Deborah Tannen’s framework for interpersonal communication between males and females (published in 1990) was used to explore how male and female distance education students meet their primary needs through communication. The study population consisted of the 19 female and 6 male students enrolled in a 13-week computer conferencing course at the University of Calgary. An analysis of students' patterns of communication in the course's Weekly Topics sessions revealed that the men initially used four strategies to meet their primary status needs: reporting, differentiating themselves from others, separating (establishing their independence from others), and vertical aligning. By week 13, however, the men were using only two strategies: reporting and separating. The females used seven main strategies at the beginning of the course: establishing a sense of connection, interpersonal closeness, symmetry, acceptance, and horizontal alignment; making suggestions; and sharing. By the end of the course, however, they were using two additional strategies: establishing a sense of interdependence and a sense of intimacy. The women adapted to the course environment well, whereas the men were not as able to meet their primary status needs at the end of the course as they had been at the beginning. (Tannen's Cross-Gender Communication Framework is appended.) (MN)
Do Female and Male On-Line Students Meet Their Needs Differently? Introducing New Data

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Presented at the
American Association for Adult and Continuing Education (AAACE)
San Antonio Texas
Introduction

Gender bias in the regular classroom has become a prominent concern as reported by Robertson. Now the concern has spread to the virtual classroom as distance technology enables more students to access education and training experiences from their homes. How do people experience interactions with others at a distance? Studies on how females and males experience textual or voice interactions and how they meet their needs within a non-face-to-face context are important. It is important to explore student experiences and to find ways to enhance their potential for learning, regardless of whether it is in a regular classroom or not.

Computer conferencing in post-secondary education is a growing format for course instruction. This is especially the case in Continuing Education. Computer conferencing is sophisticated email where participants in a computer teleconference type their communications into computer terminals that are connected, via a special long-distance phone network, to a central computer. The central computer stores the typed message permanently and places it in a sequence with messages contributed by others. The message will be available to the conference members whenever they “sign on.” Since each participant in the “conference” so created can read the contributions of all the others, the result is true group interaction. Participants continue, sometimes for months, to contribute comments to the growing file in the central computer.

Adult students have to push beyond their daily experiences to adjust to this medium of teaching. Fabro and Garrison suggest that:

Computer conferencing is a collaborative, asynchronous, text-based communication technology which can facilitate distance education. The characteristics of computer conferencing suggest that we may well be embarking on a new approach to teaching and learning at a distance. While this may represent a new generation of distance education, little is known of the qualitative dimensions of this form of communication. That is, what effect might computer conferencing have on critical discourse and the quality of learning outcomes?

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This study is the third in a series of studies conducted within the same Continuing Education Master Degree program. Data used in the first two studies were drawn from a course taught in the program in 1995. The data from the present study were drawn from a course that occurred in 1997. The computer conferencing course that is reported on in this paper was organized into five activities: Weekly Topic, Pairs Article, Cafe, Private Chat, and Reflections. Each activity was designed with its own conferencing capabilities. Using FirstClass®, students could “click” on a specific icon on the computer screen and access the conference that was organized appropriately so the student could participate in the activity. This report focused on the data accumulated in the Weekly Topic as this was the core of the course and participation was required of each student. Each week all students clicked the weekly icon and contributed their thoughts and ideas regarding the weekly reading assignment at their own convenience. For each weekly reading, a student was assigned the responsibility to lead the discussion, summarize a reading, and pose discussion questions. All members of the class were required to respond to discussion leader’s summary. At the end of the week, another student was assigned the responsibility to summarize all the week’s dialogue.

Purpose

The purpose of the study is to explore how male and female distance education students meet their needs using Tannen’s framework for interpersonal communication. To achieve this purpose, the author investigated differences in qualitative experiences between female and male students as they participated in the Weekly Topics. Nineteen females and six males were included in the study.

Framework for Analysis

The framework used was drawn from the field of socio-linguistics. Studies in this field focus on typical responses of people, with the understanding that for every generalization or description of a population, there will be many exceptions. Deborah Tannen studied the impact of socialization of men and women and she describes stereotypical feminine and masculine communication patterns. Tannen’s framework of female and male communication may be simplified as follows (See Appendix): Both females

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4 The first study was reported at AAACE in 1996 under the title of “Participation in the Virtual Classroom: Are there Differences by Gender?” and the second study was reported at AAACE in 1998 under the title of “Gender Sensitive Instruction: A Distance Education Issue.”

and males have felt needs. Females generally feel a primary need for connection while males generally feel a primary need for status. To meet their need for connection, females create intimacy with others; while males meet their need for status by establishing distant or independence from others. Females can establish intimacy by emphasizing symmetrical relationships, built upon similarities; while males can establish independence by emphasizing asymmetrical relationships, built upon differences. Females generally interact in a manner where there exists horizontal or equal alignment among others whereas males generally interact in a manner where they are one-up and others are one-down in alignment.

This framework is compatible with learning theory, in that learning is enhanced when students possess higher levels of self esteem, and self esteem is directly proportional to a person's ability to meet their emotional and psychological needs.6

Data Analysis

The data were in the form of computer files stored in a format created by the FirstClass® program. After gaining ethics approval to implement the research design and permission from students to use the data, printouts of the conversations in the weekly topics were made and analyzed using Tannen's framework. The framework, which identified meta-messages that males and females typically communicate to meet their fundamental needs, was useful in helping the researcher to understand broad meanings that transcended the particularities of dialogue.

Male Students

During the first Weekly Topic in the computer mediated course, men in the program were able to meet their primary status needs using four main strategies (See Appendix). All men in the study used reporting in a manner that demanded attention as a primary means to maintain status, and through this means, they were able to communicate a meta-message of independence from others in the group by stating conclusions they had made. In addition, they communicated meta-messages that established their differences from others, their independence from others, and that created one-up / one-down alignments in status among the group. Thus, at the beginning of the course, men found four main strategies of reporting, differentiating, separating, and vertical aligning that would ultimately meet their status needs.

In comparison, after thirteen weeks in the computer mediated course, men only used two primary strategies to maintain their status needs, reporting and establishing their independence from others. This suggests that men experienced limitations through the FirstClass® environment that reduced their ability to meet primary status needs.

Female Students

During the first week in the computer mediated course, women in the program were able to meet their primary connection needs using seven main strategies. Women used communication that sent meta-messages that supported a sense of connection among the participants, interpersonal closeness by using names to refer to particular classmates, symmetry by establishing similarity in experiences, a sense of acceptance by asking others questions rather than expound on their own ideas, horizontal alignment in relationship by being deferential to the contributions of peers, making suggestions rather than demanding or declaring, and sharing by reporting their findings factually.

After thirteen weeks in the computer mediated course, women in the program increased the number of main strategies from seven to nine to meet their needs. They established and maintained a sense of interpersonal closeness by using names to refer to particular classmates, connection among their classmates, symmetry by establishing similarity in experiences, horizontal alignment in relationship by being differential to the contributions of peers, a sense of interdependency by building on classmates’ contributions, a sense of intimacy by acknowledging another classmate’s feelings, a sense of acceptance by asking others questions rather than expound on their own ideas, making suggestions rather than demanding or declaring, and sharing by reporting their finding factually. Thus, patterns within the data give evidence that women were not only able to use several strategies consistently to meet their primary need for interpersonal connection but they were able to adapt to the FirstClass environment and increase their ability to meet their need for connection.

Conclusions

Women were able to adapt well to the FirstClass® environment to increase their ability and meet their primary connection needs in a limited amount of time. They adapted within a thirteen week period that the course spanned. Men were not able to meet their primary status needs as well at the end of the course as they were at the beginning. According to the data at hand, men reduce their options from four main
strategies at the beginning of the program to two, namely reporting and establishing independence from others to maintain status. Perhaps women can write on-line as if they might converse with other women—without modifying their conversation. It should be noted that men were on-line too and were part of the women's audience. Although men were included in women's talk it did not contribute significantly to meeting their status needs.

Why do men not adapt well to this computer-mediated environment? A fundamental need for men is to acquire and maintain status with others. To gain status, men attempt to present themselves as different from others. In normal face-to-face communication, men can achieve status through competition; gaining the most for “air time” in a conversation and to be noticed. Men are noticed when they interrupt, speak with a louder voice, are declarative, are animated as they speak, and so on. These strategies are not readily available to men in a computer-mediated course environment. In fact, the course environment is absolutely democratic, where competition is not supported and where students can choose their own time and place to enter into the building dialogue of the course. Therefore, all members of the class can provide input without fear of being interrupted or overshadowed by others. Men, on the other hand, do not seem to fare so well achieving status under such a democratic environment where competition cannot depend upon usual strategies. Perhaps men will be better able to meet their status needs when 2-D graphics and 3-D holograms become more accessible in the computer-mediated milieu. Men may be attracted to these media so they can “show off” their skills in a more dramatic fashion, to contribute uniquely, and feel their status needs are being met.

Recall that this was the third study conducted on this program over three years. The findings replicate those in the previous two studies in 1996 and 1998. In each study, it was concluded that men were not able to adapt their communication styles within a thirteen-week course to meet their needs as readily as women were. Thus, the author feels more confident to conclude that this is an area that requires further exploration and study.

Future studies could be designed to replicate and to expand the conceptual framework to include many more perspectives. Finally, recommendations should be developed to assist program designers to create a virtual classroom milieu that supports both women and men in meeting their socio-emotional needs.
Appendix

Cross gender Communication Framework
Deborah Tannen

Table 1
Male and Female Main Linguistic Strategies to meet their Respective Needs
By Week in the Computer-Mediated Course
Cross Gender Communication

Framework for Understanding Communication between Women and Men
Adapted from Deborah Tannen (1990) You Just Don’t Understand

We meet our needs through communication and studying the patterns of speech and non-verbal communication help us to understand what our needs are and how we meet them.

Pattern of communication of males indicate that males have a primary need for status and that women have a primary need for connection through relationships.

**Males need STATUS**

gain status by achieving INDEPENDENCE

by...

being DIFFERENT
maintaining ASYMMETRICAL relationships
UP - DOWN alignments
being FREE from others
talking to REPORT things
INTERRUPTING
only TALKING WHEN NECESSARY
public LECTURING
ritualized CONTESTS as practice
BOASTING (is OK)
considering APOLOGIES as one-down

**Females need CONNECTION**

gain connection by achieving INTIMACY

by...

being SIMILAR
maintaining SYMMETRICAL relationships
HORIZONTAL alignments
being INTERDEPENDENT with others
talking to create RAPPORT
OVERLAPPING conversations
talking to KEEP communication OPEN
in public LISTENING
CONTESTING only FOR REAL
NOT BOASTING
considering APOLOGIES as conveying empathy, concern
### Table 1

Male and Female Main Linguistic Strategies to meet their Respective Needs
By Week in the Computer-Mediated Course
(Criteria for a strategy to be considered a Main Strategy is it must be demonstrated by at least 40% [0.4] of the subjects.)

<table>
<thead>
<tr>
<th>Males</th>
<th>N=5 in Week 1</th>
<th>N=6 in Week 13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four Main Strategies</td>
<td>(0.4 or greater)</td>
<td>Two Main Strategies</td>
</tr>
<tr>
<td>Reporting to Distinguish 5 (1.0)</td>
<td></td>
<td>Reporting to Distinguish 6 (1.0)</td>
</tr>
<tr>
<td>Independence 3 (0.6)</td>
<td></td>
<td>Independence 4 (0.7)</td>
</tr>
<tr>
<td>Difference 3 (0.6)</td>
<td></td>
<td>Difference 2 (0.3)</td>
</tr>
<tr>
<td>One-Up Alignment 2 (0.4)</td>
<td></td>
<td>Judgment 2 (0.3)</td>
</tr>
<tr>
<td>Being Tentative 1 (0.2)</td>
<td></td>
<td>Horizontal Alignment 2 (0.3)</td>
</tr>
<tr>
<td>Horizontal Alignment 1 (0.2)</td>
<td></td>
<td>Asking Questions 1 (0.2)</td>
</tr>
<tr>
<td>Being Tentative 1</td>
<td></td>
<td>Using Names 1 (0.2)</td>
</tr>
<tr>
<td>Horizontal Alignment 1</td>
<td></td>
<td>One-Up Alignment 1 (0.2)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Females</th>
<th>N=17 in Week 1</th>
<th>N=19 in Week 13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seven Main Strategies</td>
<td>(0.4 or greater)</td>
<td>Nine Main Strategies</td>
</tr>
<tr>
<td>Making Connection 14 (0.8)</td>
<td></td>
<td>Horizontal Alignment 18 (0.9)</td>
</tr>
<tr>
<td>Horizontal Alignment 12 (0.7)</td>
<td></td>
<td>Reporting to Share 15 (0.8)</td>
</tr>
<tr>
<td>Using Names 10 (0.6)</td>
<td></td>
<td>Using Names 15 (0.8)</td>
</tr>
<tr>
<td>Reporting to Share 11 (0.6)</td>
<td></td>
<td>Making Connection 11 (0.6)</td>
</tr>
<tr>
<td>Asking Questions 9 (0.5)</td>
<td></td>
<td>Rapport/Intimacy 9 (0.5)</td>
</tr>
<tr>
<td>Similarities 6 (0.4)</td>
<td></td>
<td>Asking Questions 8 (0.4)</td>
</tr>
<tr>
<td>Making Suggestions 6 (0.4)</td>
<td></td>
<td>Making Suggestions 8 (0.4)</td>
</tr>
<tr>
<td>Interdependency 5 (0.3)</td>
<td></td>
<td>Similarities 7 (0.4)</td>
</tr>
<tr>
<td>One-Down-Alignments 3 (0.2)</td>
<td></td>
<td>Interdependency 7 (0.4)</td>
</tr>
<tr>
<td>Making Declarations 2 (0.1)</td>
<td></td>
<td>One-Down Alignment 4 (0.2)</td>
</tr>
<tr>
<td>Rapport/Intimacy 2 (0.1)</td>
<td></td>
<td>Being Tentative 3 (0.2)</td>
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<td>Thomas D. Gougeon</td>
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