

## **Bridging Voices: Interactive Dialogue as the Touchstone in e-Learning Communities**

DIRK FLINTHART, VIRGINIA LITTLE, BETSY STEFANY  
Online Learning Programmes  
The College of Exploration  
Tasmania, Australia, Kalamazoo, Michigan, Syracuse, New York  
Australia, United States of America

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*Abstract:* This paper addresses 10 years experience from three educators engaged with online learning programs--from design and implementation to evaluation--and what we've learned through the process. The authors emphasize the value of the dialogue process embedded within thinking process and particularly in e-learning design as applied to research based and applied pedagogical contexts. The thematic strand is communications theory in relation to learning design and delivery.

*Keywords:* online education, communications theory, e-learning, dialogue

### **1 Introduction**

The writing of this paper delineates the result of theory applied to practice. Although the three authors' online learning projects vary in goals, domain and age groups, their observations and conclusions about e-learning are consistent. The writing of this paper exemplifies this very process as all of the writing was accomplished online in collaboration. The authors first created a dialogue around a common goal, then brainstormed and shared individualized thoughts, and finally synthesized and crystallized the collective dialogue, wrote and edited the paper to share with others in a larger community.

In 1996, Dr. Virginia Little created the online learning community, B.E.A.T St., an acronym for the intersection of Business, Education, Arts and Technology. Originally designed for high school students studying Creative Writing and World Literature, the project expanded to include professional development for teachers wanting to learn to deliver or augment courses online. Students receive credit from their home schools which also pay teacher salaries.

The program has attracted interest and participation from an impressive array of people--visiting

authors and poets, groups of students, and global individuals ranging in age from adolescent to 80. Participant numbers have ranged from 20 to 120 since the program's inception.

From the outset, the BEAT St. literacy program was envisioned as a learning community. Clearly, online communications serve to enhance geographically proximal ones and eradicate distance barriers for learners in remote locations. Co-teacher, Dirk Flinthart, connects from Australia and, with his adept storytelling skills, is able to transport students to another culture.

Co-author Betsy Stefany has extensive experience in the realm of innovative science and technology education. Ms. Stefany was an early entrant to Internet communications, connecting a pilot marine science project to increase access to practicing science. Her collaborative efforts to integrate technology with science education then led to her becoming an on-line moderator with the JASON Project in 1997. JASON is an expedition-based science and technology program for middle school level students. The project's multi-disciplinary approach includes the innovative use of novel discussions to extend the science theme into language art practice.

Ms. Stefany employs a cycle of reading, focus questions, and reflection to encourage writing. Exposure to various media and the resulting interaction between participants became the basis for her independent study and ongoing projects.

All authors agree that online learning focuses not only on course content, but on interpersonal relationships. The online learning community is an increasingly commonplace product of the new age of telecommunications and connectivity. Some online learning communities are based on personal interests or hobbies. Other online groups may form around academic, business, or other intellectual pursuits. The lines often overlap between people's interests creating a more diverse learning environment and a heightened sense of connectivity and/or learning community.

The authors are currently looking at ways of intersecting their combined interests in science and literacy in these online programs. It is very clear, through the work and testimonials of our students, that knowledge is inextricably connected, and that content and ways of knowing overlap in ways that can enhance the learning experience most naturally, as is described in systems theory. For example, from the book, *Why Do Future Scientists Need to Study the Language Arts*, by Larry D. Yore:

Scientists read with pencil in hand, noting interesting ideas, drawing diagrams, and writing margin notes to make sense of the text....This illustrates science reading as an interactive, constructive, meaning-making process, not a meaning taking process...to aid comprehension, additional information can be obtained from concurrent sensory experiences, such as making observations of the central ideas, conducting an activity related to the topic, or consulting with another reader or knowledgeable person. Science readers must accurately assess the validity of claims, the quality of evidence and the coherence of claims and established science knowledge of the field (p.80).

Within designing e-learning forums, content domains can, and should be, blurred. Knowledge is interconnected and integrated, crossing former artificial classroom models which require students

to go from Science to English to Math class. The transactional nature of learning with students and teachers as co-learners replaces former transmission models with the teacher as authority and imparter of knowledge. Online learning may be used to infuse both the creative/artistic while simultaneously enhancing the critical thinking process, a fundamental skill not only to modern science but to a person's ability to grow, construct, deconstruct and reconstruct knowledge in systematic ways.

Paulo Freire, in his book with Myles Horton, *We Make the Road by Walking: Conversations on Education and Social Change* (1990), reiterates the connection between science and literacy, emphasizing the difference between reading and reading the world:

When the students come, of course, they bring with them, inside of them, in their bodies, in their lives, they bring their hopes, despair, expectations, knowledge, which they got by living, by fighting, by becoming frustrated. Undoubtedly they do not come here empty. They arrive here full of things. In most of the cases, they bring with them opinions about the world, about life. They bring with them their knowledge at the level of common sense and they have a right to go beyond this level of knowledge (p.157).

Despite years of work, online education systems remain mired in a relatively didactic content-delivery paradigm. Education as a process, with the classroom culture in particular, has the weight of decades behind them. It is only natural that the delivery of online education has been modeled after the entrenched systems we know so well. Unfortunately, this outmoded paradigm is the single greatest obstacle to the success of online learning, and it is the contention of the writers of this paper that where genuine online learning has been shown to occur, it has done so in spite of the system, rather than because of it.

The strength of online flexibility has yet to be fully engaged to maximize the intent, specifically, participant engagement in the life-long interest in acquiring knowledge. Direct observation during years of online work has yielded a raft of valuable insights which could readily lend themselves to classical quantitative or additional qualitative studies, permitting possible refinement and improvement of the basic model — or

as they stand, they act as useful guidelines to build, implement and assess online learning programs.

As the new technology has outmoded former, physically proximal ideas of community, paradoxically, it has spawned a new paradigm of connectivity and collaboration which may eventually come to be as important as grade, classroom and school location. As online facilitators, we teach others to organize, encourage and critique, as we respond to teachable moments to mentor and guide. We closely attend as we ask leading questions to move the learning forward. When students are intrinsically motivated, the investigative process becomes infused with passion and learning is authentic. At the core of the process is an ongoing depth of communication and community with teachers and students, visiting authors, and other participants as co-learners. What fosters this process is dialogue.

## 2 The Application of Communication Theory in Online Learning Forums

In an article about David Bohm, *Address on Dialogue* (1991), the author distinguishes the difference between dialogue and discussion as follows:

Dialogue is not discussion, a word that shares its root meaning with “percussion” and “concussion” both of which involve breaking things up. Nor is it debate. These forms of conversation contain an implicit tendency to point toward a goal, to hammer out an agreement, to try to solve a problem or have one’s opinion prevail....It is, as we have emphasized, primarily a means of exploring the field of thought. Dialogue is concerned with providing a space within which attention can be given. It allows a display of thought and meaning that makes possible a kind of collective proprioception or immediate mirroring back of both the content of thought and the less apparent, dynamic structures that govern it. In Dialogue this can be experienced both individually and collectively. Each listener is able to reflect back to each speaker and to the rest of the group, a view of some of the assumptions and

unspoken implications of what is being expressed along with that which is being avoided. It creates the opportunity for each participant to examine the preconceptions, prejudices, and the characteristic patterns that lie behind his or her thoughts, opinions, beliefs and feelings...and it offers an opportunity to share these insights. (Taken from: <http://www.std.com/~lo/bohm/0000.html>).

Dialogue is different than discussion and from the beginning has served to create a different type of learning and connection than we have noted in many online programs. Online communications, with the possibility of archiving, allows learners to revisit prior postings, slow down their process of thought through cycles of pausing and reflection, which in turn urges them to examine their ideological presuppositions. Shared meaning can then be constructed and deconstructed, and at times a perceptual shift may occur as learners come to view varied perspectives in new and illuminating ways.

A formal science process seeks to encourage science practitioners through the following stages and process:

1. **Self consciousness**- conversational form gradually increasing toward productive exchange.
2. **Suspension of individual agenda**- participants begin to consider other findings and opinions.
3. **“Conciliatory consilience,”** defined as ‘interest in the intellectual power developed from the practice of strategic humility’ (N.Y. Academy of Sciences, p.235).
4. **Re-evaluation:** Willingness to engage in a re-evaluation of one’s former certainties.

## 3 The Lessons of our Process

BEAT St. focuses on creative writing and literature and on workshops for training teachers to deliver or augment online courses. Early on facilitators recognized the capacity of the program to foster critical thinking which became one of the primary strengths of the program. Similar observations of both online projects in longitudinal study provide the following conclusions:

### **3.1 Positive outcomes in study of literature, writing, and science observed:**

- Understanding of social issues in chosen works of literature, and complex discussion of such issues
- Recognition of influence of social, racial and economic forces shaping chosen literature
- Ability to recognize and deconstruct literary techniques, including character-creation, dialogue, and 'poetic' imagery
- Increased 'risk-taking' in creative responses; willingness to offer emotional and personally meaningful writing rather than simplistic answers
- Overall increase in quality of written communication in terms of grammar, spelling vocabulary and construction.
- Engagement with setting and environment as a factor in human behavior and events

#### **3.1.1 Positive outcomes in critical thinking skills observed:**

- Ability to analyze complex concepts and arguments to address root ideas and issues
- Ability to recognize personal emotional response to ideas, and to set them aside to dialogue logically
- Ability to recognize and respect emotional response to 'hot-button' concepts in others, and argue with care and compassion in return
- Increase in logical and rhetorical skills, including capacity to construct and deconstruct complex arguments
- Improved understanding and usage of analogy as a tool of communication and argument
- Increased acceptance of the impact of geographic location on individual observations and local culture.

#### **3.1.2 General positive outcomes:**

- Students are responsible for, and must take ownership, of their own learning.
- Students receive a myriad of responses to their work from a varied audience instead of relying solely on the teacher for feedback and assessment.

- Text-based medium necessitates daily reading and writing practice fostering attentiveness to clarity, composition, audience and the necessity of thoughtful discourse and editing.
- Curriculum may be co-created by teachers and students in a democratic fashion. Learning becomes transactional with curriculum being largely emergent.
- Students may have expertise in technology or areas of specialized interest which surpasses that of their teachers resulting in excellent opportunities for students to teach teachers.
- The online medium provides an infinite and generative resource, especially important to geographically isolated participants.
- External pressures are minimized online and students feel safe disclosing, particularly important to normally "shy" students.
- The asynchronous design of the online space directly produced a participation rate far higher than is possible in a classroom environment. With every written response archived, students rapidly realized that their participation could and would be taken into account.
- Concept delivery is not just augmented by discourse but discourse is an essential tool to assess meaning transfer.
- The isolated geographic location becomes an asset, offering new perspectives, as opposed to encouraging a united opinion. This practice increases understanding and tolerance.

## **4 What works, what doesn't and why?**

We consider these reflections as an ongoing piece of Action Research. We define Action Research as: "Research undertaken by individuals or in groups that is founded on an active ethical commitment to improve the quality of life of others, is critically reflective in nature and outcome, is collaborative with those to be affected by actions undertaken, and is made public" (*Action Research for Teachers*, 2005, p.49).

Observation, surveys and formal evaluations form the analysis of the process of extended community in active discourse. The distillation of this research follows.

### **4.1 The Golden Rule: Leave The Classroom To The Classroom**

A classroom is an excellent auditorium, designed to permit content delivery from one to many. Classrooms

are not intended to promote dialogue. The Internet is not a classroom and should not be viewed as such. How we design our online forums and the software we use greatly affects outcomes and the ability to facilitate dialogic based learning.

#### **4.1.1 Form and Function are Inextricable**

Provide an online space that facilitates dialogue writing and sharing of writing in addition to spaces for discussion. Additional facilities are needed for sharing things like images and links, video and audio delivery, as such things spark ideas and promote dialogue. Focus should be on space and software which promotes active dialogue and interconnected learning content.

#### **4.1.2 Walk the Walk**

The cornerstones of genuine dialogue are honesty and trust. The facilitators of the program lead and teach largely by example. Unlike a face-to-face classroom, there are few methods of recourse in extinguishing undesirable behavior. What you show, the students will return. Be prepared to put as much of yourself onto the page as you expect from your students.

One of the fundamental principles of critical thinking is the ability to examine an idea and its assumptions from all sides. Students cannot be asked to use logical, rational modes of discourse in exploring and defending their ideas if the teachers are not prepared to apply those same modes to their own, no matter how 'right' those ideas and beliefs may appear to be. The lesson is clear: if students are expected to question their ideas and assumptions, then the teacher must be equally prepared for such a process.

#### **4.1.3 Censorship Derails Dialogue**

The facilitator sets the rules of dialogue and manages the pace. Students will speak freely and passionately on matters which are important to them — and many of those matters are 'hot-buttons' in society at large. Students must be allowed to engage in the topics which are important to them. These are NOT side-tracks. A good facilitator will engage in the dialogue and watch for the 'teachable moment', make connections between the matters under discussion and the course content. Education is an exploration and an understanding of

the human condition. Guide them, learn from them, and show them how to learn from themselves.

#### **4.1.4 Set The Rules Early**

Civil discourse is vital to the process of dialogue. In BEAT St, we delineate the following guidelines:

1. Mutual respect for beliefs and ideas.
2. Suspension of judgments:
3. Pausing and reflecting before posting:
4. Seek the next level of discourse.

It can be highly rewarding to observe the process as smart young people with strong emotional ties to an issue begin to attempt to moderate their own behavior.

#### **4.1.5 Preconceptions Fail to Thrive**

In a dialogue-based system which demands a critical approach from participants, the results frequently surprise. Students who are normally disempowered by the class structure for any of a number of reasons can come to the fore, given the encouragement provided by the online system.

Although developmental age and language skills require different facilitation, students reach a critical point — an almost transcendent state where they realize the value, purpose and strength of their words. Students, while always retaining their own personal beliefs, continue to become spectacularly effective thinkers, open to new ideas, and demonstrably capable of that rare ability to separate emotion and ownership from ideas and beliefs. Raise expectations and the students will meet the challenge.

#### **4.1.6 Colleagues are Critical Backup**

In a classroom system the expectation is simply that the material will be presented to the students, and the students will be encouraged to absorb it. In a dialogue-based system, much of the discourse will surround complex, emotive topics. Facilitation means extensive depth of knowledge and extensive language or team practice. Fresh, vital viewpoints are critical to encourage passionate, logical dialogue.

#### **4.1.7 The Socratic Method**

Questions promote dialogue. Answers end it. As facilitators, be prepared to ask how their answers are formed, and to provide credible research and evidence which support those answers. Then ask them why some other answer would not work just as well. Giving students these skills helps them lay the foundation for

not only their academic career, but the rest of their lives.

#### 4.18 Atmosphere of Equality creates control

“Communication is only possible between equal.”  
Robert Anton Wilson. True communication is only possible between persons who consider themselves equal. Learn to embrace and accept students as co-learners and equals.

## 5 Conclusion

These are not the only lessons to emerge from our collective experience, but they are certainly some of the most valuable, and most easily transmitted. An online program which incorporates these guidelines will almost certainly succeed in creating effective dialogue and promoting a deep learning experience for everyone involved.

Dialogue is the primary tool by which knowledge and understanding are constructed. The technological tools that support dialogue are increasingly improved and embedded in all forms of our culture. For the first time in human history, we have an opportunity to create true dialogue on a scale to reach and affect millions. Given half a chance, we can find a way to escape the fossil structures which have warped our societies into twisted mirrors of past ignorance and control — but the half a chance is fading as vested interests in governments, corporations and religions figure out how to perpetuate their own structures onto the Internet.

Right now, it is still possible to envision a new approach and to strive for new outcomes. But if we do not move fast, the window of opportunity will close, and like television, cinema, and radio before it, the Internet will become just one more means of maintaining control at all cost. Instead, if used in innovative ways, perhaps we can achieve a closer understanding of each other as people and as cultures and work towards the possibility of coming closer to a much more inclusive and mutually respectful world.

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