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## ABSTRACT

The purpose of this paper is to shed light on the developmental stages of academic publication collaborations through both research on the collaborative process itself, as well as through analysis of the discovery process. Using the qualitative software package, NUD\*IST, the teleconferencing system, FirstClass, and standard e-mail, the study discovered methods which enhanced both the conceptual development and writing process of co-authored academic research for publication. Working collaboratively online offered the authors great flexibility and focus in the production of a co-authored research based paper. The following elements were critical to the project's success: conferencing system with an internal real-time chat function; conferencing system with an e-mail element for transfer/archiving data; system to code differences in text versions and edits; method to concurrently code and merge data for analysis; flexible time to meet online to stay on track; and trust and respect in the partner's abilities. With the exception of the technological interface that such an endeavor demands, the same or similar elements emerged as would be found in the traditional "presenced" collaborative environment. The most significant missing element was the distractions that can result from tangential and casual conversations. (AEF)

Writing in the Ether:  
a collaborative approach to academic research

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## INTRODUCTION

In this presentation, we will discuss and outline strategies used in the production of an academic publication. We developed a set of efficient and expansive methods to research and write at a distance. Using the qualitative software package, NUD\*IST, the teleconferencing system, FirstClass, and standard e-mail, we discovered methods which enhanced both the conceptual development, and writing process of co-authored academic research for publication.

The findings in this presentation spring from work we did in the area of discourse analysis, and distance education. We sought to understand the ways in which listserv participation by undergraduate students exposed dynamic discourse patterns. Advanced technology packages gave us an ability to work both independently and interdependently as we parsed data, developed coding schema, merged information, and discussed findings.

## A NEW AVENUE FOR COLLABORATION

As educators embrace and explore the electronic learning environment, new systems towards collaboration within this environment also present themselves. In this paper, we hope to shed light on the developmental stages of academic collaborations through both research on the collaborative process itself, as well as through the analysis of our own discovery process. This presentation chronicles that collaborative experience, as it related to and followed research paradigms in the structure of creative collaborations.

In his work on the collaborative process, Dr. Mel Roman, professor emeritus [of Psychology] of the Albert Einstein College of Medicine, identifies a variety of characteristics common in successful collaborative teams (Roman, 1996). The shared elements in highly successful teams include a commitment to a common purpose and an understanding of the goals. Successful working groups also share an awareness of the skills and competencies that each individual brings to the project. These understandings promote an environment of respect and trust, where members feel free to express themselves openly and honestly.

Roman also describes the developmental processes involved in collaborative work as including phases of inclusion, dependency, control, and kinship. During these phases, participants discover their place in the project, and gain an orientation of expectations of themselves and others within the group. As the project continues, an affinity to the group can develop, promoting a cohesion and high level of morale in the work. This cohesion can produce a "mission mania" in the participants, as they discover intense satisfaction in their participation in a working-community based on merit, passion, and shared vision (Bennis & Biederman, 1996). Indeed, it is suggested that the intensity of collaboration is potent enough to make everything that follows seem drab and ordinary.

Much of the literature available today is based on face-to-face interaction where proximity, and physical relationship between the collaborators adds a different set of both professional and personal boundaries. We strove to discover how non-presenced collaboration operates in the on-line environment. Would communication follow the same patterns as those exhibited in face-to-face collaboration, or would the platform force a new or different pattern to emerge? What were the significant benefits and hindrances of working distally. What strategies were employed to achieve the highest level of cooperation, collaboration and progress?

## **A SHARED VISION**

Our commonalities converge in the area of online communications, so it was natural for us to see advanced technology as a convenient means to satisfy the impositions of coordinating a writing workload against our conflicting schedules. We were both already familiar and facile with SoftArc's intranet software, FirstClass, which houses a reliable and fast real-time chat feature, and internal mailbox, providing us a "cyber-office" platform from which our messages and data could be maintained, organized, transferred and archived. In essence, FirstClass served as the "room" in which our real-time meetings took place.

## **ORGANIZING FOR SUCCESS**

The collaboration created the need for a certain discipline of organization in maintaining the work, and also an element of urgency in sharing our findings, especially as we developed and worked with the open coding structure. A method was developed to facilitate the merging of codes, and co-editing of documents on-line. We also developed a "strawman" workflow schedule to ensure that all of the work would be completed in time to meet common deadlines. As our on-line conversations grew more regular, the formality of the schedule became flexible and far more fluid.

A separation of responsibilities emerged rather organically. Research directions and intentions were discussed casually during on-line sessions, or e-mailed back and forth in FirstClass on a regular basis. Though no formal agreement was established at the outset of the project, we tended to meet briefly on-line several times per week. During the course of the collaboration, no more than a few days passed without contact. Information about literary resources was exchanged back and forth to eliminate a duplication of search effort, build a common knowledge, and to inspire comment and discussion.

Using a common word processing application, and initiating a strategy towards maintaining cohesion between versions, we created a system of color codes, and version numbers to keep us on track with changes and edits. While co-editing the paper, text-strikethrough indicated deletions, while new additions were coded in a specific color for

each writer. This method allowed us to quickly reference additions and cross-edit each others new contributions. Stylistic variations of voice were “discussed” virtually through online chats using the FirstClass system.

The nature of our exploration into discourse analysis in the asynchronous environment, provided us with much excitement about the potential extensions and further research possibilities for our field. Having already acquired the body of data for our study, we set out to find a qualitative software package that would allow us to parse, sort, and code the content of our data-base of email interactions concurrently. The QSR product, NUD\*IST, provided just such a platform, also extending us the opportunity to merge our independent work into one form for analysis. With the technical elements in place, we were set to begin our distal collaboration.

## **WHAT IS LOST AND GAINED?**

Some posit that effective communication is seriously restricted by technology, where visual cues and physical or non-verbal references are not manifested. However, recognizing that communication in synchronous cyber-environments can be as texture- and content-rich as those occurring in verbal conversation, new understandings towards ways to express and perceive extraverbal communication becomes a practical need for users of this platform (Menges, 1996).

Our personal experience within this collaboration proved to us that distance could serve as a benefit in keeping form, content, and personal interaction focused on the work at hand. Tendencies to digress, or get tangential were far less evident in our online conversations than they were in our face-to-face meetings. The distal setting imposed a loose formality that was conducive to accomplishing work in a timely and organized manner. Our personal styles of communication within the distal environment, specifically in the area of chat, were sharpened and honed, allowing for quicker and more “streaming” exchanges.

The issue of misunderstandings in online postings is often noted as a limitation and problem of the platform. The lack of visual signifiers, inflection, and tonality, amongst other things, can lead to meaning being misconstrued. We acknowledge this dynamic as a potentially significant issue, and look forward to research into the expert/novice elements that may impact this dynamic. Perhaps as a result of our familiarity and facility in online discussions, we experienced few, if any, significant misunderstandings stemming from our text exchanges.

As we progressed into the study, a competitive spirit emerged as each of us worked to meet and surpass the others expectations and output. This shared excitement towards the project, followed the theory of cohesion and the “mission mania” rubric mentioned in the workings of traditional collaborative teams. Keeping to the organic evolution of the research and subsequent paper, we retreated to individually crafting and developing ideas presented by the data that were most personally interesting to each of us.

As we each had specific avenues of expertise or experience, the division of labor followed as a natural extension of our individual research. Part of the strength that we recognized in this collaboration was in the ability to capitalize on the background and perspective of each other, as well as the foundation that we share as academic colleagues, to add a rich dynamic that neither could easily provide independently. The challenge was to then work in concert to form one voice, and learn the best of each other's materials, to fortify and extend our independent understanding of the topic.

## CONCLUSION

Working collaboratively online offered us great flexibility and focus in the production of a co-authored research based paper. Systems and strategies to organize the workflow and responsibilities need to be discussed and implemented at the start of such an endeavor to insure a shared vision of the end result.

The following elements and strategies were critical to our success:

- Conferencing system with internal real-time chat function
- Conferencing system with email element for transfer/archiving data
- System to code differences in text versions and edits
- Method to concurrently code and merge data for analysis
- Flexible time to meet online to stay on track
- Trust and respect in each others abilities

With the exception of the technological interface that such an endeavor demands, we saw the same or similar elements emerge as would be found in the traditional "presenced" collaborative environment. The most significant missing element was the distractions that can result from tangential and casual conversations. While this is not to say that the online workspace is devoid of the social element, in our case, the social aspect had less of a detrimental time-impact on the production of the work at hand.

Regular participants of on-line discussion groups have acquired a range of new communicative tools that convey attitude and emotion. These tools can enhance the collaborative process, maintaining a level of focus and control in the tasks. As technology has evolved, allowing for multiple methods of data processing, real-time chat, image transfer and more, researchers can achieve an enriched experience working collaboratively.

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