COMPARING THE LANGUAGE OF INTERMEDIATE LEARNERS OF FRENCH IN ASYNCHRONOUS ELECTRONIC COMMUNICATION VS. FACE TO FACE COMMUNICATION

By

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I thank Dr. Antes and Dr. Lord for their constant support and greatest patience.

I thank Dr. Shoaf for suggesting and letting me use the language laboratory.

I thank my parents for always loving me and being supportive of me even though we were so far apart.

I thank my grand-parents as well for their encouragement and for having been so good to me all my life.
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As technology permeates in the foreign language classroom, teachers have to determine whether any technology they intend to use can be beneficial to their students. Electronic forums are a recent technology that teachers may consider using. This research’s purpose is to compare students’ language production on an electronic forum to face-to-face communication. A study group used an electronic forum outside of the classroom to complete a project based on the cognitive approach; at the same time a control group performed the same task using in-class face-to-face communication. The first research question of this study aimed at comparing the grammatical complexity of the language produced by two groups of students. One group produced their language on an electronic forum and the other communicated orally. In order to compare these two groups’ grammatical complexity, the Coordination Index (CI), which compares the number of dependent clauses over the total number of clauses, was compounded. The
results for this variable suggest that the language produced on an electronic forum tends to be more complex than the language produced orally. The written nature of the language used on the electronic forum accounts for this result. However, the CI does not take into account the types of dependent clauses and the data revealed that there was a similar number of completive clauses in the language produced with both media.

The second research question of this study aimed at comparing the lexical complexity of the language produced using both media. In order to compare the language complexity, the Type Token Ratio (TTR), which measures the number of different words over the total number of words, was used. While it was expected that the TTR of the language used in the electronic forum would be higher than the one used in the F2F environment, it was not the case for this research. Indeed, the TTR for both media were almost identical. Thus, these data suggest that more research be performed in order to compare both media again with data coming from various tasks.

The third and final question of this research aimed at whether other patterns could be discovered from this type of data. First of all, it revealed that students display interesting behaviors on an electronic forum. The first student to write a thread is more likely to become the leader of the group and the last student to write a thread is more likely to be the student who will participate the least. Students reported that they did not enjoy working on the electronic forum claiming that it was not convenient for negotiation and, indeed, most of them ended up using other media for communication. On the other hand, most students in the F2F group reported that they enjoyed communicating in the language laboratory. They enjoyed the new environment and felt that negotiating meaning among other aspects of the task was beneficial.
CHAPTER 1
INTRODUCTION

Technology in the foreign language classroom is not a new phenomenon. The first teacher to have used a tape player or a tape recorder brought technology into her/his classroom. However, when one speaks of technology in the foreign language classroom nowadays, one speaks of CDs, DVDs, computers and the most recent global phenomenon associated with computers, that is the World Wide Web. New technology is exciting and there will always be a teacher or a researcher who will try to incorporate it into his or her teaching practices. The difficulty becomes to optimize the use of this technology so that its benefits outweigh or supplement existing practices. Such has been the case for Computer Mediated Communication (CMC). CMC is the use of a Wide Area Network (WAN) or a Large Area Network (LAN) to allow communication between two or more computers. CMC can take the shape of students chatting together from computer to computer in the same room, such as is used in language laboratories, or it can be students communicating from remote locations. CMC can be synchronous when students chat simultaneously with the use of a chatting interface such as instant messengers (AOL Instant Messenger also called AIM™, MSN Messenger or ICQ™) or with the use of voice over IP (Internet Protocol), which allows for voiced conferences over the Internet thanks to software like Netmeeting™. Synchronous CMC via chat software displays similar characteristics to Face-to-Face (F2F) communication. For instance, there is an important amount of turn-taking and turns are short in general (Warschauer 1996, Beauvois 1996). CMC can also be asynchronous, meaning that every message will have
a delay and that people will be able to have access to those messages in their own time. Asynchronous communication is typically associated with written communication as users can take the time to organize their writing before making it available to its recipient. Examples of asynchronous CMC include email, email lists (or newsgroup or listservs) or the use of electronic forums also called Bulleting Boards (BB). Electronic forums differ from other asynchronous communication as they archive and thread all writing so that participants can access, select and retrieve any written message at any time, regardless of the topic or when it was written as long as the discussion is stored on its host. Messages on electronic forums can be displayed chronologically but, most commonly nowadays, they are displayed first according to topic and then chronologically (see appendix B).

The present thesis intends to examine the use of an electronic forum to complete a class project as opposed to a F2F alternative. The goal of this thesis is not to determine whether one approach is better than the other. Both approaches have advantages and disadvantages that influence students’ performance differently. Therefore, the goal of this thesis is to compare students’ performance using both approaches so as to provide pedagogical input for teachers. Thus, a project was designed and administered to two classes of students of intermediate French at the University of Florida. One class was asked to use a bulletin board software as means of communication while the other communicated orally in class. The two classes language production were compared using the Coordination Index (CI) and the Type Token Ratio (TTR) as variables. The results and a more detailed explanation are presented below.
CHAPTER 2
PREVIOUS WORK

The following articles have been selected from a more complete list concerning technology in the classroom because of the limited amount of research regarding the use of bulletin board software as a means of communication. In order to compare F2F and Electronic discussion, Warschauer (1996) asked the following questions:

1) do second language students participate more equally in small group discussions held electronically than those held in a traditional F2F manner? 2) if so, who benefits from this more equal participation? In particular, how are differences in participation for a F2F mode or an electronic mode related to factors such as gender, nationality, and age and language proficiency? 3) what are students’ attitudes toward participating in electronic and F2F discussion and how do these attitudes correlate with changes in amounts of participation? 4) does electronic discussion include language that is lexically or syntactically more complex than F2F? 5) what other differences are noted in the language use and interaction style in the two modes? (p. 10)

Warschauer studied the language production of 16 students of various ages and nationalities enrolled in an advanced ESL course in a community college in Hawaii. The F2F data was transcribed and all the transcripts were entered in the Computerized Analysis Program (CLAN) of the Child Language Data Exchange System (CHILDES); which was used to count the number of words per speaker and to calculate the Type Token Ratio (TTR). The transcripts were analyzed to calculate the number of clausal coordinations and subordinations. He found that there was an increased participation in the computer mode. The language was also more complex in the electronic mode when comparing the CI and the TTR. The turn-taking in the conversation mode was more numerous with short turns and many confirmation checks. The computer exchanges
displayed less direct levels of interaction and students expressed their own ideas as opposed to directly answer questions. The electronic communication showed more formal expressions such as transition words. In his conclusion, Warschauer suggested that further research be performed according to nationality, according to the speaking fluency of the learners.

This article is relevant for the present research as it presented the two variables that were used in this study. In other words, it presented the coordination index, which provides information on the complexity of sentences and the Type Token Ratio, which provides information on lexical complexity.

Beauvois (1997) examined the affective and social benefits that students can derive from LAN (Large Area Network) communication. The purpose of her research was to examine, in controlled conditions, whether a link between written synchronous communication, via the Daedalus™ software, and oral communication could be established. She wanted to measure the transfer of skills that operated. Her participants consisted of 83 fourth semester students of French at the University of Tennessee in Knoxville (UTK) in 1995. The students were randomly assigned with half the class in a PC laboratory and the other half in a regular classroom. There were 49 females and 34 males. Classes were instructed using a communicative approach. Students were assigned the completion of tasks based on their readings from the *Petit Nicolas* a children’s book written by André Gosciny. At mid-semester and again at the end of the semester, all students took an oral examination, the grading of which was used to compile a T-test used to compare the study group and the control group. She found that the LAN group exceed the control group in grades and that not only was the LAN group better but also
more homogeneous. According to Beauvois, the synchronous communication carried elements similar to conversation such as a high amount of turn-taking. Furthermore, she posited that there was a compelling character of the PC message with flashing visual prompts, which kept students focused. She also noticed that Vygotsky’s scaffolding theory applied to the synchronous communication, that is to say students benefited from one another’s input thus creating a peer teaching environment. Thus, she concluded that there was a significant amount of transfer of skills from one medium to the other and suggested that further research be performed at different levels of instruction in addition to investigating other language skills.

The article is relevant to the present research as it offered several suggestions. First of all, the variables she had chosen to study were interesting as using grading as a variable to measure student achievement was considered. One of the problems that grading poses is subjectivity. Furthermore, grading cannot provide an accurate illustration of the type of language that is used in both media. Therefore, the idea of using grading as a variable was rejected for the present study.

Boyd, Davis, and Ralf Thiede (2000) examined what happens to different features of discourse when English as Foreign Language (EFL) learners must choose to function in an ESL situation as shown by the changes that occur in their writing in asynchronous electronic forums. Thus, Davis and Thiede studied the style shifting of students of ESL in response to native speaking participants’ accommodation to the experience of creating a learning community online. By pairing native speakers and ESL learners the researchers tried to emulate mimetism. They found that investigating social practices such as politeness, authority status or distance is not always simple. Students
participating in asynchronous communication present themselves exclusively in a positive and polite manner. They can enter the conference at any point, read as little or as much as they wish, and choose to reply to whomever they want. The conventions on the forum included exaggerated politeness and signals of approbation with compliments that showed alignment more than partisanship. In order to measure the replication of language researchers studied “lexicosyntactic indicators of stylistic emulation.” In other words, they looked at an acquisition scale and at lexical density, which they defined as the number of lexical words divided by the total number of words.

The two variables that they used were extremely interesting. On the one hand, the acquisition scale was not applicable as measuring acquisition was not the goal of the study and native speakers were not introduced as a factor. On the other hand, the definition for the lexical density was the exact same one as the definition for the Type Token Ratio that Warschauer (1996) had used. In Davis and Thiede’s case, however, it was used to measure the production of language learners versus that of native speakers on the same medium, i.e., bulletin board software, which was used for the present study.

In her article, Pellettieri (2000) studied the interaction and the negotiation of meaning in synchronous CMC. Her research questions included:

1) does the negotiation of meaning occur in task-based synchronous CMC? 2) do the negotiations facilitate mutual comprehension? 3) do the negotiations push learners to output modifications that are both meaning and form-focused? 4) do the negotiated interactions foster the provision of corrective feedback and the incorporation of target-forms in the subsequent turns? (p. 64)

Her participants were 20 students of Spanish at the University of California at Davis. They were all native speakers of American English enrolled in intermediate Spanish. Students' interactions were observed as they functioned in dyads. She found that negotiation via synchronous CMC facilitated mutual communication and that
negotiations pushed learners to output modification encouraging corrective feedback. Her conclusion offered pedagogical suggestions on tasks to be designed so that all participants are required to request and obtained information from one another for successful task completion so that communication is goal-oriented.

This article offered the perspective of performing a research from a theoretical point of view. Pellettieri chose to perform her research from the interactionist point of view. The present research was based on the Cognitive point of view as Skehan (2001) defines it. The Cognitive approach also calls for goal oriented tasks and includes some interactionist elements. It is described in greater detail below.

Böhlke (2003) designed his study to verify that participation in a CMC is more equalizing than F2F participation as was suggested by Kern and Warschauer (2000) whom he cited. His participants were fourth semester students of German as a foreign language using a communicative approach. The students participating in chats and F2F produced discourse from two activities presented on worksheets. Half of the students used CMC and the other half F2F communication. Contrary to Warschauer who used broader units of meaning, called T-units, in order to measure students’ language participation, Böhlke used C-units that he considers to be the fundamental elements of communication, i.e., a C-unit can represent one word only or a whole sentence. Consequently, the C-unit does not require a verb nor does it require a predicate, it is more inclusive than the T-unit. He found that group size has to be factored into the equalizing effect of CMC. Groups of 5 students did not tend to be optimal whereas groups of 4 offered a positive impact. He also measured students’ language competencies according to a scale of stages defined by Tschirner. He found that CMC is indeed more equalizing
at certain stages of language than others. For future research, he suggested that the chat room should set the ground work for in-class discussion, and that “more research should be performed on the ideal number of students within a group as well as further investigated Tschirner’s stages.

His discussion on the C-unit was extremely interesting, however, using the C-unit may be too encompassing as it includes utterances of only one word such as “yes” or “no” as a unit of meaning. Particularly since in F2F communication turn-taking is much more important, and using C-units as a construct would create an imbalance with CMC communication. Therefore, it was necessary to perform the present research on units that would include a verb and a predicate. Tschirner’s stages are also interesting, however, they only apply to the German language and such a scale was not found for a research using French. Böhlke claims that chat room should set the ground work for in-class discussion, however, doing so seems redundant. How useful would it be for students to carry the same conversation twice? His approach to literature in CMC was also interesting. Indeed, he was the first to offer opposing views to most of the litterature. For instance, he offered an alternative explanation for the transfer of skills that Beauvois had suggested, expressing “doubts that the implementation of chat does not imply transfer of skills since there is no immediate cause and effect relationship with increased speech proficiency” (p. 70). Böhlke also voiced concerns for using CMC. Such concerns were expressed by Beauvois (1992) who claimed that students become increasingly indifferent to the appropriate use of the target language the longer they use the chatroom. Yet, the present research by Guillo also showed how some students in F2F started speaking in their native language in the language laboratory. Therefore, it is a concern to
be had in both media. He further quoted Kelm who saw a disadvantage “when students copy incorrect form from another student’s message” (p. 71). It is a right claim although not only true to CMC since the lack of feedback both from a peer or a native speaker may lead a learner to acquire an erroneous form of language. Finally, he quoted Bremp (1990) “it gets frustrating sometimes when a conference gets really busy and you would have no time to type anything if you worried about reading absolutely everything” (p. 72). Although chatting takes on a form that allows one to realize that we may not be fast enough or have enough time to read every thing when we are communicating, it is also true to the oral language. It is not suggested that these concerns should be dismissed for the present research, on the contrary, they may be used for all communication purpose. As far as the present research is concerned, an electronic forum was preferred to a chat software.

Ann, Chenoweth, and N. K. Murday (2003) noticed that students at Carnegie-Mellon Universtity were interested in taking a foreign language course but could not do so because of scheduling issues. Therefore, they designed an online class to meet those needs. Thus they wanted to measure whether this online course using CMC would be as efficient as a regular course. The participants for this research included students enrolled in French 1. They were all undergraduate students, 12 of them participated in the F2F evaluation and 8 participated in the online course. On the SAT II French exam, the online participants averaged 581 points and the F2F participants averaged 556. They all filled out a General Background Questionnaire (GBQ) and a Technical Background Questionnaire (TBQ). The students’ oral production was measured by interviews conducted after 5 weeks and at the end of the semester. The researchers gathered data
from a focus group and an interview from one student. They found that in all the testing
done there was no statistically significant difference between the two groups. Thus,
students registered in the online course made similar progress but they offered more
mitigated satisfaction feedback than students in the conventional course.

As with the research done by Beauvois, the manner in which students’ performance
could be used as a variable to compare two media was intriguing. To solve the question
of subjectivity, Chenoweth and Murday had several impartial graders. Doing the same
was not feasible within the limits of the present research. Therefore using grades as a
variable even with impartial graders was abandoned.

This literature review offers information on how the use of technology can be
compared to conventional teaching practices. Most of the articles dealt with the use of
synchronous communication as opposed to F2F communication. The researchers’
interests varied from theoretical approaches to systematic statistical research. In the end
their concern is the same, how efficient can CMC technology be in the language
classroom?

Overall the current literature did not present many articles on electronic forums or
other asynchronous communication. No article offered any comparison between
electronic forums and F2F communication. That is because electronic forums are
asynchronous communication and F2F is synchronous. This fundamental difference
makes them difficult to compare. Yet as asynchronous communication can often be
presented as an alternative to in-class F2F communication, it is important to examine how
different those two media are when student language production is concerned.
Understanding these differences will allow teachers to make appropriate pedagogical decisions about which medium to use and how to use them.
CHAPTER 3
METHODOLOGY

Research Questions

We know that CMC is different from F2F communication. Additionally, we know that asynchronous communication is different from F2F communication. However, we do not know to what extent these modes of communication are different nor do we know if there exist similarities between them for foreign language learners. For these reasons, the following research questions were asked:

1. How does language produced in an electronic forum compare to that of F2F communication in terms of grammatical complexity?

2. How does language produced in an electronic forum compare to that of F2F communication in terms of lexical complexity?

3. What patterns, if any, can be noted from both modes of communication?

Participants

The participants in this study consist of two classes of students enrolled in a French grammar class at the intermediate level at the University of Florida. The University of Florida code and title for this class is: FRE 2200 – Intermediate Grammar. The project was a class assignment but each student volunteered for the research and signed an informed consent form approved by the University of Florida Institutional Review Board 02 under the protocol number 2005-U-0295 for use through 06/4/2006. All the data was kept anonymous. There were 22 students who participated in the protocol, 17 of whom were women. No other ethnographic data was requested. The textbook used in FRE
2200 was *Interactions*; chapters 4 and 5 of this textbook provided the language and cultural impetus for the activity used in this study and detailed in Appendix A.

**Task**

The activity was created with Skehan’s model in mind (Skehan 2001). At the center of Skehan’s Cognitive approach is the action of “Noticing,” which first integrates input into the “working memory” and into the “long term memory.” “Noticing” occurs when input takes on several qualities, namely frequency and salience. The teacher’s task is to create focused input. A particularly interesting aspect of Skehan’s model is that it takes into account learners’ internal factors (readiness and individual differences), forcing a teacher to also take the various learning styles into account.

The application of this model in the classroom requires task-based instruction. In other words, the CMC activity will follow these guidelines provided by Skehan (2001 pp. 121-152):

- Meaning is primary;
- There is some communication problem to solve;
- There is some sort of relationship to comparable real-world activities;
- Task completion has some priority;
- The assessment of the task is in terms of the outcome.

Furthermore, Skehan (2001 p. 152) specifies that tasks:

- Do not give learners other people’s meanings to regurgitate;
- Are not concerned with language display;
- Are not conformity-oriented;
- Are not practice-oriented;
- Do not embed language into materials so that specific structures can be focused upon.

With all these guidelines in mind, a series of communication-driven tasks for a CMC activity was created (appendix A). The project is also designed to provide students with an opportunity to use their language skills through negotiation as well as to develop an understanding of French culture through the media. The media in question are
television and advertising, particularly how commercials fit into French television programs.

Commercials provide an idea of the target audience the marketers are trying to reach. The positioning of the advertising also provides information on this target audience as it occurs at the particular time when this target audience is most likely watching television. Some information the advertising provides about the target audience includes demographics, such as age group, income bracket, geographical location, education, values, etc. Once the marketer has drawn a sketch of the target audience, he/she will identify the programs this target audience is the most likely to watch on television in order to position the advertising so as to maximize the reach, i.e., the proportion of the target audience that will be sensitive to the advertising message. For students it translates into an exploration of French television programs and particularly what French people watch and how this compares to US programming.

Students performed a CMC activity that helped them draw conclusions about French programs as well as the make-up of the audience for these programs. According to Skehan, an activity is more efficient if students are provided with an adequate background and are given a role. For this activity, students were told that they were members of a marketing company, The Famille Guillo Advertising Agency, whose CEO was offering them an opportunity to lead a project related to the marketing of a product and particularly, to the positioning of the advertising of that product. Appendix A contains a detailed description of the project the students accomplished, for both the CMC and F2F groups.
Analysis

The present research was performed using two different classes of FRE 2200. The first class consisted of 15 students distributed within 4 groups, one group of 3 students and 3 groups of 4 students, who were instructed to use the electronic forum to perform all their communications. They will be referred to as the Computer Mediated Communication group or CMC group. The second class consisted of 7 students who met in the language laboratory twice in the course of the project during regular class sessions. They will be referred to as the Face to Face group or the F2F group. Data from the CMC group was retrieved directly from the electronic forum using the copy/paste functions. They were then compiled in a Microsoft Word™ document in order to perform the analysis of the data by hand on printed material. The data from the F2F was collected on the computers of the language laboratory of the University of Florida using the Divace™ software. The data from this group consisted of audio files that was transcribed afterwards on a written Microsoft Word™ document. Thus, this data was subjected to the researcher’s interpretation. Furthermore, on the second session of the project, erroneous manipulations to save the data were performed by the researcher and the entire session was lost. Therefore, only half of the data expected to be used was analyzed.

The data was analyzed in relation to two variables. The first variable was used to identify the syntactic complexity of sentences uttered or written by students according to a ratio called the Coordination Index (CI). Warschauer (1996) defined this ratio as the number of dependent clauses divided by the number of total clauses. Further information is provided in the “Results and Conclusions” section of the present thesis. The second variable measured the lexical complexity displayed by students in the form of another ratio called the Type Token Ratio (TTR). Warschauer defined the TTR as the amount of
different words produced divided by the total number of words produced. As for the CI, further information about the TTR is provided in the “Results and Conclusions” section of this thesis. Both ratios are similar to averages or probabilities. An average is the part divided by the whole and a probability is the number of desired outcomes divided by the total amount of outcomes. Thus both variables will provide us with a general idea of the patterns, if there are any, present in students’ communication as well as allowing us to make predictions on such behaviors. Another advantage to both variables is that they can easily be applied to both communication media. As previously stated, one medium is asynchronous while the other is synchronous, therefore we expect differences. The goal of this study is to measure these differences and derive pedagogical implications related to these findings.
CHAPTER 4
RESULTS AND CONCLUSIONS

Syntactic Complexity

In order to determine the coordination index for the two types of samples that were collected, I first removed all the utterances that were produced in the native languages of the students. Second, the utterances that pertained to the task demands that requested a written preparation, particularly the first part of the project, which consisted of providing a summary and a description of the advertising were eliminated. Since students were provided with guidelines in the form of questions, they created a written sample and since the spontaneous language that students created was the object of this research, a written sample was not desirable. For the CMC groups, it consisted of their first participation to the thread for the most part. For the F2F groups it consisted of any part that was read from their course preparation. Any single word feedback such as “oui, non etc.,” repetitions, etc., were eliminated. Thus, only the most spontaneous language that they produced while negotiating for the one commercial each group was going to analyze, the type of program during which they would place their advertising, as well as any off-topic discussion, was left.

Once, the utterances were narrowed down to usable samples, each clause of the samples were outlined. The clauses were separated into two categories: Dependent clauses (D) and Independent clauses (I). A independent clause is a clause that has a meaning by itself. A dependent clause is a clause that has no meaning by itself. For example, if we analyze the following sentence “I met her at the restaurant where we had
our first date” there is one independent clause, “I met her at the restaurant,” which would be meaningful by itself, and a dependent clause “where we had our first date,” which is meaningless by itself. In this sentence all the verbs are conjugated and the relative clause introduced by “where” is easy to determine. However, dependent clauses also include clauses where the verbs are not conjugated. These clauses include participial clauses and infinitive clauses. No participial clauses in the samples collected were found, however there were a few infinitive clauses.

Although attention was paid to the types of dependent clauses present in the data, this analysis did not reflect these various types. In other words, the coordination index does not discriminate between relative clauses, completive clauses or other subordinate clauses. Instead, it offers an insight on the general syntactical complexity of samples. The coordination index is a ratio of the amount of dependent clauses over the total amount of clauses. Therefore, the higher the ratio the more complex the sample.

Once, dependent clauses are separated from the independent clauses, each were counted separately and computed in an Excel™ chart according to the following formula for the CI:

\[ CI = \frac{\text{number of dependent clauses}}{\text{total number of clauses}} \]

Table 3.1 summarizes the results of this data. D represents the dependent clauses, I represents the independent clauses and CI is the Coordination Index. The data is presented on a per student basis, a per group basis, and finally the totals were compounded. Each student was studied in his/her order of appearance for the threaded participation or the oral exchanges. For every group a total, an average and a standard deviation was calculated in order to identify individual patterns. Finally, the total,
average and standard deviation were calculated for the two different means of communication so as to identify general patterns. The data highlighted in gray represents the students whose production was also used for the TTR.

Table 3.1: Summary of findings according to the CI

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<th>I</th>
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<td></td>
<td>STDev</td>
<td>1.155</td>
<td>4.359</td>
<td>5.508</td>
</tr>
<tr>
<td>Gp 2</td>
<td>4</td>
<td>27</td>
<td>63</td>
<td>90</td>
<td>0.300</td>
<td>Total/Gp</td>
<td>98</td>
<td>190</td>
<td>288</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>36</td>
<td>17</td>
<td>53</td>
<td>0.424</td>
<td>Average</td>
<td>24.501</td>
<td>47.500</td>
<td>72.000</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>13</td>
<td>33</td>
<td>46</td>
<td>0.283</td>
<td>STDev</td>
<td>9.609</td>
<td>12.261</td>
<td>19.408</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>22</td>
<td>47</td>
<td>69</td>
<td>0.319</td>
<td>Total/Gp</td>
<td>98</td>
<td>190</td>
<td>288</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Average</td>
<td>12.750</td>
<td>19.500</td>
<td>32.250</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>STDev</td>
<td>4.031</td>
<td>6.758</td>
<td>10.532</td>
</tr>
<tr>
<td>Gp 3</td>
<td>8</td>
<td>16</td>
<td>22</td>
<td>38</td>
<td>0.421</td>
<td>Total/Gp</td>
<td>81</td>
<td>148</td>
<td>229</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>13</td>
<td>18</td>
<td>31</td>
<td>0.419</td>
<td>Average</td>
<td>20.250</td>
<td>37.000</td>
<td>57.250</td>
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<td></td>
<td>10</td>
<td>15</td>
<td>27</td>
<td>42</td>
<td>0.357</td>
<td>STDev</td>
<td>13.500</td>
<td>17.795</td>
<td>29.915</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>7</td>
<td>11</td>
<td>18</td>
<td>0.393</td>
<td>Total</td>
<td>298</td>
<td>494</td>
<td>792</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Average</td>
<td>19.867</td>
<td>32.267</td>
<td>52.133</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>STDev</td>
<td>14.555</td>
<td>17.296</td>
<td>29.549</td>
</tr>
<tr>
<td>Gp 4</td>
<td>12</td>
<td>36</td>
<td>61</td>
<td>97</td>
<td>0.371</td>
<td>Total</td>
<td>98</td>
<td>255</td>
<td>353</td>
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<td></td>
<td>13</td>
<td>9</td>
<td>35</td>
<td>44</td>
<td>0.206</td>
<td>Average</td>
<td>14.000</td>
<td>36.429</td>
<td>50.429</td>
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<tr>
<td></td>
<td>14</td>
<td>27</td>
<td>34</td>
<td>61</td>
<td>0.443</td>
<td>STDev</td>
<td>9.452</td>
<td>14.524</td>
<td>20.582</td>
</tr>
</tbody>
</table>

The last factor to take into account for this analysis is that the CI does not reflect language accuracy. In other words, all clauses were counted, regardless of whether they were grammatically correct. They may not have been introduced by the right pronoun or the verb may have been incorrectly conjugated. Therefore, when the CI is determined and compared, the tendencies for students to formulate complex sentences are compared, without comparing their degree of language accuracy.

Interestingly, as the data shows for every group who used CMC except for group CMC3, the first person to participate on the forum for each group is also the person who provided the most data. CMC Student 1 has a total of 101 clauses, CMC student 4 a total
of 90, and student 12 has 97; each one of these students far exceeded the amount of total clauses of all the other members of their group. This accounts for the very high standard deviations among the total number of clauses and thus shows a very uneven distribution of production. The total amount of clauses is roughly correlated to the total number of threads that each student wrote. Table 3.2 below summerizes the amount of threads that each students wrote:

Table 3.2 : Total number of threads

<table>
<thead>
<tr>
<th>Gp</th>
<th>Thread</th>
<th># of threads</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gp 1</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>Gp 2</td>
<td>4</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>10</td>
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<td>6</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>64</td>
</tr>
<tr>
<td>Gp 3</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>22</td>
</tr>
<tr>
<td>Gp 4</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>26</td>
</tr>
</tbody>
</table>

Not only did these students participate more and thus provide a larger quantity of data but they also proved to be the decision-makers and the leaders of each group. They were the students who prompted their peers to provide feedback. They were also the motivators to solicit actual work and meet deadlines. Finally, after consulting with their
peers they made the final decisions as to which commercials and programs were going to be used. Below is an example of student 12’s motivational input:

- “Je pense que nous devons choisir ou la pub de Axe ou la pub de Peugot, les deux sont faciles. Mais il faut que nous choisissions une pub ASAP!!!!

- I think that we must either choose the Axe commercial or the Peugeot commercial, both are easy. But we must choose a commercial ASAP!!!!

The pattern was true to all the groups except for group CMC3. If we examine the data a little closer we can see that the first student to participate was not the one who provided either the most data nor the one who wrote the more threads. CMC Student 10 actually did, and CMC student 10 was the leader of her group and made the decisions in her group. However, this was not always the case within this group. When we look at the dynamics for this group we observe that CMC student 8, who actually started the thread, was the initial leader. The leadership was then taken over by CMC student 10.

This data suggests that when a teacher offers a communicative task where students will be participating on a forum, the first students of each group will be very likely to become the leaders of their group. Furthermore, the teacher will also be able to expect that the leader of a group will generally be the one who will participate the most.

What one cannot predict is whether the leader of a group will also be the student whose language skills are the best. The coordination index is an average that represents language complexity. In other words, it will show students’ tendencies to express themselves in a more complex form of language. Yet, of all the students that qualified as group leaders only one, CMC student 1, had a higher CI then the rest of his/her group. CMC students 4 and 10, with CI’s of .300 and .357, respectively were even below their group averages of .340 and .395, respectively. They were also below the class average and means of .381 and .362, respectively. What does this suggest? For one, leadership
does not equal language complexity or skills. Second, it may suggest that leaders tend to offer straight to the point communication.

Inversely, the last student to participate on the forum was also generally the one who participated the least and thus provided the least data with the exception of CMC student 7 of group CMC2. This an interesting predictor and, therefore, it is worthwhile examining what could be the reasons for this pattern. Böhlke (2003) suggested a correlation between group size and participation. For him, CMC has an equalizing effect provided that the group size does not exceed five and not be lower than four. He also suggested that more research be performed on the matter. From the present data one can conclude that as long as an electronic forum is used as a CMC group size does not appear to be relevant. Three groups comprised four students whereas one consisted of three students. Even though group CMC1 consisted of three students, the last one to participate, CMC student 3 hardly communicated and most of the work was done by CMC student 1 and 2. In group CMC3 and CMC4 CMC student 11 and CMC student 15 also communicated far less then their peers with 27 and 18 total clauses, respectively. Their CI was also below average with .333 and .389 respectively albeit not as much below the average of the groups, which used CMC. Thus group size was not a relevant predictor nor did it have an equalizing effect in the present data. The slightly below average CI’s of those students who participated the least may suggest that their language skills may be a corrolary to explain their level of participation. Other factors may include motivation for performing the task as well as their familiarity and motivation with the means of communication. However, no questionnaire was offered to inquire about their familiarity with the technology used, no question was asked about their affective
response to the same technology either. Therefore, no conclusion can be definitely drawn at this time.

Leadership patterns can not be derived as easily for students who participated in groups in the F2F tasks. In fact, none can be derived whatsoever. The first students to participate in both groups did not display more of a leadership ability as the students in the CMC tasks. Furthermore, it appeared that leadership was more diluted and more democratic. All students of group 1 offered their opinion agreed together as to what commercial was going to be used to complete the task. In group F2F2, two students, F2F students 5 and 6, seemed to argue but the final decision was taken between F2F students 4 and 5. F2F Student 7 participated minimally as is shown in the table: he/she only provided 7 clauses.

Although CMC students were specifically instructed to conduct all communication on the forum, the researcher discovered that some of the communication was conducted via other means such as telephone, email and oral in-class meetings. No data pertaining to the amount of communication that was performed outside of the forum was collected, therefore it is impossible to determine what percentage it represented. Testimonies in students’ participation suggested that they had actually communicated by other means. Below are examples of threads suggesting other means of communication.

- “Comme nous avons dit en classe, stade 2 et cd aujourd'hui sont bons programmes pour passer notre pub.”

- “Je suis confondu de que notre groupe fait pour le rapport final. […] quel est votre e-mail. Quelqu'un s'il vous plaît m'envoie un e-mail à […]”

- “I am confused about what our group should do for the final report. […] what is your email? Please someone, send me an email at […]”
This explains the discrepancy among all the groups that participated.

Students’ behavior can also be analyzed by looking at other factors, such as the amount of threads that they wrote combined with their CI. The Bulletin Board software used provided data that included the amount of threads, the time and the date of each thread and other statistical data. For instance group CMC1, CMC3 and CMC4 totaled 17, 22 and 26 threads respectively. Their total clauses were 136, 129 and 229 respectively and the average amount of clauses per person was 45, 32 and 57. On the other hand, group CMC2 had 64 total threads for 288 total clauses and an average of 72 clauses per person. These figures give us some insight on the use of the forum for communication. Either all groups managed to effectively make decisions, without much negotiation or they used other means of communication to come to those decisions. The latter is what happened in reality. As for group CMC2, they used the forum to communicate often.

One of the consequences of participating on an electronic forum is the community building effect. Many Internet businesses use that effect to create a community around their products and also to create brand loyalty. Consequently, community software such as an electronic forum has developed devices to create loyalty. Such devices are the use of emoticons (smilies) and avatars (personnal pictures that appear on their profile every time they post a thread) along with the necessity to register for a forum before participating and the use of attractive Graphic User Interfaces (GUI). One of the goals of the researcher was to create a community around the French class that he taught using the Forum. Group CMC2 who displayed the necessary characteristics of community building was a success. Their enthusiasm and their use of the forum was evidence of that effect. They enjoyed identifying themselves with avatars already provided in the forum,
and they even actively sought additional avatars to include. They also registered on the forum as indicated using pseudonyms that did not disclose their identity but identified them through other traits. They also used emoticons extensively to express feelings that cannot be expressed in the written form. Finally, they continued communicating on the forum after the project was completed. Other students from the other groups did the same but not to the extent of the students in group CMC2.

Finally, as we look at the averages for all the groups, we notice that the standard deviations from the means are pretty high. The dispersion from the amount of total clauses and the amount of dependent versus independent clauses as indicated by the standard deviation, indicate a wide variety among those students. On the other hand, this variety is not reflected in the average CI for all groups. This average is .381 with a mean at .362 and a standard deviation of .093, which shows a certain homogeneity in the type of utterances, which is to be expected as all the students were approximately at the same level in the same class.

The amount of participation for the F2F groups cannot be measured by or with turn-taking as on the forum. Indeed, many turns only comprise of one word, indicating acquiescence or feedback, which is one of the fundamental differences between a written and an oral performance. On the other hand, we can derive participation with the amount of total clauses.

Group F2F1 is homogeneous at every level. The CI of each student is very similar and, as the standard deviation revealed, they all participated equally and produced a language of an equal level of complexity. Their average CI is .228 and their mean is exactly that as well, with a standard deviation of .003, which is very narrow. This group
displayed quite an efficient level of communication that would be labeled as “synergy” in the business world. Synergy is the ability to create seamless communication for the most efficient business practices. Although such homogeneity is ideal, it is also suspect for it could be abnormal. Unfortunately, it is almost impossible to know accurately whether or not it is natural, given the amount of data. Additional data would definitely help in defining the statistical validity of this pattern. However, when we look at the data, the CI for F2F students 4 and 5 of group F2F2 with .240 and .246 respectively are not far removed from the average CI of group F2F1, which is .228. In fact, they are very close, which suggests that we could predict a certain homogeneity for the oral medium and that we need to treat F2F Students 6 and 7 separately.

As the researcher was also the teacher for this class, he felt that there were certain significant differences that were not measured. For instance it was striking that two of the students did not participate as much as they did in a regular class setting. These students may have been influenced by the Novelty Effect (Kern, Warschauer 2000). In FRE 2200 at the University of Florida, students do not typically use the language laboratory, thus creating motivation for students who find themselves in a new environment while using new technology. In this case the language lab offered the novelty, the technology and the new environment. The novelty effect predicts that students will react positively to a new environment and that the effect will dwindle as this environment becomes more and more familiar. In the case of the present research, however, students did not have time to experience such familiarity, thus the novelty effect carried over the duration of the task. On average, the researcher felt that all students in general, and certain students in particular, participated more than they usually
did in class. The Novelty Effect of the language lab was also more equalizing than on the forum.

F2F student 7 of group F2F2 was the only students who maintained the same level of participation, which was quasi inexistent in general. This group did not show as much homogeneity and its dynamics were far different. For instance, although F2F student 6 is the student who shows the most complex language in the classroom, she was also the students whose production was eliminated for the most part. Indeed, she produced many utterances in her native language, i.e., English, and even though the researcher was monitoring the class, he realized afterwards that she spoke English when he was not monitoring her group. There were some attempts from her peers to make her speak French. However, Group Think was not powerful enough to change her behavior. Group Think is when a deviant member’s behavior is reduced or stopped altogether under the tacit influence of a group majority. The effect was first identified under the Kennedy administration when dissenting politicians were stopped under penalty of being excluded from the group. In a language laboratory, it is difficult for an instructor to maintain a certain level of discipline for the simple reason that every group also requires help and attention. That is when group dynamics can help. For the present research, groups were randomly assigned. Perhaps assigning students according to criteria that include language skills and personality types would have helped in assuring discipline.

F2F student 7 is a very interesting case as she is also the student that present the highest CI of the oral groups, with .492. This number is extremely high compared to the other students in the oral groups. Furthermore, when comparing this result with the results of the CMC group, we notice that it is much higher than the average for all the
groups. It may suggest that this student has a tendency to express herself with more complex sentences. A good way to measure if that is the case would be to compare her native speech with the second language speech or/and to extract additional data from her or his daily language production. Then we could also determine whether her lack of discipline can be attributed to frustration or lack of confidence in her oral skills.

We expect the language in both media to be different. Whether synchronous or asynchronous, CMC carries elements of the written language. About synchronous CMC, Chun (cited in Böhlke 2003) suggests that the CMC environment is less stressful than oral discussion, because students have more time to think about their utterances and do not have to worry about their pronunciation. It is all the truer for asynchronous CMC where the pressure of spontaneity is completely eliminated. Warschauer (1996) showed that synchronous CMC chat was more complex than face-to-face communication among his advanced students of English as a second language at the University of Hawaii. The Hawaii CI for the face-to-face group was .182 and for the CMC group was .475. As a result we can expect CMC communication to be more syntactically complex than oral communication. As far as the present research is concerned, the electronic discussions were completely devoid of negotiation of meaning, which occurred a few times with the oral groups. As expected, the average CI for the CMC groups was higher than that of the oral groups, .381 and .278 respectively.

When we look a little closer at the types of dependent clauses produced, we notice that elements of the oral language permeated almost as much in the forum. One particular element is the amount of dependent propositions introduced by a variation of “je pense que” or “je crois que,” both translated as “I think.” These clauses are
completive clauses and they are part of the oral language because in the written language students are instructed not to use the first person of the singular “je” or “I.” Furthermore, when one writes an argument one does not use personnal opinion or conjecture, instead one supports one’s argument with tangible evidence. There were 62 out of 298 such completive clauses in the CMC data and 18 out of 98 in the F2F data. Proportionately, both results are very close with a ratio of .208 for the CMC and a ratio of .184 for the oral production, the difference is only .014. This suggests that the proportion of dependent clause types will be maintained in student language from oral production to CMC production. In order to determine that this proportion is not just an effect of the CMC sharing elements of oral production, it would be interesting to compare individual students’ written production to the present data, both for the CMC group and the control F2F group.

**Lexical Complexity**

The Type Token Ratio provides allows to determine the semantic diversity students display. It is determined by identifying all the different words in a given sample and comparing those words to the total amount of words. Thus we obtain the following formula:

\[
TTR = \frac{\text{Amount of different words}}{\text{total amount of words}}
\]

In order to determine the TTR, random samples of 200 word productions from students in the two media were retrieved. In the interest of time, a limited sample size allowed for easier analysis. The sample size was determined by three factors. First of all, the TTR is not a typical ratio like the CI, which resembles a probability or an average more than the TTR does. Indeed, the TTR requires that each different word be counted, yet the bigger the sample the less diverse the vocabulary, and an individual’s vocabulary
capacity will eventually be reached. Secondly, the data available did not allow for samples much higher than 200 words (particularly in the oral production groups). Finally, in the interest of time the samples were reduced to a workable size as the analysis was going to be performed by hand.

To clarify what is meant by “amount of different words” it is best to use an example. The sentence “the cat eats the mouse” contains five words total but four different words as “the” is repeated. Thus, the TTR for this sentence is 4 over 5 or .80. The difficulty is in determining what constitutes a “different” word. One particular rule was kept: only words that were semantically different were counted and therefore morphological or syntactical variations were eliminated. For example, all the variations of the French definite articles *le, la, les, l’* were eliminated after one of them was encountered once, however, I had to make sure that those words except for *l’* were not variations of the direct or indirect object complements, which would be considered differently. Other examples included conjugated variations of a verb, for instance, I eliminated *pensons*, the first person plural of the verb *penser* (= to think) after having seen *pense* first person of the singular. The importance was to remain consistent when retrieving all the data. Table 3.3 below summarizes the findings of the TTR:
Table 3.3: Summary of the TTR

<table>
<thead>
<tr>
<th></th>
<th># of different word</th>
<th>Total</th>
<th>TTR</th>
<th># of different word</th>
<th>Total</th>
<th>TTR</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student 1</td>
<td>92</td>
<td>200</td>
<td>0.460</td>
<td>Student 1</td>
<td>79</td>
<td>200</td>
</tr>
<tr>
<td>Student 4</td>
<td>83</td>
<td>200</td>
<td>0.415</td>
<td>Student 2</td>
<td>61</td>
<td>200</td>
</tr>
<tr>
<td>Student 5</td>
<td>71</td>
<td>200</td>
<td>0.355</td>
<td>Student 3</td>
<td>72</td>
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</tr>
<tr>
<td>Student 6</td>
<td>77</td>
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<td>0.385</td>
<td>Student 4</td>
<td>84</td>
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<td>200</td>
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<tr>
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<td>200</td>
<td>0.435</td>
<td>Student 6</td>
<td>88</td>
<td>200</td>
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<tr>
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<td>200</td>
<td>0.295</td>
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</tr>
<tr>
<td></td>
<td>Total</td>
<td>547</td>
<td>0.391</td>
<td>Total</td>
<td>466</td>
<td>1200</td>
</tr>
<tr>
<td></td>
<td>STDEV</td>
<td>0.054</td>
<td></td>
<td>STDEV</td>
<td>0.049</td>
<td></td>
</tr>
</tbody>
</table>

The same considerations as for the CI applies to the TTR. The TTR does not reflect language accuracy. In other words, it does not say whether vocabulary is employed relevantly, nor whether it is spelled or pronounced correctly.

Unlike for the CI, a per group analysis was not performed since not all students yielded a sufficient amount of workable data. As for the CI, data considered workable included, any data that was spontaneous, therefore all the written samples that were requested by the project were excluded. The written samples that were excluded were the summary and description of the commercial, the rationale on where to position the commercials, and the final report (see Appendix A). Thus, data from students 1, 4, 5, 6, 8, 10 and 12 of the CMC group was used. Overall, they were all very consistent and ranged from .295 to .460. The average was .391 with a standard deviation of .054, which indicates a limited dispersion from the mean. This consistency and limited dispersion suggest a marked homogeneity among the students’ semantic diversity.

Students in the F2F groups showed consistency as well. Their TTR ranged from .305 to .440, with an average of .388 and a standard deviation of .049, which again indicated a limited dispersion from the mean. As for the CMC groups this consistency
and limited dispersion suggest a marked homogeneity among the students’ semantic diversity.

Since both media are different and since the CMC carry similarities with written production, one would expect the TTR to also be different for the two media. The CMC groups should show a higher TTR, thus a higher semantic diversity than the F2F groups. Warschauer (1996) also determined the TTR for his advanced students of English as a foreign language at the University of Hawaii. The F2F group yielded a lower TTR of .262, compared to the synchronous CMC group’s of .301, as expected. Perhaps this difference can be attributed to the task Warschauer gave. Students in his research were supposed to answer two “counterbalanced questions” (p. 12). However, one would reasonably expect to find the same pattern with the present research.

Yet, both media yielded a similar consistency, as we have seen in the group analyses above. This similarity ended up being much more striking than expected since the two groups displayed a margin of only .003 between the two TTR of .388 for the F2F group and .391 for the CMC group. This is reinforced by the two standard deviation of .049 for the F2F group and .054 for the CMC group. These numbers allow us to conclude that intermediate students of French at the University of Florida display the same level of semantic diversity both orally and using asynchronous CMC communication. It further suggests that students’ language on an electronic forum is similar in semantic diversity to F2F communication contrary to previous affirmations that asynchronous communication is more diverse than face-to-face communication within the context of the task provided to the students. However, this may be because students
had used all the vocabulary requested by the task, since the task was specific and encompassed the vocabulary of two chapters from the students’ textbook.

**Implications**

None of this data suggests that one medium is better than the other. However, there are some pedagogical benefits to both of them that will be discussed herein. Then, some suggestions about running the same project or any other that would be similar will be offered in light of students’ behaviors and also in light of their feedback.

The above data suggests that running the project on an electronic forum did offer some of the benefits that were stated in the introduction. All of the students respected the rule about posting threads in French. The messages they posted included both characteristics from the oral language and the written language. Having their messages posted on the Internet certainly influenced their behavior. None of them required any particular training as to how to use the forum and most actually used it instinctively. A few students were even so familiar with the software that they developed their own profile and adopted interesting behaviors. Some of these behaviors included using a different colored font for every message that they posted (see appendix B), or the use of avatars and emoticons. The majority of the students only performed what was asked of them and, albeit, they did not necessarily find using the forum practical for the duration of the project. One can deduce that by looking at the number of threads they posted as well as their messages suggesting other means of communication. Their final feedback on the project was more obvious. Here are some examples of positive and negative feedback:

*Pour la plus part je pense que je n'ai pas apprécié ce projet en raison du format de forum. Mais, le travail était assez facile, seulement je desteste des ordinateurs.*
-For the most part I think that I did not appreciate this project because of the format of the forum. However, tasks were rather easy, I just hate computers.

-Je suis aussi pas bon avec les ordinateurs et comprendre le site était au début très dur. Mais c'est plus facile à écrire le français pendant qu'à un ordinateur parce que c'est plus rapide pour chercher des mots que vous ne savez pas.

-I am not very good with computer and understanding the site was very difficult at first but it is easier to write in French with a computer because it is faster to find words that you do not know.

Overall students reported that they did not particularly enjoy working on the forum. All the groups agreed that they needed time in class to coordinate better. Yet, members of group 2 still maintained communication on the forum after the project was over.

As for the F2F group, they enjoyed working in the language laboratory very much. Here are examples of their feedback:

-Je pense que ce projet a été intéressant. J’aimais utiliser les écouteurs. Je préfère travailler dans le laboratoire de langues que dans la salle de classe. [...]  
-I think that this project was interesting. I liked using the headphones. I prefer working in the language lab than in the classroom.

-Nous pouvions aussi pratiquer nos compétences de grammaire et communication. Le projet était une bonne idée

-we could also practice our communication and grammatical skills. The project was a good idea.

-Le projet a été très bon pour pratiquer le français. Nous avons utilisé beaucoup les mots uniques de la projet. Il a été difficile à comprendre les autres personnes dans le group quand nous avons décrivé les pubs. Mais, c’était un bon exercice pour nous parce que nous avons du comminquer nos idées entre eux. Quand quelqu’un ne comprenait pas les choses qu’un autre disait, cette personne a dû chercher un autre manière d’exprimer son idée.

-The project was very good for practicing French. We used many unique words of the project. It was difficult to understand the other people in the group when we described the commercials. But, it was a good exercise for us because we had to communicate our ideas to one another. When someone did not understand the
things that someone else was saying, this person had to look for another way to express his/her ideas.

The overall feedback on the F2F version of the project was much more positive than that of the forum. Students did indeed negotiate meaning often, which was a very beneficial exercise for all of them. The only problem was to accommodate the project and the time in the language laboratory within a pretty heavy syllabus. One of the advantages of running the project with a forum was to offer the possibility to do work outside of the classroom. Thus it was easier to accommodate the project within the syllabus. On the other hand, having to do extra work outside of class may have been a reason why students did not enjoy the electronic forum. The final product of the project was equally satisfactory with both media. However, since so many students ended up not using the forum for actual negotiation, but only to post their final thoughts, and since so many groups ended up using other means of communication, it is not clear that they actually benefited as much from the project as the F2F group did in the laboratory. Furthermore, although the forum offered controlling possibilities such as time and date when the thread was posted, it did not allow to control the rest of the students’ negotiations. These negotiations offer the best opportunity to improve students’ language skills therefore it is imperative for the teacher to be present to offer feedback and control the exchanges. The forum was indeed not as beneficial partly because the teacher did not add threads to encourage students to participate more. If the teacher had been more involved and encouraged students to post replies by asking questions for instance, perhaps students would have used the forum better. The forum could also be used in combination with a F2F medium. For instance, using the forum for posting work such as the description of the commercial and for completing the final project would be
beneficial. Students are then at liberty to review what the other groups are doing and can also check on their progress. This is what a student wrote when she/he was worried that her team had not yet made a decision as to which commercial to use:

- Vous n'avez pas choisi une pub. Mais c'est 11:52, et puis je vais choisir une pub pour le group. J'ai regardé les autres groups et il y a un group qui a choisi "le sculpteur" et il y a un autre group qui n'a pas choisi une pub mais ils peuvent choisir la pub de Axe mais je pense que il n'ont pas la choisi. Donc, je vais choisir la publicite de AXE pour notre group. Si, on peut changer plus tard quand vous avez repondre, nous changons. Si, non, donc j'ai choisi la pub de AXE pour le group.

- You did not choose a commercial. But it is 11:52pm, and then I am going to choose a commercial for the group. I looked at the other groups and there is a group that chose le sculpteur (=the sculptor) and there is another group that did not choose a commercial but they may choose the Axe commercial but I think they did not choose it yet. So I am going to choose the commercial AXE for our group. If we can change later when you answer, we will change. If not, then I chose the commercial Axe for the group.

Finally, pairing students with native speakers from a French speaking university to add a cultural exchange component to the project should be considered. Insight from native speakers would help students understand certain cultural subtleties related to the media. It is all the more important as we live in an era of global communication.

The CI helped determine that there is a difference in complexity between CMC and F2F communication, whereby CMC offer more syntactically complex communication. However, they both proved to be as varied in lexical terms. As one of the students in the F2F group pointed out, it is possible that negotiation of meaning pushes students to be more creative in an oral setting. In order to obtain more insight into both media and the languages produced therein research should be performed using additional data, such as written samples, to compare both groups so as to find out whether the type of dependent clause (such as those introduced by je pense que (I think that)) is maintained proportionately in the written samples, on the forum and in F2F samples. Thus we would be able to determine whether this proportion is more a factor of the oral
language while using CMC or not. Furthermore, future research on the matter could include additional variables that pertain to language accuracy. It is important that we look at variables that can be consistent with both media. In other words, we cannot look at spelling errors as the oral language in F2F communication does not offer such insight. Yet we can look at patterns in errors such as preposition mistakes that students would typically make. We could also look at morphological errors such as verb conjugations, particularly with the use of the auxiliary être ou avoir (“to be” or “to have”) in analytical tenses such as the “passé-composé.” Finally, we could collect additional data to determine whether the homogeneity that was found with the TTR variable during the F2F exchanges was an abnormality or not. This could be done by performing the research using different tasks that would vary in specificity in order to elicit a larger variety of vocabulary.
CHAPTER 5
CONCLUSION

The first research question of this study aimed at comparing the grammatical complexity of the language produced by two groups of students. One group produced their language on an electronic forum and the other communicated orally. In order to compare these two groups grammatical complexity, the CI, which compares the number of dependent clauses over the total number of clauses, was compounded. The results for this variable suggest that the language produced on an electronic forum tends to be more complex than the language produced orally. The written nature of the language used on the electronic forum accounts for this result. However, the CI does not take into account the types of dependent clauses and the data revealed that there was a similar number of completive clauses in the language produced with both media. This suggests that more research be performed in order to compare the quantity of the various types of clauses between the two media and written and spoken samples of the native language of the students.

The second research question of this study aimed at comparing the lexical complexity of the language produced using both media. In order to compare the language complexity, the TTR, which measures the number of different words over the total number of words, was used. While it was expected that the TTR of the language used in the electronic forum would be higher than the one used in the F2F environment, it was not the case for this research. Indeed, the TTR for both media were almost identical. One reason for this result may be the fact that at the intermediate level of their language
apprenticeship and for this particular task, students had reached and used the extent of their vocabulary bank. Thus, this data suggests that more research be performed in order to compare both media again with data coming from various tasks.

The third and final question of this research aimed at whether other patterns could be discovered from this type of data. First of all, it revealed that students display interesting behaviors on an electronic forum. The first student to write a thread is more likely to become the leader of the group and the last student to write a thread is more likely to be the student who will participate the least. Students reported that they did not enjoy working on the electronic forum claiming that it was not convenient for negotiation and, indeed, most of them ended up using other media for communication. It is possible that students did not enjoy the extra work to be performed outside of the classroom in addition to other factors, thus they did not enjoy using the forum as much as if they had had to perform the task in class. One group of students, however, enjoyed the community building characteristic of the electronic forum. Most students in the F2F group reported that they enjoyed communicating in the language laboratory. They enjoyed the new environment and felt that negotiating meaning among other aspects of the task was beneficial. In fact, some students even participated much more than in the regular class setting.

Learning about the differences between the types of language produced using an electronic forum and F2F communication can help teachers make informed pedagogical decisions on when alternative to use an alternative and how to use it when they design a task. This research revealed some of these differences and perhaps similarities.
However, additional research is necessary to examine more of these differences for teachers to be able to make better informed pedagogical decisions.
APPENDIX A
PROJECT DESCRIPTION

FRE 2200: Activité médiatique

Dear employees,

You are my best team of advertising executives, here at Famille Guillo Advertising Agency, and I am proud of the work you did on our last campaign. I have been contacted by several French clients who would like to use your talents for their campaign. Your job will be fairly easy, as our clients have already shot the commercials. This will be your first time working in an international environment so be aware of cultural differences and all your production must be in FRENCH (including the meetings).

Your first task will be for each one of you to choose a commercial and to analyze it according to our usual guidelines. The most important thing of course will be the identification of the target audience.

Then, as a team, you will have to decide on a single commercial from the ones that each one of you will have chosen. Then, individually you will have to research TV programming and choose two shows that the target audience is most likely to watch so that we reach as much of that target audience as possible. We want our client’s messages to be as effective as possible.

Once each one of you will have identified the two shows, as a team, you will have to decide on which two shows will best suit your commercial. Your budget is limited, that is why I am only allowing two shows.

Finally, you will have to give me a report on all of your progress and all the decisions you made and why. This report will be no longer than two pages.

Attached, you will find a timeline, a copy of our guidelines, links to the 2 French TV channels with the largest viewership and the guidelines for the final report.

I almost forgot… Since you are so busy, you will not be able to meet at the same time. That is why I have requested that a forum be created on our web site. Each one of you is required to post all of your work on it as well as your team communication. You will also find the link to the forum as well as guidelines on how to register.

Go ahead and make me and all of the Famille Guillo Advertising Agency proud of you again.
Respectfully,

Cyrille Guillo
President Directeur General

**Timeline for the CMC groups:**

All of your communication and production will have to be posted on the forum at the following website:


You will have to register in order to be able to post. To register click on “Register” at the top of the page. Then go to “FRE 2200 – Projet mediatique” find your group and click on reply in order to post. Do not start another thread!

1. **Pour Vendredi 25 Mars:**
   *Individually,* choose a commercial:
   Go to the following link where you may have to register (it is free):

   [http://www.pubstv.com](http://www.pubstv.com)

   Analyse the commercial according to the advertising guidelines attached.

2. **Pour Lundi 28 Mars:**
   Discuss which commercial your *team* will choose. You will have to tell your teammates why you decided on the commercial you chose. As a group you will choose the commercial that appeals to the team the most.

3. **Pour Mercredi 30 Mars:**
   *Individually,* explore these 2 French TV web site to find their programming in order to identify 2 shows that would best fit your commercial. Your goal is to reach the largest target audience possible.

   [http://www.tf.fr](http://www.tf.fr)

   [http://www.france2.fr](http://www.france2.fr)

   Write a paragraph for each show explaining your rationale. See the advertising guidelines below.

4. **Pour Vendredi 1 Avril:**
   *As a team,* decide on which 2 shows will best reach your audience for your ad campaign.

5. **Pour Lundi 4 Avril:**
As a team, work on the final report, the guidelines of which are provided below.

**Timeline for the F2F groups:**

6. *Pour Mercredi 30 Mars:*
   *Individually,* choose a commercial:
   Go to the following link where you may have to register (it is free):

   http://www.pubstv.com

   Analyse the commercial according to the advertising guidelines attached.

7. *Mercredi 30 Mars EN CLASSE au Turlington Language Lab:*
   Discuss which commercial your *team* will choose. You will have to tell your teammates why you decided on the commercial you chose. As a group you will choose the commercial that appeals to the team the most

8. *Pour Vendredi 1er Avril:*
   *Individually,* explore these 2 French TV web site to find their programming in order to identify 2 shows that would best fit your commercial. Your goal is to reach the largest targetted audience possible.

   http://www.tf.fr
   http://www.france2.fr

   Write a paragraphe for each show explaining your rationale. See the advertising guidelines below.

9. **Vendredi 1 Avril EN CLASSE au Turlington Language Lab:**
   *As a team,* decide on which 2 shows will best reach your audience for your ad campaign.

10. Pour *Lundi 4 Avril:*
    *As a team,* work on the final report the guidelines of which are provided below.

**NO LATE WORK WILL BE ACCEPTED. Failure to provide work will result in personal grade penalties.**

**Advertising Guidelines:**

In order to analyse a commercial properly you have to first identify the product, the brand, and the message, then you will provide a short summary describing the commercial and finally, you will provide a profile of your target audience. For the target audience profile, use the following major demographic variables and suggested breakdowns:
In addition, describe the possible interests and hobbies of the target group. Most of the time, interests, and hobbies can be derived from the commercial itself. Is it shot in an artistic manner? Is it showing sports of any kind? If yes which type? Is it showing wealth? Is it humorous? If yes, what kind of humor? Etc… If you watch the commercial closely you will learn many things about the people targeted, be attentive and creative!

Finally, according to your findings, anticipate and tell us what type of shows the target audience is most likely to watch and when.

**Report Guidelines:**

The report will include 4 parts.

In the first part you will describe the commercial and why your team decided to choose it.

In the second part you will provide your rationale for the 2 shows you chose for your advertising campaign.

In the third part you will discuss the cultural differences or similarities you found while choosing a commercial and while examining French TV programming. For instance, would your commercial be efficient in the US? Why or why not? What are the differences or similarities between French and US shows.

Finally, what did you think of this project? Write one paragraph.

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<td>-24</td>
<td>15-30</td>
<td>Brevet des colleges</td>
<td>-Professionel et Technique</td>
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Students need to enter the threaded topic related to their class project in order to have access to the threaded discussion (1). As the administrator, I am can maintain students’ privacy by denying the access to the forum to any one who is not registered on the forum and in the class.
Figure 2: Screenshot of the Project threaded discussions.

After students have clicked on the topic all they have to do is click on the threaded discussion of their assigned group. A little flag on the left side (1) indicates if there is a new message they have not read yet and a comment on the right side (2) tells them who was the last person to post a comment.
Figure 3: Screenshot of a thread including (1) emoticons (2) avatars and (3) personalized signatures.

Notice the different color fonts.
LIST OF REFERENCES


BIOGRAPHICAL SKETCH

Cyrille Guillo obtained a Master of Arts in English as a Second Language from the Université de Haute Bretagne, Rennes, France. He also obtained a Master of Business Administration from the University of Missouri, Columbia.