about this topic with all my classmates.	1	2	3	4	5

APPENDIX 7: POST-QUESTIONNAIRE

Directions: Please fill in the information requested below. Your answers will be kept confidential and only the researcher will have access to the information you provide.

Name : _____

Instructions: Circle the number that reflects your opinion for each of the statements.

Scale:

1	2	3	4	5
-----X-----	-----X-----	-----X-----	-----X-----	-----X-----
-----X-----				
Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree

- | | | | | | |
|---|---|---|---|---|---|
| 1. The chat provided me with some necessary vocabulary during my oral report. | 1 | 2 | 3 | 4 | 5 |
| 2. The chat helped me to construct my sentences in a shorter time during my oral report. | 1 | 2 | 3 | 4 | 5 |
| 3. My classmates could not understand me when I shared my views during my oral report. | 1 | 2 | 3 | 4 | 5 |
| 4. The chat session helped me to express my ideas in English easily during my oral report. | 1 | 2 | 3 | 4 | 5 |
| 5. I felt embarrassed during my oral report. | 1 | 2 | 3 | 4 | 5 |
| 6. I was not afraid to express my opinions to the whole class during my oral report. | 1 | 2 | 3 | 4 | 5 |
| 7. I didn't feel shy when I made mistakes during my oral report. | 1 | 2 | 3 | 4 | 5 |
| 8. I felt self-conscious when I was reporting my opinions on this topic to the whole class. | 1 | 2 | 3 | 4 | 5 |
| 9. The chat session helped me to make fewer mistakes during my oral report. | 1 | 2 | 3 | 4 | 5 |
| 10. I found it difficult to express my ideas on the topic during my oral report. | 1 | 2 | 3 | 4 | 5 |
| 11. The chat session helped me to be more comfortable in sharing my ideas during the oral report. | 1 | 2 | 3 | 4 | 5 |

12. I didn't feel tense when I was sharing my ideas about this topic during my oral report.	1	2	3	4	5
13. The chat session improved my fluency during my oral report.	1	2	3	4	5
14. I felt nervous when I was giving my oral report.	1	2	3	4	5
15. I started to panic when I had to give my oral report.	1	2	3	4	5
16. I spoke softly so that my classmates could not hear my mistakes during my oral report.	1	2	3	4	5
17. I felt relaxed when I was giving my oral report.	1	2	3	4	5
18. I don't need to improve my English because my classmates could understand me during my oral report.	1	2	3	4	5
19. I knew the words required for the topic during my oral report.	1	2	3	4	5
20. I felt comfortable sharing my opinions during my oral report.	1	2	3	4	5
21. I felt anxious when I was sharing my ideas during my oral report.	1	2	3	4	5
22. I was worried because my classmates seemed impatient with me because I didn't speak clearly and fluently.	1	2	3	4	5
23. I think my classmates could not understand me because of my poor speaking ability.	1	2	3	4	5
24. My classmates understood me easily during my oral report.	1	2	3	4	5
25. I wanted to share my ideas about this topic with all my classmates.	1	2	3	4	5

**APPENDIX 8: CONTENT VALIDITY FOR ITEMS IN
PRE-QUESTIONNAIRE**

Pre Questionnaire - State Anxiety	SA		SSPC		Both	
	F	Profs	R	Profs	R	Profs
3. I am not worried about making mistakes when I talk about this topic in class.	X	33%		33%		33%
5. I worry that my fluency will prevent my classmates from understanding me.	X	67%				33%
6. I feel self-conscious when I have to talk about this topic.	X	67%				33%
7. I don't feel tense if I have to share my ideas about this topic.	X	33%		33%		33%
9. I feel comfortable talking about this topic in class.	X	33%		50%		17%
11. I am not afraid to express my opinions about this topic in English.	X	50%		50%		
12. I am afraid that my classmates cannot understand when I talk about this topic in English.	X	67%				33%
13. I am able to share my opinions about this topic without feeling nervous.	X	50%		50%		
15. I feel anxious about speaking English in class.	X	100%				
16. I won't feel shy if I make mistakes.	X	83%		17%		
17. I am worried that my classmates will be impatient with me if I don't speak clearly and fluently.	X	83%				17%
18. I feel nervous about sharing my views with my classmates.	X	83%				17%
20. I feel embarrassed volunteering my opinions about this topic in class.	X	83%				17%
21. I will start to panic if I have to talk about this topic in English.	X	83%				17%
24. I feel relaxed about sharing my ideas on this topic.	X	50%		50%		
Pre-Questionnaire - State Self-Perceived Competence	SA	SA	SSPC	SSPC	Both	Both
	R	Profs	R	Profs	R	Profs
1. I am not familiar with the vocabulary required for the topic.		33%	X	67%		
4. I find it easy to talk about this topic in English.			X	100%		
8. I find it difficult to express my ideas about the topic in English.		33%	X	50%		17%
10. I know the words required for this topic.			X	100%		
14. I don't need to improve my English because my classmates can understand me when I talk about this topic.			X	100%		
19. I think my classmates will understand me easily when I talk about this topic in class.			X	83%		17%
23. I think my classmates will not understand me because of my poor speaking ability.		33%	X	67%		
Pre-Questionnaire - Combined	SA	SA	SSPC	SSPC	Both	Both
	R	Profs	R	Profs	R	Profs
2. I don't like to talk about this topic because I take too much time to construct my sentence.		17%		33%	X	50%
22. I will speak softly so that my classmates cannot hear my mistakes.		17%		17%	X	67%
25. I want to share my ideas about this topic with all my classmates.		17%		67%	X	17%

SA - State Anxiety; SSPC - State Self-Perceived Competence; Both - SA+SSPC; R- Researcher; Profs - Professors

**APPENDIX 9: CONTENT VALIDITY FOR ITEMS IN
POST-QUESTIONNAIRE**

Post Questionnaire - State Anxiety		SA	SA	SSPC	SSPC	Both	Both
		R	Profs	R	Profs	R	Profs
5. I felt embarrassed during my oral report.		X	83%				17%
6. I was not afraid to express my opinions to the whole class during my oral report.		X	67%		33%		
7. I didn't feel shy when I made mistakes during my oral report.		X	50%		33%		17%
8. I felt self-conscious when I was reporting my opinions on this topic to the whole class.		X	83%				17%
11. The chat session helped me to be more comfortable in sharing my ideas during the oral report.		X	33%		67%		
12. I didn't feel tense when I was sharing my ideas about this topic during my oral report.		X	67%		33%		
14. I felt nervous when I was giving my oral report.		X	83%				17%
15. I started to panic when I had to give my oral report.		X	83%				17%
17. I felt relaxed when I was giving my oral report.		X	67%		33%		
20. I felt comfortable sharing my opinions during my oral report.		X	50%		33%		17%
21. I felt anxious when I was sharing my ideas during my oral report.		X	83%				17%
Post Questionnaire - State Self-Perceived Competence		SA	SA	SSPC	SSPC	Both	Both
		R	Profs	R	Profs	R	Profs
1. The chat provided me with some necessary vocabulary during my oral report.				X	100%		
2. The chat helped me to construct my sentences in a shorter time during my oral report.				X	100%		
3. My classmates could not understand me when I shared my views during my oral report.			17%	X	67%		17%
4. The chat session helped me to express my ideas in English easily during my oral report.				X	100%		
9. The chat session helped me to make fewer mistakes during my oral report.				X	100%		
10. I found it difficult to express my ideas on the topic during my oral report.			33%	X	67%		
13. The chat session improved my fluency during my oral report.				X	100%		
18. I don't need to improve my English because my classmates could understand me during my oral report.				X	100%		
19. I knew the words required for the topic during my oral report.				X	100%		
23. I think my classmates could not understand me because of my poor speaking ability.			17%	X	50%		33%
24. My classmates understood me easily during my oral report.				X	83%		17%
Post Questionnaire - Combined		SA	SA	SSPC	SSPC	Both	Both
		R	Profs	R	Profs	R	Profs
16. I spoke softly so that my classmates could not hear my mistakes during my oral report.			17%				
22. I was worried because my classmates seemed impatient with me because I didn't speak clearly and fluent			83%				
25. I wanted to share my ideas about this topic with all my classmates.			17%		83%		

SA - State Anxiety; SSPC - State Self-Perceived Competence; Both - SA+SSPC; R- Researcher; Profs - Professors

APPENDIX 10: GUIDELINES FOR JOURNAL ENTRIES

Name: _____

1. What was the topic of discussion?
2. Were you familiar with the topic?
3. What did you feel when you were first assigned the topic in class?
4. Were you prepared to talk about the topic in class?
5. How did you feel after you were given time to chat about the topic?
6. What did you think about the chat software?
7. Did you face any problems during this class activity?
8. Were there any advantages or disadvantages to this lesson?
9. Which part of the lesson did you like the most?
10. Which part of the lesson did you dislike the most?

**APPENDIX 11: DETAILED CATEGORIZATION OF
LANGUAGE TRANSFER**

Participant 1	Chat Transcript	Oral Report by Participant	Categorization
Session 1	<p>I want my roommate to be <u>neat</u>, I mean <u>clean</u>.</p> <ul style="list-style-type: none"> • <u>I live in UV</u> • Formerly, I have a roommate, who liked to <u>put things everywhere</u>. • <u>Before my wife joined me</u>. 	<p>Actually I have another criteria for a good <u>roommate</u> that the person should be <u>neat</u> or <u>clean</u>.</p> <p>...<u>before my wife arrived</u>, I have a <u>roommate</u>. At that point, <u>I live in university village</u> and that <u>guy put everything everywhere</u>.</p>	<p>Paraphrased</p> <ol style="list-style-type: none"> 1. roommate, neat, clean <p>Substitution (synonym)</p> <ol style="list-style-type: none"> 1. Before my wife joined me/arrived 2. put things/everything <p>Direct transfer</p> <ol style="list-style-type: none"> 1. I live in UV/University Village 2. I have a roommate
Session 2	<p>I think I should give our father 1 because he is <u>old</u> and can not make it without one.</p> <p>But the first thing is we need to figure out whether a woman and a <u>little son</u> can share <u>one jacket</u> or not.</p> <p><Partner> you and me <u>swim back</u> to the beach, ok?</p>	<p>Also, our <u>father is old</u>...</p> <p>Our final solution is give jacket to father, my wife, and his wife, and his wife share the <u>jacket with the son</u>.</p> <p>And so our partner just say that <u>we swim back</u>.</p>	<p>Substitution (pronoun)</p> <ol style="list-style-type: none"> 3. he/our father is old <p>Paraphrased</p> <ol style="list-style-type: none"> 2. woman/wife, share, jacket, son <p>Substitution (pronoun-partner's)</p> <ol style="list-style-type: none"> 4. you and me/we swim back
Session 3	<p>The bad thing is that we serve as <u>RA/TA</u>, but the <u>tuition</u> is not <u>waivered</u>.</p> <p><Partner> In fact, <u>I do not think it will be much difference for 15% or 18%</u></p> <p><Participant> No. It is a big difference.</p> <p>You know, the universities <u>raise tuition fee every year</u>. If they <u>raise 18%</u>, they probably do the <u>same thing</u> next year.</p>	<p>...the <u>RA</u> or <u>TA</u> they don't have to pay any <u>tuition</u>. Usually they <u>waive the tuition</u>.</p> <p>Another thing is <u>I don't think there is no great difference between 15.5% and 18.8%</u>.</p> <p>So if you <u>increase 18.8%</u>, that means if this year they can <u>increase this much</u>, that means they also can <u>increase as much</u> as this year.</p>	<p>Paraphrased</p> <ol style="list-style-type: none"> 3. RA/TA, tuition, waive <p>Direct transfer (partner's)</p> <ol style="list-style-type: none"> 3. I do not think/I don't think <p>Substitution (synonym- partner's)</p> <ol style="list-style-type: none"> 5. much/great difference for 15%/15.5 and 18%/18.8% <p>Paraphrased</p> <ol style="list-style-type: none"> 4. raise/increase, 18%/18.8%, same thing/as much

Participant 2	Chat Transcript	Oral Report by Participant	Categorization
Session 1	But I think the first is that <u>he is neat</u> .	The roommate should have the neat. <u>He</u> should be very neat.	Substitution (expression) 1. he is/should be neat/very neat
	<Partner> first, I think the <u>guy</u> should be <u>honest</u>	And firstly (Partner's name) said <u>he must</u> be <u>honest</u> .	Substitution (expression/pronoun-partner's) 2. the guy/he must be/should be honest
	As you know, one is honest or not, we can't judge that. If he is not a honest man, <u>but</u> he tell us that he is <u>honest, who knows</u> what he can do.	But I don't agree with him because if a <u>man</u> said he's <u>honest, who knows</u> he's <u>honest or not honest</u> ...	Paraphrased 1. man, tell/said, what he can do, honest or not honest
	<Participant> The second, I think we can ask him to be a <u>American</u> . So that we can talk with him in English. So that can improve our spoken english. <Partner> ... second, I do not think so. I need a <u>chinese</u> guy. <Participant> Because here is American, I think you'd better accept an American. Not only the Spoken English, I think he can also help you in many other ways. <Partner> we can improve out english by many other ways, no, I will refuse your second point. <Participant> Ok, maybe I will agree with you. A <u>Chinese</u> guy.	And the second one is that he must be a <u>Chinese</u> <u>guy, not an American</u> , but I think he may be – if he's American that may be better, <u>but (Partner's name) insist his</u> opinion, <u>so I agree with him</u> .	Direct transfer 1. he is honest/he's honest 2. who knows Direct transfer 3. Chinese guy (partner's) 4. An American
	I think if he like to <u>play the PC</u> games. I think <u>that's the best</u> .	At the last time we think if he can <u>play the PC</u> games, I think that the most – <u>that's the best</u> character he must have.	Substitution (ellipsis, pronoun) 3. I will/Ø agree with you/him Paraphrased 2. refuse, point/ insist, opinion Direct transfer 5. play the PC games 6. that's the best

Participant 2	Chat Transcript	Oral Report by Participant	Categorization
<p>Session 2 Continued</p>	<p>My list is: <u>My wife, My two year old son, and brother's wife.</u></p>	<p>At first my choice is <u>my wife, my two year old son, and my brother's wife.</u></p>	<p>Direct transfer 7. my wife, my two year old son, and my brother's wife</p>
	<p>Yes, We can let the father wear the jacket, and he <u>bring the baby.</u></p>	<p>...and my father <u>bring my two years old baby</u> with him.</p>	<p>Substitution (pronoun) 4. he/my father bring the baby/my two years old baby</p>
	<p><Partner> in my opinion, we should find a very <u>big wood plate...</u> <Partner> ..we should find some wire to connect us together... <Participant> <u>Connect us together?</u> <Partner> ... we are not supposed to swim, <u>we just want to stay alive....we stay in the sea</u></p>	<p>And my partner – brother said that we should use a rope to connect all of us together, so that we can stay alive, use a <u>big wood plate to keep us stay in the sea....</u></p>	<p>Direct transfer (partner's) 8. a big wood plate 9. connect us/all of us together 10. stay in the sea Substitution (expression – partner's) 5. we just want to/can stay alive</p>
<p>Session 3</p>	<p>Now we will represent our TA to propose a <u>15.5 increase of the tuition fee.</u></p>	<p>I and my partner <u>represent ITAs to propose about fifteen and one half percent about the increasing of the tuition fee of the next year.</u></p>	<p>Substitution (pronoun) 6. we/I and my partner represent our TA/ITAs to propose a 15.5/fifteen and one half percent Paraphrased 3. increase, tuition fee</p>

Participant 2	Chat Transcript	Oral Report by Participant	Categorization
Session 3 Continued	<p><Partner> first, I believe the increase of tuition fee will <u>increase</u> the <u>economic pressure</u> of teaching assistant...</p> <p><Participant> 18.5 is too high. It will <u>increase</u> the <u>economic pressure</u> of us.</p> <p><Partner> first, I prefer too fast increase would cause <u>too heavy</u> economic pressure....</p> <p>...and we believe 18.5 is too <u>high</u></p>	<p>The first one is if the <u>increasing</u> of the tuition is <u>too fast</u>, I think this will give us more <u>pressure on living expenses</u>.</p>	<p>Paraphrased</p> <p>4. pressure, increase, too fast, economic pressure, pressure on living expenses</p>
	<p>...and we believe 18.5 is too <u>high</u></p>	<p>The administrative ask about <u>eighteen and one half percent</u> about the <u>increasing</u>. We think it is <u>too high</u> about the tuition fee.</p>	<p>Substitute (synonym, pronoun)</p> <p>7. we believe/think 18.5/it is too high</p>
	<p><Participant> We asked many other TA, they said they can accept the increase of 15.5, They can't accept any more.</p> <p><Partner> ... we think relative <u>smaller increase</u> is <u>more reasonable</u>.</p>	<p>The second one is we have asked many <u>teaching assistants</u> and some of them asked for about no increasing, and some support some increasing and after the totally statistic we find that <u>fifteen and point five percent</u> may be the <u>best one</u>.</p>	<p>Direct transfer</p> <p>11. We asked many other TA/teaching assistants</p> <p>Paraphrased</p> <p>5. Smaller increase, fifteen and point five percent, more reasonable, best one</p>
	<p>I think we may suggest that the <u>increase in the first semester is 7%</u> and then the <u>next semester is also 7%</u>, so the total is 7.5%.</p>	<p>... we think in the <u>first semester</u> we can <u>increase about 7%</u> about the <u>tuition fee</u> and in the <u>next semester</u> we can <u>increase another 7%</u> and all of this may become about <u>five-fifteen point five percent</u> of the tuition fee.</p>	<p>Paraphrased</p> <p>6. Increase, first semester 7%, next semester 7%</p>

Participant 3 Session 1	Chat Transcript	Oral Report by Participant	Categorization
	i am a man	First I tell my partner <u>I'm a man</u>	Direct transfer 1. I am/ I'm a man
	...it is not good habit to w irk too late	I think <u>it's not a good habit to work too late</u>	Direct transfer 2. It's not a good habit to w irk /work too late
	i have pc, you can use it to check your email but i hope you will not use it to play game, ok?	I told him <u>I have a PC</u> , but I hope she only use my PC to check email and I don't hope she play game on the PC	Direct transfer 3. I have pc/a PC Substitution (pronoun, ellipsis) 1. Use it/my PC to check your/ Ø email
	<Partner> i think those houses in UV is good	I think <u>UV is best choice</u>	Paraphrased 1. Will not, don't hope, play game, it/PC Substitution (ellipsis, synonym - partner's) 2. I think those houses in/ Ø UV is good/best choice
	i have family, and if my family get here, you will leave as soon as possible, ok?	...and I told him I have a family, and I told him whenever my family get here he must leave as soon as possible.	Direct transfer 4. I have family/a family Substitution (expression, pronoun) 3. If/whenever my family get here (expression) 4. you will/ he must leave as soon as possible (pronoun)
	<Partner> i think it's not a good idea for you to share the apartment with me	And then he told me <u>that's not a good idea for me to share with him</u>	Substitution (pronoun, ellipsis-partner's) 5. Not a good idea for you/me to share the apartment/Ø with me/him

Participant 3	Chat Transcript	Oral Report by Participant	Categorization
Session 2	i have a suggestion: you just take it as a hypothesis	I give him one suggestion, just take it as a hypothesis	Direct transfer 5. Just take it as a hypothesis Substitution (expression) 6. i have a/give him one suggestion
	the first i think we should know something about members of the family who can swimming <Partner> i can swim	The first we should do is check which member of the family can swim He told me he can swim, and I can swim too...	Direct transfer 6. Members/member of the family Direct transfer (partner's) 7. I can swim Substitution (pronoun) 7. I/he can swim
	<Partner> can your wife swim? <Participant> i am not sure i must check it if my wife can swim then there is no bog problem	And my brother care about whether my wife can swim, so I am not sure, so I must check on it If she can swim too then there is no big problem	Direct transfer 8. I am not sure 9. I must check it/on it Substitution (pronoun) 8. If my wife/she can swim Direct transfer 10. Then there is no bog/big problem
Session 3	i am intrested in this topic, actuaerly, last week i ask foe the graduate students to sign on the petition of reducing the tutuion fees increase 18.5% is too high	I am interested in this topic – last week, or before last week I have collected signature from graduate students in our department, so we, most of us sign our names on the petition 18% is too high	Direct transfer 11. I am intrested/interested in this topic Paraphrased 2. Last week, ask foe/collected, graduate/graduate students, signature/sign, petition Direct transfer 12. 18.5%/18% is too high
	the rent in UV is awlay increased by 8%	Such as our rent in UV is increase 8% every year	Substitution (ellipsis) 9. Rent in UV is awlay/Ø increased by/Ø 8%

Participant 3	Chat Transcript	Oral Report by Participant	Categorization
<p>Session 3 Continued</p>	<p>some of us have couples (wives or husbands as F2) are studying in ISU, so the increase in tuition will be doubled as to this family, and this will make life difficult</p>	<p>The second one, some of the graduate students has a wife or husbands to study in ISU. In this case, the increase in tuition fees means double increase with this family, so it is very difficult to live well</p>	<p>Substitution (pronoun, expression) 10. Some of us/the graduate students 11. the increase in tuition/tuition will be doubled/means double increase</p>
			<p>Paraphrased 3. Increase, tuition, double, this family, difficult, life, live well</p>
	<p>do you plan to visit some place...</p>	<p>...such as we need money....to visit some places</p>	<p>Direct transfer 13. To visit some place/places</p>

	Chat Transcript	Oral Report by Participant	Categorization
Participant 4 Session 1	i always come back at about 1:00pm... most of the day I am in lab i can't spend much time in apartment i really have many things to do	...come back at about later than one o'clock I have to spend most of time a day in the lab I do not spend much time in my dorm everyday I have many homework to do	Direct transfer (with insertion) 1. come back at about/about ..1:00pm/o'clock Substitution (expression) 1. most of the/time a day Substitution (expression) 2. i can't/do not spend much time Substitution (synonym) 3. have many things/homework to do
	<Partner> ...it is not good habit to work too late <Partner> i have family, and if my family get here....	...he told me it's not a good habit And he told me that he has family, and maybe his family will come to here.	Direct transfer (partner's) 2. it is/it's not good habit Substitution (pronoun, expression) 4. i have/ he has family 5. if /maybe my family/his family get /will come to here
	i think it's not a good idea for you to share the apartment with me...	And I think it's not a very good idea to share the room with people who are family...	Substitution (ellipsis) 6. i think it's not a good idea for you/Ø to share
Session 2	i think this is not a good topic to talk on net	I think that this is not a proper topic to talk on net...	Substitution (synonym) 7. i think this is not a good/proper topic to talk on net
	It seems that we all agree that two wives and father should take the jackets	So we all agree that maybe we should give him a priority of the jacket. And if the two wives and the father -	Direct transfer 3. we all agree 4. two wives and father
Session 3	...if the tuition is increased by 18.5% we have to pay much more	And maybe we have to pay a little more tuition	Paraphrased 1. pay, much more, a little more, tuition

Participant 4	Chat Transcript	Oral Report by Participant	Categorization
Participant 3 Session 3 Continued	but i can't find the difference between <u>15.5</u> and <u>18.5</u>	I am not very clear about how much will be the <u>increase of 15% or 18%</u>	Paraphrased 2. Difference, how much, increase, can't find, not very clear, <u>15.5</u> and <u>18.5</u> , <u>15%</u> or <u>18%</u>
	i think our salary is <u>enough to pay for the 18.5 increase</u>	I think it seems we can also <u>endure the 18% increase</u>	Paraphrased 3. Endure, enough to pay, <u>18.5</u> , <u>18%</u> , increase
	though more money left for ourselves is better	...if we can save the <u>3% for ourselves it's better...</u>	Direct transfer 5. For ourselves, it is/it's better

Participant 5	Chat Transcript	Oral Report by Participant	Categorization
Session 1	<p><Partner> But I think the first is that he is neat.</p> <p><Partner> <u>He must take the shower every day</u></p> <p><Participant> ...actually, <u>we have our own bedroom,</u></p> <p><Participant> so FT! we just can require that he is neat.</p> <p><Participant> and I think he also should have no religious tendency.</p> <p><Partner> Yes, I agree with you. If he is not neat, <u>we can regulate some rules.</u> Such as clean the table, clean the room in some time.</p>	<p>I believe we can make friends with many Americans but if we stay with American at home, there may be some problem-many problem because maybe the guy have some religious tendency or other problem. So I prefer to a Chinese guy.</p> <p>As far as the first point, the neat. Actually, I don't care if the guy is neat or not because we have different bedroom. ...<u>And (Partner's name) said we can set up some regulations for the guy. If he doesn't take a bath everyday, he should clean the whole house.</u></p>	<p>Substitution (expression)</p> <ol style="list-style-type: none"> 1. we have our own/different bedroom <p>Direct transfer</p> <ol style="list-style-type: none"> 1. religious tendency <p>Paraphrased</p> <ol style="list-style-type: none"> 1. take shower/take bath everyday 2. regulate rules, set up regulations

Participant 5	Chat Transcript	Oral Report by Participant	Categorization
<p><Partner> The second, I think we can ask him to be a American. So that we can talk with him in English. So that can improve our spoken english. <Participant> ok. First, clean. Second, I do not think so. I need a chinese guy. <Partner> Because here is American. I think you'd better accept an American. Not only the Spoken English, I think he can also help you in many other ways. <Participant> we can improve our english by many other ways, no, I will refuse your second point. no, but, you know, home is home, it is not school.</p>	<p>My partner said that our future roommate must be American but I don't think so because our home is the place for us to relax and not a place for us to study. He said if we have American roommate we can study English, we can study culture-American culture. I don't think so. I believe we can make friends with many Americans but if we stay with American at home there may be some problem-many problem because maybe the guy have some religious tendency or other problems. So I prefer to a Chinese guy.</p>	<p>Paraphrased 3. ask him to be a American, must be American 4. home, place to relax, school, place to study 5. improve our spoken english, study English</p> <p>Substitution (expression) 2. I need /prefer to a Chinese guy</p> <p>Direct transfer 2. I do not/don't think so.</p>	
<p><Partner> I think if he like to play the PC games. I think that's the best. ...I think a two year old boy do not know how to use the jackets, it is almost useless.</p>	<p>According to the third point we agree with great happy. We both like PC game so we need another guy to take part in. Because the boy are so young so I believe the jacket are not useful at all for him...</p>	<p>Substitution (ellipsis - partner's) 3. like to play the/Ø PC game</p> <p>Paraphrased 6. two year old boy, so young, not useful, almost useless, jacket</p>	
<p><Partner> We can let the father wear the jacket, and he bring the baby.</p>	<p>...and the old father should take the jacket and the father stay with the baby.</p>	<p>Substitution (pronoun, expression) 4. the father/the old father wear/should take the jacket 5. he/the father bring/stay with the baby.</p>	

Participant 5	Chat Transcript	Oral Report by Participant	Categorization
Session 2 Continued	..or we can even <u>destroy the boat</u>	...we would rather <u>destroy it</u> by some tools	Substitution (pronoun, expression) 6. we can even/would rather destroy the boat/it
	<Participant> in my opinion, we should find a very big <u>wood plate</u> or other things,.... <Partner> Ok, let try to find some <u>light things</u> that can be used in the sea.	...we would rather <u>destroy it</u> by some tools in order to get some <u>light things</u> for example the <u>wood plate</u> . We just hold those <u>light things</u> for example the <u>wood plate</u> . And he said if it is not easy for him to hold the <u>light things</u>and I think we can use some ropes to hold him to the <u>light things</u> . He said he don't know how to swim...	Direct transfer 3. Light things (partner's) 4. Wood plate
	<Partner> But I can't swim!	He said he don't know how to swim...	Substitution (pronoun, expression - partner's) 7. I can't/he don't know how to swim
	We just <u>float on the sea</u> ...	We just hold those <u>light things</u> for example the <u>wood plate</u> and <u>float on the sea</u> .	Direct transfer 5. float on the sea
	<Partner> ...maybe there is a large storm... <Participant> ..if there is a <u>great storm</u> , <u>jacket</u> are not useful at all...	...and he said if there is a storm-a heavy storm. And I said if there is a <u>heavy storm</u> , the <u>jacket</u> are not useful...	Substitution (synonym) 8. if there is a heavy/great storm
Session 3	<Partner> ..I think the committee of the administrative should give us the <u>reason why</u> they will <u>increase</u> so much...	We are questioning how they get the 18 percent <u>increase</u>They should have a <u>reason</u> . So I believe we should carefully review their <u>reasons</u> .	Direct transfer 6. jacket are not useful
	<Partner> They <u>calculated</u> their income and their <u>expense</u> .	We <u>calculated</u> the amount of the money...	Paraphrased 7. reason, increase, why, review their reasons
	the difference is <u>54\$</u> ...	It is about <u>fifty four dollars</u> per year	Paraphrased 8. calculated/calculated, their income and their expense/the amount of money Direct transfer 7. 54\$ = fifty four dollars

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