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ELECTRONIC DISCUSSION GROUP LISTS IN ADULT LEARNING

Mauri P. Collins
Research Associate, Office of the Provost
Northern Arizona University
P.O. Box 5751
Flagstaff, AZ 86011-5751
520-523-4059
Fax: 520-523-0057
mauri.collins@nau.edu

Zane L. Berge
Director, Training Systems
ISD Graduate Program
UMBC
1000 Hilltop Circle
Baltimore MD 21250
410-455-2306
Fax: 410-455-3986
berge@umbc2.umbc.edu

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Introduction

Online electronic discussion groups (EDGs) are formed as a result of voluntary association (Harnack & Fest, 1964). Some persons use EDGs to gather information, to explore different perspectives on the same issues, much as they would a library. Other participants meet online with colleagues to informally discuss ideas, to promote creative thinking and to listen to others in much the same way as they do in person, by phone or at a seminar. An exploratory survey of a purposive sample of electronic discussion groups was conducted to determine the reasons a random sample of participants would give for joining electronic discussion groups, the benefits they derive from their membership, the metaphors they would use to describe lists; the general effects of list participation, and to determine if they considered their participation in their respective lists as a learning experience.

A EDG is a type of computer conference that functions as an electronic forum--a place to hold open discussions on topics of mutual interest (Harnack & Fest, 1964; Gulley, 1968). Electronic discussion groups exist for many different reasons, with over 8,000 public and 19,000 private electronic discussion lists on the Internet. Access to electronic mail is all that is needed to participate.

This paper is background information for our conference presentation. Here we will examine EDGs as venues for informal adult learning and knowledge networking. The conference presentation will outline the advantages and disadvantages of such lists, and highlight scholarly discussion groups (SDGs)--a subset of EDGs--as an avenue for self-directed, adult learning at a distance.

Off-line and On-line Discussion

Brookfield (1990) notes that "discussion encourages active, participatory learning" (p. 190) and helps learners explore their experiences so that they can become more critical thinkers. Discussion serves to "expose learners to a diversity of perspectives on an issue, topic or theme; help learners externalize the assumptions underlying their values, beliefs and actions; assist learners in perspective taking, and introduce learners to elements of complexity and ambiguity in an issue, topic or theme" (p. 192). There is a large body of literature on the functions of face-to-face discussion groups (Brookfield, 1990; Brookfield, 1986) in and out of formal adult learning.

Brookfield (1986, p. 135) attributes the attention paid by adult educators to face-to-face discussion groups to their goals of "encouraging adults to undertake intellectually challenging and personal precarious ventures in a non-threatening setting." Interacting openly in discussion groups with their peers, adult learners can practice aloud with the new conceptual tools they are acquiring. Supportive feedback can be forthcoming as they tentatively articulate changing ideas and opinions, as can rousing arguments as opposing perspectives clash. Learners can be exposed to widely divergent points of view, lifestyles and belief systems and receive encouragement as they enlarge and revise their own world-views. These same activities can and do occur in on-line scholarly discussion groups.

Electronic Discussion Groups

The context of the EDG is somewhat different from a face-to-face group and EDGs in this study are specifically not part of formal educational settings (although many members may be part of formal educational communities).

There are almost 20,000 public and private online electronic discussion groups on the Internet where people "come together" asynchronously to discuss topics of mutual interest. These electronic discussion groups provide a forum in which participants can exchange, via electronic mail (email) information, argue, discuss articulate ideas more clearly, try out new ideas, reflect on the inconsistencies in their own logic and in the observations of others, and discover multiple or varying perspectives on issues of interest to their group (Berge. 1994, p. 103; Hahn & Stout, 1994, p. 516). They can engage in discussion that can lead to creation, experimentation or discovery--a process that may lead to change--and to those activities such as reaching a collective dialogic wisdom (Berge 1994, p. 103).

It is our contention that such lists, especially those whose intended purpose is scholarly discussion, have much in common with other voluntary associations of adult learners (Harnack & Fest, 1964, Knowles, 1977) that have developed over the years. We suspect adults join EDGs to take advantage of opportunities for "enlightenment", although they may not make such a decision consciously or describe their reasons for joining using that particular term. Brillhart (1974) describes enlightenment as "a fuller understanding, a wider grasp of information pertinent to a topic, or consideration of a problem from as many points of view as possible" (p. 117).

While EDG members can articulate a purpose and intention to learn from the discussion; much incidental learning also occurs, and members derive many benefits, including keeping updated in their professional field, getting materials, getting answers, learning the medium, a sense of belonging, a chance to express themselves and networking for contacts. They may also use these groups as newsletters, to get and provide information, or to exchange ideas and experiences (Rojo, 1995).

Research has been conducted on EDGs from a communications perspective but there is no indication in the literature that participants in non-academic EDGs consider them to be a venue for learning, self-directed or otherwise. Perhaps exposure to discussion online creates, in and of itself, such a learning venue. If this is so then it might indicate that EDG membership may enhance self-directed, any time, any place adult learning. This information can provide instructors with a rationale for decisions concerning the use of electronic discussion lists as an adjunct to place-based classes or as a replacement for classes in distance learning situations.

Peterson (1979), making the distinction between "deliberate education" and "unintentional learning" in the Sources of Education and Learning (SEL) typology puts "schools, non-school organizations and individually used sources" into the domain of deliberate education (p. 14). Peterson claims that "unintentional adult learning is a fact of life for everyone; it is a concomitant of living. However, one can conceive of environments, particularly interpersonal environments, that are more stimulating than others and thus make for more frequent unintended learning" (p. 18). He adds that people learn without intending to, in what academic psychologists call "incidental learning": "Learning, as the acquisition of new cognitive, affective, or motor response, is virtually synonymous with living" (p. 64).

On-line electronic discussion groups can be one of those "more stimulating" environments. Some members contribute frequently to EDGs however, no individual is required to post comments as a condition of membership (except perhaps, on a few lists, as an introduction). Most subscribers can and often do, to use Internet parlance, "lurk" (Newby, 1993, p. 34) and only listen/read, forming an large audience for the ongoing discussion. This can give rise to the sense that one is observing an ongoing small group discussion or a panel discussion with a revolving roster of discussants. Such listening/reading can be a valuable activity in itself for apprentice scholars who have the opportunity to watch other minds at work.

Rojo (1995) in her dissertation examined participation in a random sample of twelve scholarly electronic forums in terms of subscribers' adoption processes, purposes for participation, contribution rates and patterns of use and perceived benefits.

Contribution was operationalized as 1) asks for information; 2) provides information; 3) asks complex questions; 4) responds to complex questions; 5) makes short comments; 6) makes elaborate comments. Benefits and modes of use were operationalized as 1) keeping updated; 2) getting materials; 3) getting answers; 4) learning about the medium; 5) feelings of belonging; 6) possibility to express oneself; and 7) enhancing contacts. Many of the categories used in the research described in this article were derived from those developed by Rojo.

The Online Context

Participants in online electronic discussion groups need only to have access to an Internet-accessible electronic mail (email) program in order to participate.

Logistically, the "discussion" appears in participants' mailbox as a continuing series of email messages, and are replied to by sending an email message back to the mail handling software that automatically manages the mailing list, (i.e., an electronic form of Internet mail distribution list similar to a magazine subscription list). Whenever a message is sent to the address of the list, the message is automatically distributed to every address in its database. When a message is received from the mailing list, it can be treated as all other email--it can be deleted, read or stored, or responded to. Mail volume is usually manageable, but some lists receive many hundreds of posts a day (Harris, 1993).

Once subscribed to a particular discussion group, a subscriber receives an email copy of every post distributed to that list and from this can internally construct a "discussion" and sometimes, even a sense of "virtual community" (Quarterman, 1993; Rheingold, 1993). There is value in this "in your face" aspect of mail delivery from a list - it is right there in the mailbox whenever it is opened. The same kind of discussion can be achieved in web-based conferences, but members must remember to log into the discussion every day in order to keep up, and this can easily be forgotten.

Meaning-making Metaphors

As noted above, EDG discussion occurs in the form of an exchange of electronic mail messages among a group of subscribers and appears as text in an email message in their computer systems' representation of a mailbox. In the reading of these messages participants often construct metaphors to provide "a sense of familiarity and provide navigational and cognitive aids, helping to organize the interactions and set participant expectations . . . [they also] convey what is socially appropriate" (Harasim, 1993, pp. 29-30; Newby, 1993) in the situation. Spitzer (1986) likens EDG communication to a slow motion panel discussion (which infers an audience) while others have likened it to a conversation being held in a room full of people, or some

other informal face-to-face gathering, or a long and drawn-out after-dinner conversation. (Berge & Collins, 1995).

Research

The discussion lists purposively chosen to serve as case studies are ones the authors are either the listowners or members of and familiar with the personalities, discussion and dynamics (Berge & Collins, 1993). List members also passed the survey on to others. This resulted in the following groups:

LDSSIS-L (n=60, approximately 50 percent of the list membership; IPCT-L (n=58, approximately 5 percent of the list membership) OCC-L (n=17, approximately 5 percent of the list membership) and the following where the total list membership was unknown: LDSIRC (n=7), LIAHONA (n=6), LOISCLRK (n=4), STAT-L (n=1), and GUNDOG-L (N=1).

The Lists

The lists differ greatly in membership and purpose will be described as each constitutes an individual community with different histories and cultures. This understanding will aid in the interpretation of the results.

IPCT-L - Interpersonal Computing and Technology List

IPCT-L was started in February 1992 and initially attracted more communications scholars than those involved in the 'computing' and 'technology.' IPCT-L was very active for almost three years (averaging 10--15 posts a day), until a leading discussant died suddenly. No one stepped forward to fill his role (Newby, 1993 p. 34) and as the listowner's interests had moved elsewhere, the list has become very quiet over the past year, with between 1 and 10 posts a week.

The survey was posted to the entire membership of IPCT-L but initial response was low (21 responses). Those respondents were deleted from the list roster of 996 members in 49 countries (on July 29, 1996), which was then randomly sampled and private messages sent until an approximately five percent random sample was obtained.

OCC-L - Online Community College List

This list is for online community college teachers and is owned by a community college teacher in Hawaii. Discussion is sporadic and revolves around the triumphs and trials of online teaching. Traffic varies from several messages a day to one or two a week.

LDSSIS-L

This list is for women only and the only other commonality is their faith expression. The list has been growing steadily over the past 9 months and now has approximately 240 members who talk to each other at the rate of approximately 4000 lines a day (the list is set to a maximum of 100 messages a day which otherwise would be regularly exceeded). Discussion ranges widely from complex theological topics to managing marriage and family relationships to recipe exchanges.

The Other Lists

LIAHONA is a list for young adults; LDSIRC is for managers of a group of Internet relay chat groups; LOISCLRK for aficionados of the Lois and Clark television show; STAT-L is a list for statisticians and GUNDOG-L for those who raise or enjoy hunting dogs.

The Survey

From the literature review an electronic survey was constructed to investigate list members' definition of their list membership and their definition of EDGs as a deliberate or incidental learning experience. Participants were asked their reason for joining; the benefits they felt they derived, the rate of their contribution and participation, the intentionality of their learning, the metaphors they used to frame the setting of the discussion, and their opinion of the perceived effects of participation in EDGs. The following demographics were collected: length of time on the list; and membership of other lists and gender; age; and educational level. From two prior electronic surveys, (of the *IPCT Journal* (Berge and Collins, 1996) and the DEOSNEWS journal (unpublished)), the online population had been described as more male than female (approximately 80/20 percent), well-educated, with more respondents in the 35-55 age groups.

Findings

Demographics

One hundred and fifty-four list members responded to the survey: 99 women and 55 men with 67 percent of those in the 36 to 55 age group. They were from eight different countries with the majority (74 percent) from North America. List membership ranged from very new to well experienced: 46 (30.1 percent) had been members for less than three months; 31 (20.1 percent) three to six months; 23 (14.9 percent) six to twelve months; and 53 (34.6 percent) for more than a year. These were well educated persons with only 3.3 percent having less than high school graduation; 5.9 percent only having high school graduation; 25.5 percent some college or associates degrees; 19.6 percent having earned Bachelor degrees, 26.8 percent Masters degrees and 17.6 percent doctorates. They are also experienced list users with 76.3 percent belonging to between two and more than 9 lists. From prior research we can

say this group differs from the readership of lists we have studied in only one respect: the unusually high representation of women.

Involvement

Respondents were asked about their involvement with the list: 52 respondents read posts as they come, 65.1 percent saying they read posts daily, 23.5 percent weekly 3.4 percent monthly reflecting the frequency of postings to the lists. Respondents were asked how often they contributed by asking for and providing information, asking and answering questions, making short and elaborate comments, and sharing experiences. A range between 16 percent and 32 percent said they never contributed and a range between 20 percent and 24 percent said they contributed at least yearly. The proportion of those who contribute is unusually large in this sample, as the general accepted ratio of "lurkers" to contributors is approximately 10:1 (Newby, 1993, p. 34).

The following results reflect some consistency, but also a wide range of differences, too. The lists members as groups were sufficiently different that SPSS Discriminant Analysis correctly classified 69.8 percent of the respondents by list.

Table 1: Respondents' top five¹ reasons for joining electronic discussion groups

IPCT-L	OCC-I %	LDSSIS %	other %	all %	
89.0	94.1	85.0	94.7	88.3	Generally interested in topic
31.0	41.2			26.3	Have questions about the topic
46.6	47.1	66.7	73.7	57.8	Looking for others interested in topic
39.7	39.7	81.7	84.2	61.0	Looking for forum to share opinions
25.9	41.2			15.6	Looking for job-related resources
		76.7	63.2	44.2	Looking for community/belonging
	41.2	65.0		39.6	Looking for personal resources
			36.8	24.0	Looking for recreation
	76.5			25.9	To develop/upgrade talents or skills

Most respondents (88.3 percent) joined because they were generally interested in the topic of the list discussions and were looking for others with whom to discuss those topics (61.0 percent) in a forum where they could share opinions (39.7 percent) and to upgrade/develop their talents or skills (25.9 percent). (See Table 1)

¹ Respondents were asked to check all that applied.

Table 2: Respondents' top seven benefits from list membership¹

IPCT-L %	OCC-I %	LDSSIS %	other %	all %	
84.2	88.2	96.6	89.5	90.1	I get information valuable to me
70.2	76.5				Staying updated in my field
54.4	82.4		68.4	60.5	I can learn about list topic
50.9	58.8	94.9	94.7	74.3	Exchange thoughts/ideas/opinions with others
42.1	58.8	84.7		61.8	I get materials I can use
38.6					Professional development opportunities
	76.5	91.5	94.7	67.8	I can ask questions
	76.5	89.8	84.2	60.5	I get answers to my questions
	58.8	88.1			I get help solving my problems
			78.9	59.2	Feeling of community/belonging
		83.1			The possibility to express self, feelings
			84.2		Exchange experiences, stories with others
35.1					Networking/making contacts

Respondents felt they benefited most by getting information that was of value to them from reading the list postings (90.1 percent) exchanging thoughts, ideas and opinions their (74.3 percent); asking questions (67.8 percent), getting their questions answered (66.4 percent); getting useful materials (61.8 percent), learning about the list topic (60.5 percent) and increased feelings of community and belonging (59.2 percent). (See Table 2.)

Table 3: Respondents' top three metaphors: What is a List most like?¹

IPCT-L %	OCC-I %	LDSSIS %	other %	all %	
70.2	70.6	88.3	84.2	79.1	A ongoing small group discussion
42.1		58.3	36.8	45.8	A series of private conversation(s)
		88.3	36.8	51.0	An ongoing support group meeting
	52.9				A professional conference
	35.3				A newsletter
40.4			42.1		A ongoing panel discussion with an audience

To most respondents the discussions most resembled ongoing small group discussions (79.1) percent, a series of private conversations (45.8 percent) or an ongoing support group meeting (51.0 percent). This is despite the number of persons

actually subscribing to the lists ranged from 160 (LDSSIS) to over a thousand (IPCT-L). (See Table 3)

Table 4: Respondent's top five effects of participation in mailing list groups¹

IPCT-L %	OCC-I %	LDSSIS %	other %	all %	
98.3	100.	100.	100.	99.4	Increase knowledge
85.5	82.4	91.7	100.	89.0	Change perspectives/outlooks
74.1	70.6	91.7	63.2	79.2	Increase skills
69.0	70.6	91.7	94.7	81.2	Change attitudes
	58.8				Improve literacy
60.3		96.7	89.5	77.3	Reduce isolation/loneliness

When asked in about the effects of participant in electronic discussion groups in general 99.4 percent of the respondents agreed that an increase in knowledge was a primary effect; with a change of perspectives or outlook (89.0 percent), a change in attitudes (81.2 percent) and increase in skills (74.1 percent); and a reduction of isolation or loneliness (77.3 percent). The first four effects listed are those that also appear as effects of face-to-face discussion. (See Table 4)

Lists as a Venue for Learning

There was, however, general agreement among all the respondents on the following: "Without trying to, one can learn (acquire new knowledge, skills and feelings about oneself) simply by undertaking different activities at home, at work, and at play. Is your learning from this discussion list:"

Table 5: Lists As A Venue For Learning

IPCT-L %	OCC-I %	LDSSIS %	other %	all %	
29.1	17.6	21.7	10.7	22.1	Mostly unintentional, incidental, just happens
10.9	23.5	3.3	15.8	9.7	Mostly planned, deliberate, what I am here for
52.7	58.8	73.3	73.7	64.9	Both, at different times
7.3		1.7		2.6	I don't learn from this list

Only 2.6 percent of the respondents felt they did not learn from the discussion on the lists to which they belonged. This indicates that a very high proportion of the respondents to this survey agreed that they did learn from the very different lists and discussions they participated in as either contributors or listeners. (See Table 5)

Conclusion

Once again: communication on EDGs appears as email messages that arrive in subscriber's private electronic mailboxes. Despite the fact list membership varies from a few hundred to almost 1000 members, the respondents framed EDG discussion as most like a small discussion group, a series of private conversations, or a panel discussion in front of an audience. This speaks to the sense of "intimacy" in communication that listeners/readers construct from the text messages arriving in their mail boxes from other list members.

While "generally interest in the topic" is the principle reason given for joining lists (88.3 percent), looking for a forum in which to share opinions (61.0 percent), and subscribers were also seeking out others interested in the topic (57.8 percent). Particular benefits that participants derive from their membership include getting valuable information (90.1 percent), exchanging thoughts, ideas and opinions (74.3 percent), ask questions (67.8 percent) and, because of the nature of electronic communication receive prompt answers to their questions (60.5 percent) and get materials and information that they need (61.8 percent), all functions similar to face-to-face discussion groups for enlightenment/learning.

Most respondents (99.4 percent) agreed that one effect of participation in discussion groups is "increases knowledge", with 89.0 percent saying it also changes perspectives and outlooks; and 81.2 percent saying that it changes attitudes. Ninety-three percent of respondents say that they do indeed learn from their list participation with 9.7 percent saying that is their plan and design for membership; 22.1 percent saying their learning from the discussion is incidental and 64.9 percent saying they learn both incidentally and deliberately at different times. This may well be for all the same reasons that discussion can be a good learning method in adult face-to-face groups (see above).

This study was limited in that the lists purposely chosen for this pilot study are not necessarily representative of all Internet discussion lists. Most of the respondents (87 percent) from the IPCT-L had been members for more than 2 years and remembered the list in its hey-day rather than in its present almost dormant state. Several remarked they were responding to the questions on the basis of this remembered experience. LDSSIS has the highest proportion of new members and the highest level of message traffic. Rojo (1995) feels that the age of the list has a effect on the rate of participation with older lists having lower levels of traffic.

Discussion lists have always attracted a high proportion of scholars and 90 percent of the respondents to the survey had some education beyond high school graduation. To the extent that old learning is a predictor of new learning (Brookfield, 1986, pp. 5-6), the general agreement that EDGs are a "learning" place may be a function of these lists and these respondents.

Before EDGs can be generally accepted as situations where lifelong learners seek out self-directed learning opportunities, further research is needed with more representative samples from many other electronic discussion groups that randomly represent the proportion of scholars to non-academics now using the Internet, and that are not deliberately framed as "scholarly" discussion groups.

Significance for Practice

Knowing the characteristics of EDGs in terms of their perceived value to adult learners, the advantages and disadvantages of such lists and the extent to which EDG membership may enhance self directed, any time, any place adult learning can provide instructors with an academically acceptable rationale for decisions concerning the use of electronic discussion lists to extend or replace their face-to-face classes. Such information can also frame the format and content of learning opportunities delivered to homes through the cable modems and web-television networks of the not-so-distant future.

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