

# Conferencing – An Exploration Into Connectivity, Content and Community

## Conferencing – An Exploration Into Connectivity, Content and Community

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**ABSTRACT:** The electronic conference, Bits and Bytes: An Online Symposium on the Evolution of Technology in Education, was a joint initiative of the Faculty of Education at Memorial University of Newfoundland and the Centre for Advanced Placement Education at Discovery Collegiate. The format of this electronic conference (e-conference) was similar to that of an on-site conference, with a call for submissions, a peer-reviewed processing of these proposals, and a presentation of the accepted proposals. However, the participants of this e-conference never met in a specific locale in a synchronous time frame, as is the case with traditional conferences. The authors and participants interacted in a virtual sense, with presentations, commentary and feedback taking place in an asynchronous time frame.

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### *Introduction*

What is an e-conference? What is involved in creating and actively participating in an e-conference? Without trying to add to the mystification and hype of the Internet, simply stated, e-conferencing is a new form of academic interaction. E-conferencing utilizes new formats and mechanisms for communication among scholars. Web-enabled conferences are characterized by scholarly content being technologically transformed using computer-mediated interactions. By augmenting the traditional oral presentation of papers at a conference, e-conferences extend the presentation and ensuing discussions beyond the confines of a conference site at a specific date. Scholars are simultaneously connected on a global scale. While e-conferences will not replace the traditional conference, it will, if utilized properly, re-place the scope of our notion of the academic conference.

### *"Bits and Bytes" E-Conference*

The electronic conference, Bits and Bytes: An Online Symposium on the Evolution of Technology in Education, was a joint initiative of the Faculty of Education at Memorial

University of Newfoundland and the Centre for Advanced Placement Education at Discovery Collegiate. It was co-chaired by Marc Glassman, a professor in the Faculty of Education, and Michael Barbour, a doctoral student at the University of Georgia in Athens (although at the time of the e-conference a teacher at Discovery Collegiate).

On March 8, 2001, a "Call for Papers" was issued through a number of list servers and online newsletters. The deadline for this call was April 30, 2001. At the deadline there were 21 different abstracts submitted and all twenty-one were accepted. These presenters were given a deadline of August 31, 2001 to submit their final paper. On May 7, 2001 a "Call for Participants" was issued through the same list servers and online newsletters that the Call for Papers was issued. A second Call for Participants was issued to the list servers, online newsletters and directly to all the participants of the annual Society for Teaching and Learning in Higher Education conference.

Once all the papers had been submitted, user accounts were created for all presenters on September 18, 2001. This allowed the presenters to check the online presentation of their paper and to post an initial or opening question to the e-conference's discussion forum. User accounts were then created for all registered participants on September 30, 2001. The e-conference took place from October 1-14, 2001.

Following the actual e-conference, all registered participants were sent a copy of all the papers that were submitted and a transcript of the discussion forum on November 11, 2001. On that same date, a feedback form was sent to all registered users to obtain their thoughts and impressions on the e-conference. A total of ten presenters and participants replied to this feedback form.

### *Literature Review*

Within a period of time from the middle of the decade of the 1990s, the creation of a form of cyberculture was well underway. This virtual culture focused primarily on virtual communities and online identities, and enabled the sharing of thoughts, ideas and feelings over a vast expanse of time and space. Since Howard Rheingold published *The Virtual Community* in 1993, much has been written about communities on the Internet. Prior to the entity we call the Internet, communities were considered by sociologists to be people who lived or worked close to each other. At times, this community would be a gathering of like-minded people, or people sharing a common goal or need. The world-wide Internet transforms this traditional sense of community in that it enables a variety of people to form communities regardless of where they are located in the physical world.

Sabatini (2001) contends that there is a need for "customized leaning environments" for adult learners that utilize web technologies and multimedia resources. He continues this line of thought with the contention the "dynamic, interactive and collaborative settings" are needed to enhance learning and the exchange of ideas. The Bits and Bytes e-conference was specifically this form or innovation that he contends is critical for the development and implementation of effective learning communities.

The development of any professional is continued when these professionals are able to share their views and research in an open forum. Little (1993) contends that this form of professional development should offer the participants in this forum of exchange "...meaningful intellectual,

social, and emotional engagement with ideas, with materials, and with colleagues both in and out of teaching” (p. 138).

Williams (2003) writes of the embedded nature of knowledge creation and the subsequent exchange of this new knowledge. He contends that the “just-in-context” management of this knowledge is “...specific to time, place, sequence and timing ...within discourse communities/communities of practice...” Thus, the development of papers by various individual participants for the Bits and Bytes e-conference was at the onset of knowledge creation. However, unlike traditional on-site conferences in which papers are presented simultaneously, the opportunity to manage the exchange of knowledge in an asynchronous e-conference format helped to create a unique community of scholars.

The format of the non-traditional learning environment appears to describe the basic structure and theoretical rationale underlying the Bits and Bytes e-conference. Consequently, any new paradigm for scholarly conferences must recognize that significant changes are necessary in the roles and responsibilities of both the presenters and participants in an e-conference. Such changing roles and responsibilities, however, are not to be undertaken without prior consideration of the function and form of traditional academic conferences. Thus, “...change, whether desired or not, represents a serious personal and collective experience characterized by ambivalence and uncertainty” (Fullan & Steigelbauer, 1991, p. 32).

The terms such as e-learning, telelearning, distance education, or distance learning have been applied interchangeably by various researchers to a variety of academic programs and audiences, utilizing various multiple-media formats. The theoretical premise for such learning formats are rooted in the concepts such as the separation of teacher and learner in space and, or, time (Perraton, 1988), the self-directed nature of learning by the student rather than the distant instructor (Pea, 1994), and a synchronous communication between student and teacher, mediated by print or an alternate form of communicative technology (Garrison & Shale, 1987; Keegan, 1986).

Doise and Mugny (1984, pp. 35-36) argue that the learning process is more “progressive” when intellectual peers with different “cognitive strategies” towards the creation of knowledge work together and engage in direct “conversational conflict.” There is, for obvious reasons, no opportunity for direct face-to-face contact in the e-conference format unless one utilizes a synchronous video conference webcast. Even then, this format is not the typical face-to-face contact one might have at a traditional conference. However, an e-conference enables a wider community of scholars to join together, in a virtual sense, and engage in the “conversational conflict” that Doise and Mugny contend will allow for a learning process and understanding which utilizes the “causal principles of deductive reasoning.”

It is the contention of Mayben, Nichols, and Wright (2003) that the wide variety of web sites that currently exist could be of benefit to collaborative research in numerous ways. They contend that the technology and infrastructure to use this technology is widely available and is “...accessible by anyone, anywhere, at anytime.” For the “virtual team”, specific web sites provide a relevant “communicative and informational resource.” The current utilization of the Internet provides a technological advantage which allows academic cooperative and collaborative teams to

“...archive textual, visual, audio, and numerical data in a user-friendly format.”

Aviv, Erlich, Ravid, and Geva (2003) devised a model which might prove helpful for the process of knowledge creation and exchange in any subsequent Bits and Bytes e-conferences. They state that their “Interaction Analysis Model” for the “knowledge construction process” would be useful in guiding the analyses of exchanges within an “asynchronous learning network.” Their model is segmented into the following five phases:

1. Sharing/Comparing Knowledge
2. Discover/Explore disagreements
3. Synthesis via negotiating meaning
4. Testing/modifying proposed synthesis vs. schemas, theory, facts, beliefs
5. Proofs of reaching agreements or meta-cognitive admitting change of knowledge.

Aviv, et al. (2003) contend that the processes undertaken by collaborators within “different cooperative scenarios” will differ somewhat in the various phases they reach. However, “‘Asynchronous Learning Networks’ will make the process of cooperating and collaborating ‘more transparent’”, in that “...a transcript of conference messages can be used to assess individual roles and contributions and the collaborative process itself.” This process was part of the undertaking of the creation and sharing of knowledge with the Bits and Bytes e-conference.

Hirumi (2002) contends that there are basically three questions which, when asked and answered, will provide insights into the e-learning process. These questions are as follows: (a) “How does e-learning differ from other modes of instruction?”, (b) “What are meaningful e-learning interactions?”, and (c) “How do you design and sequence meaningful e-learning interactions?” The nature of the interactivity among the participants of the Bits and Bytes conference provided a visual record of the access transactions and inputs by each participating scholar in the e-conference. In hindsight, one might see how Hirumi’s three questions might provide a scaffolding format for the next Bits and Bytes e-conference. There were the obvious differences between the traditional conference environment and the e-conference environment. The nature of the interactions were critical commentaries upon each of the scholarly works presented, in a virtual manner, by the contributing authors. These interactions might, in the future, be facilitated through the utilization of advance organizers, which would serve to focus the initial discussions and interactions of each article.

Reflecting the view that an interactive exchange of knowledge and ideas enhances the development of professionalism among educators, Lieberman and Miller (1990) might view the implementation of an online e-learning conference in a favorable light. They contend that the “...establishment of new norms of collegiality, experimentation, and risk-taking by promoting open discussion of issues, shared understandings, and a common vocabulary” is an essential aspect of professional growth (Lieberman & Miller, 1990, p. 1049). They emphasize the need to develop new “professional cultures” in academic areas with structures that enable educators “to collaborate with colleagues and participate in their own renewal and the renewal of their schools” (Lieberman & Miller, 1990, p. 1051). The Bits and Bytes e-conference attempted to undertake this form of professional renewal.

Norris, Mason, Robson, Lefrere, and Collier (2003), provide a theoretical rationale for the process and procedure that was attempted in the Bits and Bytes e-conference. They contend that: In a pervasively networked world, individuals are part of intersecting networks of interest and communities of practice. Knowledge becomes tangible as digitized content, as context that can be digitally shared, and through direct and indirect interactions. Knowledge can be created by asking a question and watching the responses provoke cascading conversations, responses, and interactions among network participants. The networked world continuously refines, reinvents, and reinterprets knowledge, often in an autonomic manner. (Norris, et al., 2003)

The Bits and Bytes e-conference was created for the exchange of views pertaining to peer-reviewed papers. This formative and on-going assessment of the content of various accepted papers was undertaken in an asynchronous interactive manner, consistent with the views of Norris, et al.

*Data-Participant Statistics/System Usage/Discussion Forum Usage*

As has been discussed in the previous section, there are a number of advantages to an electronic conference compared to a real-life academic conference. One of the advantages that has been stated is that individuals can participate regardless of their geographic location. Individuals do not have to be concerned with the cost of travel or accommodations. This was also the case with the Bits and Bytes e-conference. Table 1 provides a geographic distribution of both the participants and presenters in the e-conference.

Table 1 - Location of Participants and Presenters

Location	Registered participants	Participants who logged on	Accepted presenters	Presenters who submitted papers
Newfoundland	18	8	6	4
Rest of Canada	24	13*	3	2
United States	35	7	7	2
Algeria			1	
Argentina	2			
Australia	1			
New Zealand			1	1
South Africa	1			
Togo	1			
Turkey			3	
Unknown	5			

\* one of the "Accepted Presenters" did not submit their paper, but did participate as a "Participant."

Table 1 indicates that individuals from five different continents registered for the e-conference. It is unlikely that individuals from New Zealand or Turkey would have been able to physically travel to Newfoundland to be a presenter at this conference, had Bits and Bytes been a traditional live academic conference. If they had been able to, it certainly would have been a costly venture for them to do so. Along similar lines, it is also unlikely or quite costly that individuals from South Africa, Argentina or Australia would have been able to travel to Newfoundland to attend a conference as participants.

Over the five months that individuals had to either submit an abstract for the e-conference or to register to be a participant for the e-conference, there were 109 individuals that registered to be

involved with the e-conference. This was broken down into 21 presenters and 88 participants. During this time, these numbers decreased and there were only 10 presenters and 28 participants who access the e-conference site. Table 2 provides the number of presenters and participants who accessed the system and their usage of the various tools of the e-conference.

Table 2 - Usage of the E-Conference

	Participants		Presenters
Registered for conference	88	Submitted abstract	21
		Submitted paper	12
Assessed e-conference	28*	Assessed e-conference	10
Assessed conference papers	28*	Assessed conference papers	9
Read message in discussion forum	18*	Read message in discussion forum	9**
Posted message in discussion forum	7*	Posted message in discussion forum	9**

\* one of the "Presenters" did not submit their paper, but did participate as a "Participant."

\*\* not the same nine "Presenters."

As it is illustrated in Table 2, all of the participants who accessed the e-conference read at least one of the conference papers, two-thirds of the participants read messages in the discussion forum and one quarter of the participants posted their own messages to the discussion forum. One of the main difficulties with both the low number of registered participants and presenters that accessed the e-conference was the time involved. In over a dozen instances, the e-mail address that an individual used to register for the e-conference was not active by the time accounts were created at the end of September.

Another difficulty that arose was when the users actually accessed the e-conference. While most of the users accessed the e-conference on the very first day, some waited until the later stages of the two week period. The date of first access for the e-conference participants is indicated in Table 3.

Table 3 - Date of the Users First Access

	Number of users who accessed e-conference on this date
01 October	19
02 October	3
03 October	1
04 October	0
05 October	1
06 October	0
07 October	0
08 October	0
09 October	1
10 October	1
11 October	1
12 October	0
13 October	1
14 October	0

Almost 15% of the e-conference participants waited until the second week of the e-conference, with one individual waiting until the second last day. However, it should be noted that the participants who responded to the feedback felt that the length of time allocated to the discussion of the paper was seen as adequate. One suggestion that was made was to provide access to the papers ahead of time, so that participants could have the opportunity to read the papers in advance of the discussion, in some cases an individual paper could amount to over twenty pages. It should also be noted that the above table does not include the presenters, who had access to the system before 01 October, in order to check the presentation of their papers and to post a initial discussion message.

In addition to when the users first accessed the e-conference, it is also interesting to note the total length of time that the users accessed the system (i.e., how many days between their first access and their last access). While 19 participants accessed the system on the first day, only three of these individuals continued to access the e-conference until the very last day. Exactly half of the participants accessed the e-conference on one day only, many of these accessed the e-conference on the first day and did not return after that point. Only 25% of the participants accessed the e-conference for more than one week (i.e., more than seven days). Based upon comments provided in the feedback forms, the main cause of the lack of time in the e-conference was due to the workload of many of the participants.

Another issue that may have affected both the amount of time the e-conference was accessed and the level of discussion of many of the papers was the amount of reading for the participants. Table 4 indicates the number of times that each of the content pages was accessed by both participants and presenters.

Table 4 - Pages Accessed by Page

	Participants	Presenters	Total
Welcome	38	12	50
List of Abstracts	55	10	65
Barbour & Collins	16	8	24
Barbour & Kinsella	16	7	23
Clayton	18	20	38
Hill & Reeves	14	12	26
Hinch	14	22	36
Reid	19	13	32
Robardet	14	13	27
Glassman	18	15	33
Pittman	17	21	38
Stevens	15	11	26
Total	254	164	418

Unlike a traditional conference, where the results of a 10 or 20 page research paper or report could be summarized in 15 or 30 minutes prior to a discussion on that topic, the participants in this e-conference had to read the presenter's paper in order to have full knowledge of the topic being discussions. As was mentioned earlier, in some instances these papers exceeded twenty pages and in only one instance was the paper summarized by an MS PowerPoint presentation. The significantly higher number of times that each paper was accessed, compared to the total number of messages posted to the discussion forum indicates that if a participant spent time in

the system, much of it was spent accessing the e-conference papers.

In addition to the number of times each paper was accessed, another measure of the level of participation during the e-conference was the number of messages that were read and posted by individual participants and presenters. This data is summarized in Table 5.

Table 5 - Discussion Forum Usage by User

User	Number of messages read	Number of messages posted
Participant 01	75	5
Participant 02	13	1
Participant 03	52	0
Participant 04	13	0
Participant 05	49	0
Participant 06	49	1
Participant 07	48	0
Participant 08	14	0
Participant 09	13	0
Participant 10	26	0
Participant 11	7	0
Participant 12	34	22
Participant 13	2	0
Participant 14	17	2
Participant 15	18	1
Participant 16	35	0
Participant 17	12	0
Participant 18	75	3
Presenter 01	18	9
Presenter 02	50	7
Presenter 03	16	9
Presenter 04	21	2
Presenter 05	50	3
Presenter 06	1	0
Presenter 07	26	3
Presenter 08	21	4
Presenter 09	76	3
Presenter 10	0	1

As illustrated in Table 5, all of the participants and presenters were more “lurkers” than anything else. A lurker is the term used to refer to a user who reads messages within a discussion forum, but chooses not to actively participate in the discussion (i.e., by posting their own message). A user can be only a lurker, such as participants 03, 04, and 05 (i.e., they post no messages of their own) or a user can also be a partial lurker, such as participants 01 and 02 (i.e., while they post a scatter message, they still tend to stay away from active participation). While there is no define level of active participation which makes a user no longer a lurker, it is generally accepted that a lurker is someone who monitors the participation of others without becoming too much of an active participant themselves.

Table 5 also illustrates that the majority of the messages were posted by the presenters themselves. The table also indicates that most of the individuals who posted messages to the



discussion forum were the also presenters, while the participants chose to lurk for the most part. The one exception to this trend was participant 12, who posted more messages to the discussion forum than any presenter and all the other participants combined. There may be three reasons for these trends. The first was that the presenters had access to the system prior to the participants and some began their discussion of other's papers before the official start date of the e-conference. The second reason could be because the presenters were more comfortable in using the WebCT system, again because they had access to the system longer than the participants. Finally, as was suggested earlier, the presenters had the time to read each others' papers prior to the beginning of the e-conference, while the participants may have spent the early part of the conference simply reading the papers.

One of the professed advantages of the e-conference is that it allows participants to access the system and participate in the e-conference at anytime. While the majority of messages were posted during the times that a traditional conference would occur (i.e., 8:01 a.m. to 12:00 p.m. and 12:01 p.m. to 4:00 p.m.), over one-third of the messages were posted after the traditional business day had concluded. In addition, approximately 12% of the messages were posted from the hours of 8:01 p.m. to 8:00 a.m., times when most traditional conferences participants are attending social functions or sleeping. This e-conference usage during non-traditional hours allowed participants to participate in the e-conference when it was convenient for them.

Another measure of discussion forum usage that was recorded included which day of the e-conference that messages were posted to the discussion forum. The majority of the discussion occurred during the first week and that after a week and a half the discussion appeared to trail off. The data also indicates that Monday (i.e., October 1st and October 8th) was the most active day in both weeks. Tuesday (i.e., October 2nd and 9th) and Wednesday (i.e., October 3rd and 10th) were also fairly active days.

### *Observations*

The first Bits and Bytes e-conference was a learning process for the both the hosts and the presenters and participants. Based upon the geography of the presenters and participants, the goal to create an academic conference in which individuals from around the globe could take part in without having to worry about cost, travel, accommodations, etc. seems to have been successful, at least in part. The majority of the participants were from Canada, with a large percentage of these being from Newfoundland. Almost all of the participants were from some part of North America. Only a few presenters or participants were from outside of North America. These are all trends that would have been similar to a real-life conference that were held in the province of Newfoundland.

However, it was the usage by presenters and participants where the differences between this e-conference and a traditional real-life conference occur. Rarely in a real-life conference would participants attend for the first day and then skip the remaining 13 days. Rarely in a real-life conference would a participant show up on the second last day of a 14-day conference. However, both of these occurred in the Bits and Bytes e-conference.

Another difference between the e-conference and a traditional real-life conference is the nature of the e-conference discussion. Participants are usually limited in the amount of time as well as when that time is allocated to be able to participate in traditional conference discussions. This

was not the case with the Bits and Bytes e-conference. As has been illustrated in the previous section, the discussion on individual papers lasted for the entire e-conference. In addition, participants were free to participate whenever they wanted. This was evidenced by that fact that some participant posted messages to the discussion forum during the midnight to 4:00 a.m.

### *Recommendations for Future E-Conferences*

Based upon the feedback from presenters and participants, there were a number of suggestions that were made to make future e-conferences more successful than the Bits and Bytes e-conference. As has been stated earlier, making the papers available to the participants prior to the beginning of the e-conference discussion was one suggestion (e.g., “I think I would have liked a little more time to read the papers before participating so that I could do more justice to some of the responses I gave.”). This would allow participants the opportunity to consult the papers and become familiar with the material prior to being thrust into a discussion of the finer points of that paper or issue. Another suggestion that was raised was for the presenters to be more active in the discussion forum. It was also suggested that the presenters could have been more inviting in their initial comments to the discussion forum and then to acknowledge various posts with additional questions or follow-up points to encourage the participants to continue their involvement in the discussion (e.g., “I feel the conference presenters could assist by welcoming comments and affirmation of participants responses.” Or “Maybe some clear discussion points could be added to encourage more discussion.”). Another strategy that presenters could have utilized to increase the amount of discussion that occurred was to provide summaries of the discussion on a daily or semi-daily basis (e.g., “My participation might have been increased if there had been a periodic summary of the emerging discussion. Such as summary would have kept me alerted to interesting threads and perhaps taken me back to the site again.”).

While most stated that they had no problems with following the instructions on how to access the WebCT system, there were some that experienced difficulties, both in accessing and using the system. One participant suggested that the system that hosts the e-conference should be as easy to navigate and transparent for the participant to use (e.g., “I found that the login process did not work for me for the first few times and I had difficulty logging into the site and getting to where I was supposed to be to participate. For the future, I would suggest making it as simple as security, etc., will allow.”). This would allow participants to access the e-conference in greater numbers, as there were participants who had registered and had intended to access the system, but could not do so due to technical difficulties. If the e-conference system were easier to utilize, it would also increase the number of participants and their individual level of participation.

Finally, the time frame utilized leading up to the Bits and Bytes e-conference was too long. As has been stated earlier, from the time that the Call for Presenters and Call for Participants were issued to the time that the presenters and participants were notified that their accounts had been created, a significant number of the e-mail addresses that had been provided were no longer active. This also meant that a number of the abstracts that had been accepted were never submitted as papers. While some were due to inactive e-mail addresses, others were due to the fact that accepted presenters waited until later in the summer to write their papers and as September approached, they simply ran out of time. In some cases, individuals who had been accepted as presenters participated in the e-conference as participants. However, most did not participate at all.

In addition to the time frame involved, the amount of and timing of the communication to those who had registered for the e-conference was also called into question by at least one of the participants (e.g., “I would suggest that the e-conference could be improved by the provision of more up-front description of what the conference was about, right on the e-conference home page. I know that we all got an email message about this, but the email message was so far ahead of the actual e-conference [at least a couple of weeks for me] that by the time the conference had started, I had forgotten the exact purpose of it. A little more hype about the conference in general wouldn't hurt.”). The inclusion of a descriptive opening page within the e-conference system, along with better descriptions of the process of the e-conference and the expectations of the participants would be useful in future e-conferences.

Finally, some aspects that were not considered by the organizers of this e-conference that were recommended for future e-conferences included live discussions and a different structure for the papers. The reliance on solely an asynchronous discussion forum was a decision of the conference organizers, however, some participants felt that it could have been supplemented with live discussion or chat sessions (e.g., “Maybe some live chats could be included regarding certain papers to foster more participation.”).

In terms of the structure of the e-conference, to provoke an increase in the level of discussion in the asynchronous discussion forums, one participant suggested that the e-conference could be structured in a way that the paper were presented in thematic ways and that in each theme there was one paper on each side of the issue (e.g., “Also maybe you could have two sides of an issue posed with each paper to give us more fodder on which to respond.”). This debate-style presentation would provide the participants with two sides of an issue and allow them to discuss both sides and their own views without simply having to agree with the presenter and expand upon the presenter's ideas with descriptions of their own experiences or scholarship.

#### *Conclusion*

The Bits and Bytes e-conference was a learning experience for all whom organized and participated. While the logistics of creating and implementing a successful conference is daunting, regardless of format or venue, there is much to be said as to the positive aspects of an e-conference.

Scheduling and cost/benefit trade-offs are two factors that favor the utilization of the asynchronous e-conference format as a medium of academic sharing of knowledge and expertise. It would be possible for an academic to actually attend two or more e-conferences simultaneously, a fact that would be extremely difficult with traditional conferences.

Changes in information and communication technologies have generated new forms of literacy. In this brave new world, it becomes necessary to be able to identify specific aspects of relevant research, to critically evaluate the validity and reliability of this research, and to utilize this information to resolve problems and create new issues for future research. This new literacy implies not only a need for the creation of new knowledge, but an innovated and expanded means of disseminating this new knowledge. E-conferences assist in this dissemination in innovated ways. A unique social environment is developed in the creation of and participation with e-conferences. With this development comes a theoretical framework that will serve as a

scaffold for future e-conference experiences and encounters.

However, as with every learning experience there are things that the organizers have taken away from this event that they would do differently in the future. A system that was easier to access would be utilized. The e-conference site would be fashioned in a more informative way, both in terms of how the e-conference will proceed and the expectations of both presenters and participants. Procedures would be put into place so that presenters encouraged more participation from participants. Consideration would be given to the use of live chat sessions to supplement the asynchronous discussion. Finally, the promotion of the e-conference would be significantly changed to shorten the length of time involved in both the organizational procedures (e.g., Call for Paper, Call for Participants, etc.) and the communication on when and how to access the e-conference site.

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