Task-based learning in the computer-mediated communicative ESL/EFL classroom

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Abstract
Synchronous computer-mediated communication (SCMC) has been shown to have direct and indirect benefits for classroom-based second language development. This paper reports on a classroom-based study that explores some of these potential benefits for younger learners of English in a North American (US) public school ESL classroom setting. Data from learner-learner chat interaction are used to illustrate several of these potential benefits as well as some drawbacks to using such a pedagogical approach with younger language learners.

Introduction
Research into task-based synchronous computer-mediated communication (SCMC) has yielded evidence that such interaction can be facilitative of second language development (see Ortega, 2009 for an overview). SCMC is instantaneous written communication via computer often occurring over a local area network. Such communication is more commonly known as "chatting". The purported benefits include an increased participation among students, an increased quantity and heightened quality of learner output, an amplified attention to linguistic form, and an increased willingness to take risks with their second language (Pellettieri, 1999; Smith, 2004). The printed text may also add to the salience of input and output, especially the noticing of non-target like input and output (Izumi, 2003; Salaberry, 2000; Smith, 2004). This heightened saliency of linguistic input and output is a favorable byproduct of the computer-mediated communication (CMC) interface, with this increased saliency due largely to the permanence of the written message on the screen. The use of specific types of communicative tasks compliment the potential benefits of computer-mediated interaction described above in that certain particular task design features seem to elicit specific learner linguistic behavior, such as negotiated interaction, that is favorable for positive classroom-based second language development. This study explores the potential benefits of task-based SCMC within the framework of a classroom-based empirical study in a North American K-12 ESL classroom.

The role of task type in eliciting learner interaction
Pica, Kanagy, and Falodun (1993) cited two recurrent features common to virtually all discussions of tasks in the second language pedagogy literature -- goals and activity. The model they put forward has been widely used in task-based CMC research (Blake, 2000;
Pellettieri, 1999; Smith, 2003; 2004) and is the one that informed the current study. The first feature in Pica et al.' model is that tasks are focused on goals. That is, participants are expected to arrive at some outcome, which they accomplish through their verbal (or in this case written) interaction. The second feature is activity, which suggests that participants take an active role in carrying out the task. These two categories affect the task's impact on opportunities for learner comprehension of input, feedback on production, and interlanguage modification.

According to Pica et al. (1993), jigsaw tasks should elicit the highest amount of negotiated interaction among pairs of learners. In terms of interactional activity, jigsaw tasks are those in which learners hold a different portion of the information and must request and supply information in order to complete the task. A picture-based sequential ordering activity is a common example of such a task. The goal of arranging the pictures in the proper sequence is shared by both participants and therefore convergent in nature. The combination of these two features is argued to elicit more negotiated interaction than other task types in their typology (like opinion-exchange and decision-making tasks).

**Benefits of task-based SCMC**

The potential benefits to the students of task-based SCMC instruction may be classified into two broad categories, direct and indirect. Direct benefits are those which are the direct result from the SCMC interaction itself or directly related to the SCMC interaction. In contrast, indirect benefits are those resulting from the SCMC interaction but which are mediated in some way by the instructor. I will discuss one example of each type drawing directly from the current data.

**Direct benefits - Negotiated interaction**

Recent research suggests that negotiated interaction in a SCMC environment is plentiful, effective, and varies as a function of task type (Smith, 2003; 2004). Long's Interaction Hypothesis (1996) states that negotiation for meaning, and especially negotiation work that triggers interactional adjustments by a native speaker or more competent interlocutor, facilitates acquisition because it connects input, internal learner capacities, particularly selective attention, and output in productive ways. Such negotiation can direct learners' attention to either a discrepancy between their interlanguage and the target language or to an area of the target language about which a learner has little or no information. Learning may take place during this negotiated interaction, or negotiation may provide an initial step, serving as a "priming device" for learning (Gass, 1997; Mackey, 1999). Smith (2004) has shown that negotiated interaction in a SCMC context centers mainly on vocabulary, much like that found in the face-to-face literature.

**Indirect benefits - Evidence of interlanguage development**

The written target language record captured in CMC may provide the instructor with rich information regarding the stage of interlanguage development of learners. One theoretical foundation upon which instructors may be able to build target-language instructional plans is the Teachability hypothesis (Pienemann, 1985). This hypothesis states that
"instruction can only promote language acquisition if the interlanguage is close to the point where the structure to be taught is acquired in the natural setting (so that sufficient processing prerequisites are developed)” (Pienemann 1985:35). That is, many developmental features of language are not amenable to instruction in that one may only successfully teach learners such structures when they are ready to learn them. In contrast, other variable features such as copula "be” and vocabulary can be taught successfully anytime.

Chat logs or chatscripts are those transcript text files that are automatically saved during the interaction. These may be used as a tool in helping instructors identify the developmental stage of their students in terms of specific grammatical structures and which developmental features of the target language learners may be ready to learn. This information may be helpful in guiding instructors in where to focus their energies. Likewise, the chatscripts may be equally valuable in assessing which variable features of language need to be addressed. I will focus my discussion on two areas which seem to progress along developmental stages of acquisition, Question formation (syntax) and morphology. I will draw directly on data from a recent empirical study, which explored the benefits and nature of task-based CMC interaction among middle school-aged learners in an ESL classroom environment.

**Purpose of Study**

The present exploratory study sought to answer the following broad research question: Is there evidence of direct and indirect target language benefits of task-based computer-mediated communication for younger learners of English in a public school ESL classroom setting?

**Method**

**Participants**

The learners in this study were 7th and 8th grade learners of English (n=18). Fifteen of the eighteen were Spanish L1 speakers - the other three were Korean L1 speakers. They were classified as beginner-high level based on a district test of English for non-native speakers. These classes met separately at different times of the day with the same ESL teacher. The classroom was equipped with 12 networked computers. The chat interface in Blackboard was used for synchronous (or instantaneous) communication among pairs of learners. The text of each session was automatically logged and saved to a text file for future evaluation.

**Procedures**

Over the course of two months the researcher and the classroom teacher collaborated to sculpt four task-based pair-work communicative activities for learners to complete online in a synchronous mode. Since all participants would have to take a state English
proficiency test (Stanford English Language Proficiency test) later in the year the speaking section of this test was used as the basis for the activities described in this study.

Tasks

One of the speaking sections of this test is a task that requires students to look at a series of three pictures and retell the story that is reflected in these pictures. In order to sculpt tasks from these materials that would be consistent with a jigsaw task (as described in Pica et al., 1993), the pictures from four practice test "story retelling" sections were segmented and reordered so that for each task each learner had two pictures. These tasks were administered over the course of two months as scheduling allowed with the first task being counted as a "practice task" whereby learners could ask questions of the teacher and researcher and essentially get acquainted with the task type. Since there were originally three pictures per task that means that the learners shared one of the pictures. An example of one of the tasks can be found in Appendix A.

The first task for learners was to decide which picture they shared. Learners were told to do this by describing their pictures in detail to their partner. The second step was to order the three different pictures sequentially. Since there was the convergent goal of correctly ordering the pictures to which there was only one reasonable solution as well as a clear requirement to interact with their partner in order to complete the task successfully, a high amount of communicative interaction was expected. After they felt they had the correct sequence learners were to "retell" the story from start to finish in as precise English as they could. There was a twenty-minute time limit put on the online part of the activity. Once learners felt they were finished with this third part they were instructed to print out their work and sit together with their partner to edit their final version of the story. The culminating part of this activity was for one person per dyad to read their story aloud. If the speaker had difficulty his/her partner could offer assistance. The results below report on only the first two parts of the activity and illustrate the value of this type of task-based instruction in terms of direct benefits to learners during task completion and indirect benefits based on follow-up activities initiated by the teacher.

Coding and Data Analysis

In an effort to quantify how much negotiated interaction occurred across all three tasks the transcripts for all dyads were coded for instances of negotiation. The coding scheme for CMC negotiation outlined in Smith (2003) was used. This scheme is based largely on that by Varonis & Gass (1985). In this model negotiation episodes consist of a minimum of three parts, a trigger, an indicator of non-understanding, and a response to the indicator. A fourth optional phase known as the reply to the response is also common. Smith (2003) argues that in SCMC this fourth phase while still technically optional almost always occurs since the text-based medium of communication requires a more explicit ratification that the problem has been resolved. In this model there are also two additional optional phases of negotiation routines. These are known as the confirmation and reconfirmation phases respectively.

Results
I will present and discuss the findings in terms of one direct and one indirect benefit of task-based CMC and will illustrate these benefits with data from the present study.

**Direct benefit - Negotiation**

The transcripts yielded a total of six (6) negotiation episodes. One of these was a negotiation around the task procedures and the remaining five were all in nature. There were no negotiations around morphosyntax. Taken together the negotiation data are consistent with previous research on face-to-face (Pica, 1994) and CMC (Smith, 2004) which finds most negotiation triggers to be lexically based with very little negotiation around grammar. This modest amount of negotiation is also consistent with previous research, which suggests that though negotiation can and does occur among lower proficiency level students, it is much more prevalent among intermediate-level learners (Pica, 1994).

I will use the example of the negotiation routine that was triggered by the task procedures to illustrate a prototypical negotiation episode. Example 1 below shows the typical trigger, indicator, response, and reply to the response sequence that characterizes negotiation routines. The time stamp is found to the right of the text and reflects the exact time the writer sends his/her message to the interlocutor. This time stamp is essential for instructors using chat transcripts as a pedagogical tool since it can often clarify seemingly "disjointed" turns and odd-looking discourse. In Example 1 the trigger seems to be the entire line 1, which seems indecipherable to learner A in line 2, as shown by the (global) indicator of non-understanding "what." In line 3 G provides the needed clarification that seems to be sufficient to A in line 4. At this point the pair is ready to resume their main focus in completing the task.

Example 1 Negotiation around task

1. G: wath douse your have that is different 11:42:22 Trigger
3. G: we have to make up the story because we all ready have the same picture 11:44:15 Response
4. A: ok how should we make it 11:44:41 Reply to response

In Example 2 below we see the trouble spot is with M's misspelling and segmenting of the word inside. After an indication of non-understanding by A (clarification request), M elaborates by offering "in the house" in line 3. Lines 4 and 5 bring the negotiation to a close and reaffirm that understanding has been achieved.

Example 2 Lexical

1. M: then it started rainig and they had to live to their house and eat in saed 11:35:26
2. A: in what saed what dose that mean 11:35:54
4. A: oh may bad then but in the picture it looks like they are eating in the car 11:37:05
5. M: thats after it stared eating 11:37:51

Example 3 Lexical

1. C: and theis a car under the car 11:30:57
3. C: i mean there is a blue car under the claund 11:31:43
4. T: Ok? 11:31:54
5. T: So set go to picture two 11:32:06

In Example 3 we see the effect on C of T's indicator of non-understanding. In this case the beneficiary of the negotiation routine is not T but rather C. This excerpt shows how the indicator of non-understanding pushes C to review and clarify what he said by making it more specific. Thus, negotiation routines can directly benefit either half of the dyad. Of course, the spelling of "cloud" is not correct, but it was apparently sufficient to allow the learners to continue on with the task. It may be the case that instances such as that in line 3 force learners (learner C in this case) to focus their attention on the lexical item they need to use to sufficiently describe the picture.

Example 4 Lexical

1. C: My picture A1 is were this family is going for pinic and it raining 11:30:15
2. P: yes 11:30:59
3. P: mine is the same 11:31:17
4. P: do you mean picnic? 11:31:34
5. C: What is you A2 11:31:39
6. P: a2is teh family 11:31:59
7. P: eating 11:32:00
8. P: picnic 11:32:05
9. P: and b1 is blue car 11:32:1
10. P: I think is is raining 11:32:53
11. C: yes my second is same as yours 11:33:03
12. P: i think all of our pictures are the same 11:33:28

10 lines of text

13. P: I thikn that b1 is drivin to the picnic 11:35:35

4 lines of text

14. C: then they are sitting in pinic table 11:37:00

The interaction in Example 4 above illustrates several things. Most important is that though P clearly provides evidence that C's spelling of "picnic" is faulty, C does not seem to pick up on this, despite three target-like examples of the proper spelling of the word. Though there is a clear indication of non-understanding by P in line 4, C seems to
disregard the attempt at clarification, at least at first. Thus, even with the argued heightened salience of the input due to the written mode and permanence of the message, learners do not always show evidence of focusing on form where we might expect it.

Example 5 Lexical

1. A: and the dog givet to she the sombrero 2:01:26
2. M: the gril was walking and the air came so fast and she is traing tohold the hot and the iar keeped owy from her 2:01:47
3. M: what is sombrero mean 2:02:13
4. M: tri to say in inglish 2:02:44
5. A: sombrero is hot am sorie bata obato 2:03:02
7. M: ok
8. A: i think the dog brin the hot for the gril and I think this is the last part of the story 2:04:36

Example 5 shows an interesting use of the indicator of non-understanding by M in that she is either feigning non-understanding in order to push A to use the target language or she is unclear about the translation for "sombrero" (lines 3 and 4). In line 2 M offers an attempt at the word "hat" (sombrero), which A seems to accept and incorporate (albeit incorrectly) in lines 5 and 8. This helps explain why in line 1 learner A avoided any attempt at "hat" and opted for an L1 translation. This exchange also provides evidence for the rare occurrence of learners taking over non-target-like exemplars of the target language and using it productively; one reason many instructors may shy away from using non-native/non-native speaker group-work in language instruction. Nevertheless, this short exchange can aid learning in an indirect sense in that this error illuminates a "teachable moment" that might have gone undetected by the instructor during face-to-face pair/group work.

Example 6 Lexical

1. T: the the girl old the hat
2. C: and she was very happy because has your hat and she go and play
3. T: for the wind not take again
4. C: r u crazy????????? or what????
5. C: she is not old!!!!!!!!!!!!
6. T: am sorry hold the hat
7. C: with the dog the end
8. C: is ok

Example 6 shows a prototypical and successful negotiation routine. T's misspelling of "hold" in line 1 is addressed by C in lines 4 and 5. It seems clear that the confusion surrounded a typo that was also coincidentally a separate and valid English word (old/hold). Nevertheless, we may say that the negotiation forced T to focus on form (spelling)
Indirect benefits of SCMC

As mentioned above, chatscripts resulting from synchronous CMC interaction may provide some guidance to teachers in terms of their assessment of their learners' interlanguage development: First, these chatscripts may help teachers in determining the current stage for certain developmental features of the target language. Second, the chatscripts may illustrate problematic variable features of learner language, such as the use of copula "be" or vocabulary, which may be addressed without respect to learner "readiness" to acquire these features. The indirect benefits of SCMC obtained from the current study will be demonstrated with reference to question formation and morphology.

Question formation

Pienemann, Johnston, and Brindley (1988) described a sequential order in the acquisition of questions by learners of English from a variety of L1 backgrounds. Thus question formation in English may be considered a developmental feature of English (and other languages). Examples 7 and 8 below are complete lists of attempts at question formation by two learners (from the same paired interaction).

In Example 7 we see evidence that A is at least at stage 3 (see below) of question formation (see Table 1). Though there is an exemplar of stage 5 ability, it seems that an instructor may proceed cautiously with instruction on stage 4 questions.

Table 1: Stages of ESL question formation

<table>
<thead>
<tr>
<th>Stage</th>
<th>Syntax</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Cancel inversion</td>
<td>I wonder what she is eating</td>
</tr>
<tr>
<td>5</td>
<td>Do2nd</td>
<td>Why did she eat that?</td>
</tr>
<tr>
<td></td>
<td>Aux2nd</td>
<td>Where have you lost it</td>
</tr>
<tr>
<td></td>
<td>NegDo2nd</td>
<td>He does not like it</td>
</tr>
<tr>
<td>4</td>
<td>Y/N inversion</td>
<td>Have you seen him?</td>
</tr>
<tr>
<td></td>
<td>Copula inversion</td>
<td>Is she at home? Where is she?</td>
</tr>
<tr>
<td></td>
<td>Particle shift</td>
<td>Turn the tap off</td>
</tr>
<tr>
<td>3</td>
<td>Wh-fronting</td>
<td>Where you have been?</td>
</tr>
<tr>
<td></td>
<td>Topicallisation</td>
<td>This teacher I like</td>
</tr>
<tr>
<td></td>
<td>Do fronting</td>
<td>Do he live here?</td>
</tr>
<tr>
<td></td>
<td>Adverb fronting</td>
<td>Today he stay here</td>
</tr>
<tr>
<td></td>
<td>Neg+ Verb</td>
<td>He donft ask</td>
</tr>
<tr>
<td>2</td>
<td>Neg+SVO</td>
<td>No me live here</td>
</tr>
<tr>
<td></td>
<td>SVO?</td>
<td>You live here?</td>
</tr>
<tr>
<td></td>
<td>SVO</td>
<td>John eat rice</td>
</tr>
<tr>
<td>1</td>
<td>Single words</td>
<td>Where is X? How are you? Hello</td>
</tr>
</tbody>
</table>
Compiled from Pienemann (1998)

Example 7 A's questions

1. does it have a flower (stage 3) Do-fronting
2. what color are the flowers (stage 5) Do/Aux 2nd
3. do you have them in order know (stage 3) Do-fronting

G's performance illustrated in Example 8 is more problematic in some ways since she uses stage 3, 4, and 5 question constructions. Based on this evidence it seems that G is "ready" for stage 4 or 5 instruction.

Example 8 G's questions

1. can you describe more your picture (stage 4) Y/N inversion
2. ok how many rabbit are you have (stage 5) Do/Aux 2nd
3. what eating the rabbit and where eating (stage 3) Wh-fronting
4. what do you think about my opinion.... (stage 5) Do/Aux 2nd
5. can you told me how is your first picture (stage 4) Preserve the question word order, even in embedded

Morphology

Pienemann (1998) also proposes stages of English morphology acquisition. These stages are listed in Table 2. I will focus on learners' use or attempted use of the bound morpheme -ing (a stage 2 feature) in an effort to compare learners' relative acquisition of ESL morphology. I then discuss briefly how SCMC chatscripts of interactive communicative pair tasks can assist the teacher in targeted instruction or may at least inform the instructor's expectations for particular learners. The present data yielded several attempts by learners to use the present continuous (progressive) tense as well as many instances of omissions of its use in obligatory contexts. Five learners total showed evidence of using or attempting to use the -ing morpheme.

Table 2: Stages in the acquisition of ESL morphology

<table>
<thead>
<tr>
<th>Stage</th>
<th>Morphology</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>3rd person sing -s</td>
<td>She eats good food</td>
</tr>
<tr>
<td>4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>Possessive -s</td>
<td>Pat's cat</td>
</tr>
<tr>
<td></td>
<td>Plural agreement</td>
<td>Two cats</td>
</tr>
<tr>
<td>2</td>
<td>Generic plural -s</td>
<td>The students go to school</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Possessive pronoun</th>
<th>My cat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Past -ed</td>
<td>She played yesterday</td>
</tr>
<tr>
<td>-ing</td>
<td>Going</td>
</tr>
</tbody>
</table>

1. Single words | Where is X? How are you? Hello |

Compiled from Pienemann (1998)

In line 3 (student H) of Example 9 we see a violation of plural agreement with the verb, but this error is not repeated in line 4. However, line 5 shows evidence of agreement problems once again if we are to interpret "there hungry" as an attempt at "they are hungry." Given the apparent mastery of the -ing form as well as other stage 2 morphemes such as possessive pronouns, our expectations for this learner may be at stage 3 morphology or higher.

Example 9

Student H

1. My picture has a rabbit that is eating a leaf.
2. *So I have the rabbit that is eating leaf
3. *Two rabbits that is eating a leaf! I told you...
4. There are 2 rabbits that are sharing a leaf by the garden.
5. *The rabbit is eating because there hungry.

Student E

1. The second is the two Rabitt is eating together.
2. *The A2 picture is the rabitt is eat___ the leaf

Based on the evidence above, we may say that although E does attempt to use the -ing form, he does so with mixed success. Also, line 1 shows a plural agreement error (stage 3). It seems that E is currently acquiring stage 2 morphology and shows evidence of clearly attempting to use stage 2 and 3 features.

Example 10

Student P

1. what are you doing.
2. *where are you sit___
3. *First the family is go___ to camp to the park and then when the family is eating one cloud gray is coming and started rain___ and the family is go___ to the house
4. *ok. I am talk___ with you
5. *...and then the family is eating inside the car and the family is go___ to the home
Student M

1. *what are you think___.
2. *the family is eating in the park then one big cloud is comming then all the family go to the car
3. what are you doing

There are various stage 2 violations of the -ing form in Example 10. There are, however, many target-like attempts at the feature, but also many obligatory case omissions. It seems that student P is ready for more focused instruction on the -ing form. What is interesting to note is that there were no corrections from P's interlocutor (student M) on any of the omissions even though M seems to have a fairly good grasp of this feature. A careful examination of M's use of the -ing form, however, shows that he effectively uses the -ing form with the same verbs as P (to do, to come, to eat). He does not attempt to use the -ing form with the verb "to think." This may account for his lack of "other correction" and may suggest to the teacher that both learners would benefit from targeted instruction of this feature.

Example 11

Student N

1. In one afternoon the girl Jessica is go___ to the park, when the girl is walk___ for the streets the air is come___ very fast and the hat of the girl is fly___ she ran back of the hat but the girl look a dog is go___ to she and the girl say thank for give___ me hat.

In contrast to the learners in Examples 9 and 10, student N shows no attempt at using the present continuous tense in obligatory cases. There is also no attempt at possessive pronouns (stage 2) where they may be expected. This suggests that she is not as advanced as those learners discussed above, at least in terms of morphology development. This is valuable information for the instructor to have when planning instruction, grouping, and developing tasks for classroom use.

Conclusion

The modest data presented above provide an illustration of some of the linguistic behavior among learners of English in a specific and ecologically valid context. While engaged in tasks specifically designed to elicit a high degree of learner-learner interaction, students did engage in negotiation of meaning surrounding lexical items. Negotiation has been argued to be beneficial for SLA. There was no negotiation around any aspect of grammar. Since lower proficiency learners are more likely to focus on meaning over form, and since lexical items generally carry more "weight" in communicating basic meaning than does
grammar, this result is not surprising. The data also show that learners, even at this early stage, engage in compensatory strategies and modify their own output when faced with instances of communicative breakdown or non-understanding - often resulting in more target-like modifications. There was also evidence that not all learners notice moves by their interlocutor indicating problems with form (in this case spelling). At the same time there was evidence of learners incorporating the target-like (and sometimes non-target-like) input from their interlocutors. In terms of more indirect benefits of SCMC the data show that chat records may provide good diagnostic information for teachers about the interlanguage stage of their students. Such information may help instructors to make better data-driven decisions regarding which grammatical features to target (and when) for each learner.

Pedagogical implications

In any discussion of pair or group work involving exclusively non-native speakers (NNSs), there are some common reservations that teachers often express. These are essentially fears teachers may have about forfeiting some control of the classroom, the difficulty in monitoring each of the groups, student use of their L1 during task completion, and student reinforcement or incorporation of peer's errors (Brown, 2001). The first two of these are not specific to NNS-NNS group work, but group work in general and are essentially classroom management issues. Whether or not to allow the use of the L1 is largely a philosophical issue about which attitudes vary widely. This issue is also sensitive to things like learner age and proficiency level. The last fear, the reinforcement and/or incorporation of others' errors has been tested empirically. The research into this area has found that NNSs generally do not "miscorrect" target-like utterances and generally do not incorporate non-target-like utterances into their immediate production (Gass & Varonis, 1989; Pica, Lincoln-Porter, Paninos, & Linnell, 1996; Porter, 1986), though there was some evidence of the latter in the current data. Further, research suggests that NNS children engaged in communicative pair tasks seem to utilize feedback more if their interlocutor is another NNS. Child NNS-NNS dyads have also been found to take advantage of the opportunity to produce modified output more often than adult NNS-NNS dyads (Mackey, Oliver, and Leeman, 2003).

Because of the nature of SCMC communication, the smaller the group size the better, with pairs being the best option in my opinion. However, larger groups will inevitably be required from time to time. In this case I would suggest assigning the third (or fourth) participants an "observer" status, where they are assigned one or the other task sheet but do not actively participate in typing. Rather, they simply closely follow along with the progression of the interaction. After the actual interaction, they are also expected to complete the task as described above. Though they may not gain the same type of benefit from feedback on their own output, some research shows that simply observing negotiated interaction leads to similar gains in certain types of comprehension and acquisition (Ellis, Tanaka, and Yamazaki, 1994), though there is also research that shows a clear increased benefit for active participation (Mackey, 1999).
Reflections

In reflecting on this study it seems clear that the tasks and activities presented here offered students many opportunities for learning. First of all they were highly motivating for the students since they knew these tasks reflected a high-stakes test they would face in the near future. Second, because of the task structure, there were many opportunities to negotiate meaning. Learners were asked to produce much more of the target language in this setting than they would normally do in their typical face-to-face setting. Likewise, they were each the recipients of rich input from their interlocutor.

I am, however, also struck by the paradoxical relationship many of these school-age youngsters seem to have with computer technology. Though young people growing up in the information age are certainly quite sophisticated when it comes to computer use, we seem to be slow in harnessing the potential of computer technology for second language pedagogy; at least when it comes to employing the computer as a tool for authentic communication rather than simply as a tutor. The students in this study viewed such use of computers for language learning as quite novel. This suggests that even today computer technology may not be regularly or effectively integrated into the language learning curriculum. This is most likely the result of a certain degree of trepidation many school districts have about the potential dangers of the internet. A possible solution may be for school districts to consider setting up local area networks where the school computers could "chat" with each other while being blocked from "chatting" with unknown computers outside of the school. In this way, learners could reap the potential social and cognitive benefits of such synchronous interaction, while eliminating any potential threats.

Endnotes

1. Not all participants were present for all sessions.

References


**Appendix A**

Directions:
You and your partner each have two pictures on your paper. One of your pictures is the same as one of your partner’s pictures. The other picture is different. This means that there are three pictures total, which make up a short story. You need to do the following:

1. Describe your pictures to your partner so you both can decide which of your pictures are the same.
2. Chat with your partner about the remaining pictures and decide which is the correct order -- first, second, last. Put the three different pictures in the correct order so it makes up a story.
3. Then write out the story from beginning to end. You will be asked to read it aloud later.

Make sure you use your best English to chat with your partner. We will print these out later and use them in an activity.