Women in Computer-Mediated Discussions

Strategies for facilitators, moderators and Web-designers.

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Abstract:

This paper explores issues in relating to women's use of the Internet for both formal and informal learning purposes. It outlines research that illustrates the gendered nature of online communication and the ways in which such communication can inhibit participation and learning for women using email discussion groups on the Internet. The paper discusses the findings of some research investigating what enables and constrains learning through email discussion groups. Differences in communication patterns between men and women were found, as well as differences in the ways in which email discussion groups manage challenge, and thus learning. Suggestions are offered for email-list owners, moderators and facilitators of Online learning environments.

1. INTRODUCTION

At the heart of this paper is the assumption that, as industrialised countries move further toward a "knowledge economy", those with access to knowledge and information are likely to be better positioned to reap the benefits of such an economy than those who are not. Access to and use of information and communications services have important economic, educational and social benefits and those who are excluded from such participation will also be excluded from those benefits [10]. In the knowledge economy, computer skills and use of the Internet are now expected.

It is contended that access to information technologies and use of the Internet stratifies individuals into the information rich and the information poor, and that this may worsen economic disparities between those with and without computer and information technology (IT). Such a disparity has

been predicted by some researchers as signalling a "digital divide" [16]. There is evidence to suggest that access to the Internet will be a necessary element in economic and political empowerment and representation in society. Workers who have computer and Internet skills earn 15 percent more than those in similar jobs who cannot use computers [3]. According to research conducted in America [2] 77 percent of Internet users said that Online services made them more productive on the job, while 87 percent said that the Internet provided more efficient access to information they need every day. Information technology allows those with access vastly expanded opportunities to network socially and professionally Online, providing information as well as support. This situation is exacerbated as educational institutions increasingly use information technologies and the Internet to deliver courses.

Is "technology" the solution? Will it create the "cyber-utopias" its proponents suggest? Or will it further existing inequalities, thus creating "cyber-ghettos" [3]. This paper explores some of the issues in relation to women's use of the Internet for informal learning purposes. In so doing, it extends some research reported earlier [11] and illustrates the gendered nature of Online communication and the ways in which such communication can inhibit participation and learning.

The paper addresses the following questions: are there differences in how men and women use and communicate on the Internet and if yes, what are they; and how can facilitators of virtual learning environments create spaces where women feel encouraged and able to have their say in ways that are appropriate and inclusive?

According to the literature, involvement and participation in technology is stereotypically masculine. It is generally accepted [10,15] that since their inception, men have dominated information networks and communication services. Although use of the Internet by women, for example, has increased dramatically in recent times, research undertaken still shows women and girls use the Internet less and in different ways to men [10,14].

Whilst the gap between males and females in computer experience appears to have diminished in recent years, females are still reported to have higher levels of computer phobias and negative computer attitudes [7,18]. However, Plant [12] warns us not to stereotype all women as harassed and computer-phobic, or with negative attitudes to computers. She believes much feminist theory entrenches notions of "technophobia" by adopting this view. According to Wakeford [17], rather than promoting mass media stereotypes of women on the Internet as harassed and computer-phobic, debate needs to focus on Online gender relations. Wakeford argues that many women design their own Web-pages, run email discussion groups and are explicitly creating women-centred projects as alternative spaces in computing culture.

Research undertaken at the Centre for Research and Learning in Regional Australia and funded by the Australian National Training Authority, investigated the characteristics of the learning process when it is facilitated by computer mediated communication in non-formal learning contexts. It is argued that successful learning involves reflection on experience and the transformation of that experience through conceptualisation and action [9], and that this process occurs in a social context. Non-formal learning is becoming increasingly important as continuous learning and improvement processes become recognised as imperative for organisations, interest groups and communities to keep up to date in response to changing environmental conditions [11]. To develop a greater understanding of how people interact and communicate in computer mediated communication, it is important to learn more about this new and genre, and to ascertain how computer mediated communication might enhance or inhibit the learning process. The premise of the research reported is that the use of email discussion groups in both formal and non-formal learning situations will be enhanced if we know and use those features of email discussion groups that facilitate learning. Of particular interest in this paper is the ways in which learning was enabled and constrained by differences in gendered communication patterns and what facilitators of learning within these environments can do to ensure learning and communication is inclusive.

2. RESEARCH METHOD

Following university ethical clearance for the research, potential email discussion groups were identified. The sample included email lists from workplaces, professional development and small business groups. List owners were contacted, advised of the purpose of the research and how it would be conducted and asked to post to the list a "notice of intention to subscribe to this list for research purposes". Seven list owners agreed to participate. Data were collected from seven groups over a one-month period, yielding 41,809 lines of text for analysis.

2.1 Differences in patterns of communication in email discussion groups between men and women.

Herring [6], drawing on the work of Carol Gilligan, hypothesised that there would be linguistic differences between male and female online communication. Specifically, she predicted that females' Online postings to email discussion groups would be more supportive and tentative, while male postings would be more adversarial and status enhancing. According to

Herring [6] there are more assertions, self-promotion, authoritative orientation, and challenges by males. Alternatively, females offer more attenuated assertions, apologies, supportive remarks, explicit justifications and personal orientation [6]. The research reported here investigated the nature of the communication in a number of email discussion groups. In some groups the majority of participants were women, or men, and in others the gender was mixed. In analysing communication patterns, it was observed that there were a number of put downs directed from men toward women as a result of a challenge made by a woman contributor, which was in turn ignored and deflected. In comparing the communication patterns of a mostly male group with a mostly female group, the levels of challenge and conflict appeared to be comparable in both groups, yet there was more evidence of self-effacement, and the use of conciliatory and encouraging comments in the female group, thus supporting the work of Herring [6].

In further research it would be interesting to explore in further research what the overall male/female ratio is in the groups which exhibit these sorts of characteristics, and how this might influence the levels of male/female participation. These findings draw some researchers [e.g., 10,13] to conclude that women may find all-female groups more desirable, because such groups allow women to create a greater uninterrupted voice, and one that is less confrontational and more supportive. However, it is argued that from the data in this research, that whilst enabling women to create their own "spaces" is important, it is not a sufficient condition to guarantee/promote learning.

2.2 Learning in email discussion groups

One of the most interesting features which was common to all of the groups surveyed was the prevalence of "challenge" present in the interactions among group members. The reason that this feature is so interesting is because of the potential for challenge and a challenging environment to both enhance and inhibit learning, depending on how it is managed. It is generally recognised that challenge and support contribute to a conducive learning environment [1]. A supportive environment is necessary for individuals and group members to feel safe to take risks and to disclose fears and/or concerns to the group. Challenge is also needed for learning, to encourage participants to critically examine and clarify their assumptions, thinking, value systems, attitudes and/or practices [8].

However, there were two differing outcomes from the challenges that occurred in the discussion groups, as illustrated by communication patterns within Groups "A, B and C". Communication patterns within these three groups were closely scrutinised for similarities and differences in terms of

communication patterns. The analysis included following five topics or "threads" within each of the groups and examining the content of communication. Group A (mixed gender) exhibited a consistently positive outcome from the challenges that were issued. This is compared with differences in outcomes associated with challenges presented in Group B (mostly male) and Group C (mostly female). How challenge was managed in Group A included features such as: high moderator involvement; a climate of respect, support and consideration for the other members was maintained: personal attacks were minimal, and those that did occur were either 'snipped' by the moderator or publicly addressed; clarification processes seemed to be successful; and the discussion or thread seemed to progress and develop. However, when people were challenged in groups B and C there were a number of factors which seemed to contribute to an increase in dissonance among group members and to the lack of progress and positive development in discussion. The challenges seemed to result from individual misunderstandings and misinterpretations of a previous post, which in turn lead to conflict, tension, dissonance and personal attacks. Kaye [8] stressed that '...challenging and feedback are more likely to succeed when they are not construed as personal attacks' (p. 223, emphasis added). The participants of Groups B and C spent more time restating and reproducing their own positions and opinions on an issue, rather than discussing the introduced topic and the contributions of the other members. It would seem that the challenges and dissonance that occurred within these groups had an inhibiting effect on the discussion and the groups' processes, rather than a constructive result.

One of the main contributing factors in the increase of dissonance among group members was the prevalence of misinterpretation of a message and how this misinterpretation and following clarification were handled. Conceptually, the communicative process involves the coding of messages into the chosen medium: speech or text. The recipient of the message then, through a process of interpretation, decodes the message. In order for the communicative process to be completed the message must be received and understood [4]. However, to achieve this understanding there is a process of interpretation. Interpretation and interpreting are integral parts the communication process. However, it is recognised that interpretation is a complex process [4], and that any text will produce "multiple meanings, alternatives, ambiguities, metaphors" [5, p.xiii]. Consequently, it is during this process of interpretation that tensions can be created through misinterpretation.

In the data there was evidence of extensive misinterpretation, and the difficulties of making oneself understood and clarifying meaning. A number of arguments emerged and continued among list members as they attempted

to make clear the meaning of their previous posts and discussions, attempting to clarify and correct the various interpretations presented by other list subscribers. Such misunderstanding can create frustration, irritation, anger and tension between members of the list and seem to be the catalyst in a number of 'flames' (a message that includes aggression).

These incidences of negative challenge seemed to follow a particular pattern of misinterpretation among members of groups B and C. Initial misinterpretation which occurred was conveyed to the original speaker as a criticism of their ideas and often as a personal attack. The following clarification tended to be defensive and confused with other issues. As a result, the interactions became more personal, the disagreements began to involve other participants, and the discussion of the original topic became stagnant. It is important to note that the tensions and conflicts that started between individuals often crossed over into other threads and involved more participants. It would seem that these arguments were neither isolated to one topic nor to a small number of members, but moved and involved a number people.

However, it should be reiterated that dissonance and conflict among groups and individuals does not always have an inhibiting effect upon learning and productive discussion. Learning can involve the contestation of ideas, a process that is often linked with the feelings and the emotions of the learner. Such a situation will produce dissonance and tension among individuals as they reflect and critically examine their own values, assumptions, thinking and ideas. Similarly, disagreements can also be beneficial in group development as people to learn to work with others and as a group. Through reflection and discussion of such dissonance, group members can learn how to operate their group processes more effectively. The tensions which exist within these forms of computer mediated communication are similar to those which occur when any form of interaction, in particular written communication, is subject to 'decoding'. However, it should be noted that electronic communication is, in many ways, different to conventional written language. It is more visual and possibly more expressive through the use of "emoticons" that indicate that over time this form of textual communication might become recognised as a new genre of communication [5,15]. Email list-owners, moderators and facilitators of Online learning environments can enhance the communication processes they are encouraging by becoming aware of the ways in which such communication patterns are mediated by gender [3].

3. STRATEGIES FOR EDUCATORS AND THE DEVELOPMENT OF INCLUSIVE PEDAGOGIES

The findings outlined in this paper support the following conclusions and provide strategies for those interested in enhancing continuous and ongoing learning using email as a form of computer-supported communication. They include:

- (1) Group based email communication serves different purposes. It is important for those planning to establish email lists to consider the purposes the list is to serve. Is it to provide information and to play a role similar to a bulletin board? Is it to encourage discussion and problem solving? Is it to support an emerging community of practice? The purpose of the list will have implications for the ways in which the list may need to be moderated.
- (2) People use lists for different purposes. There was some evidence, from the private emails received in support of the research project from group members, that a lot of people observe and monitor the email discussion without participating. While many might be happy to remain silent members, it is important to consider ways in which the structure of the email list may limit opportunities for participation. For example, many discussion group are multi-threaded, and if members receive their email posts in one digest form, it can be hard to monitor all of the different conversations and reply to them before the topic has moved off in a another direction. In all seven groups, the level of group participation in the discussion recorded for one month averaged 9 percent of total group membership. Examining reasons for differing levels of participation and developing strategies for enhancing participation is an area that requires further investigation.

In contrast to silent group members, are those who treat the email forum as a "stage" for their own purposes and needs. There were a few people who seemed to revel in their capacity to inflame a situation, create disruption and/or to take the discussion off on a tangent suited to their own ends. Responses included taunts, put downs and antagonistic comments. In many of these emails, a gendered discussion also seemed apparent, with a number of put downs directed from men toward women as a result of a challenge made by a woman contributor, which was in turn ignored and deflected. Group members and the moderator have a role to play here in making sure the dialogue occurs in a climate which respects all participants.

(3) When dialogue involves issues of genuine importance to people, there is a capacity for the discussion to become heated, particularly when it involves a clash of values. List moderators and members need to consider the level of intervention that may be required to bring a conversation to a close or to remind group members of the protocols of productive dialogue. In

one list, the moderator played a facilitative role in a reasonably unobtrusive way, by regularly posting the "guidelines for participation" to the list. This seemed to work as a reminder to list members of the public nature of the virtual space in which they were operating and thus as a means of providing focus on the purposes of the list. The moderator's level of intervention and ways in which potentially inflammatory situations are managed can also provide a role model for list members. A rich area for future research would include examining the similarities and differences between the roles of a moderator and a group facilitator; identifying the educative strategies email moderators could bring to their role.

(4) As a means of attempting to resolve potential points of misunderstanding, group members could monitor the degree of message complexity in their own posts. Is the purpose of the message to seek clarification of someone else's post? To provide clarification of an earlier contribution? To support, refute or expand on an idea? It seemed that there was a greater incidence of misunderstanding when all of these aspects were combined into one message, without first ensuring that the receiver has interpreted the message as it was intended.

These conclusions are presented as a means of identifying strategies that can enhance email communication to support learning and development. Computer-mediated communication presents opportunities to enhance and transform the way we work, live and communicate with others. However, it also has the capacity to simply transfer a range of inequalities and dysfunctional communication approaches that can inhibit learning and development in this social context. Attending to the ways in which learning is part of the email communication process is important so that processes supporting and enhancing electronic communication as a medium for learning can be effectively established and supported.

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