Composition in the Age of the Dot-Com: How One Virtual Community Served as a Collaborative Learning Group in Response to the Events of September 11, 2001

The Gottfried and Martha Lang Student Prize Paper

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"... learners construct their own understanding. They do not simply mirror and reflect what they read."

Ernst von Glasersfeld ²

"Communities need to be built around a purpose: a point of pain."

Vanessa di Mauro ³

The events of September 11, 2001, literally changed the world. In search of comfort and understanding, people turned to technology during this time of crisis contacting family members via telephone or email, contributing to electronic memorials and charities, and discussing the events with others through electronic conversations. These conversations allowed people to vent their frustrations and fears over what was happening while sharing diverse perspectives through a global medium. The popularity of these communities is noted in a recent Pew Internet Project report which found "the pull of online communities in the aftermath of September 11 shows how Americans have integrated online communities into their lives" (Pew 2001a). The Project also found that one-third of all Internet users either read or posted material in reaction to the terrorist attacks.

From a social constructivist perspective, these discussion groups functioned as "interpretive communities" in which collaborative group learning took place in a very tangible way. Social constructivism views learning and meaning-making as active processes, with each individual processing social interactions as inner thought and constructing knowledge as a social artifact. There is a strong relationship between social interaction and internalized thought as many of the same mental processes needed for maintaining conversation are also used in reflective thinking. Conversation then plays a central role in an individual's learning, making communities places that stimulate new knowledge.

In this paper I examine several "cyberspace" conversations because I feel that this space, unlike the traditional classroom, creates a unique medium for examination. The written nature of this conversation

produces concrete evidence which allows for an understanding of the many impacts of social interaction in the learning process, with these impacts ranging from clarification of ideas to the formation of new knowledge within the individual. Although these postings were written in an informal environment, I believe that they reflect a formal and complex process of thought. By examining conversations inspired by the events of September 11 within one online community, I will show specifically how people are naturally drawn to discussion as a method leading to the articulation and clarification of their own thoughts and, in the process, to a better comprehension of the world around them.

Social Constructivism and the Basics of Collaborative Learning

It is important to outline the meaning of "social constructivism" before beginning to analyze the reactions of this online community. As an offshoot from the larger concept of Constructivism, a belief that learners literally "construct" their own meanings while learning, social constructivism shifts its focus to the role of social interaction triggering learning within an individual. This view of learning sharply contrasts with the notion that learning is a passive transmission of information between individuals where reception, not construction, is key ("Practice Implications").

One of the first educators to recognize the importance of language and community to an individual's learning process was Russian psycholinguist and educational theorist Lev Vygotsky. Reacting against the direct instruction technique in which the teacher solely directs the student's learning process, Vygotsky's revolutionary theory places the

responsibility of learning on the individual interacting with his or her social environment. The theories put forth by Vygotsky in the Marxist environment of the Soviet Union during the 1930s were so controversial in the educational community that they were suppressed for twenty years and did not reappear in print until 1956, which theorist Jerome Bruner later called "the year of the birth of the cognitive sciences" (Bruner 1985). By popularizing the notion that language acts as a means through which humans can better understand the world and themselves, Vygotsky helped begin the ideological shift from analyzing external forces acting upon the individual (via Pavlov and behaviorism) to examining the role of community and inward thought in the individual's development. He wrote, "Every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level . . . This applies equally to voluntary attention, to logical memory, and to the formation of concepts. All the higher functions originate as actual relations between human individuals" (Vygotsky 1978, 57).

Vygotsky's major concept is that social interaction plays a fundamental role in learning, making the influences of cultural and social contexts crucial to shaping how and what an individual learns. influence of community becomes crucial in the learning process with peer input greatly affecting an individual's view of the world. Referring to the relationship between community and the individual, Vygotsky wrote that the "mental functioning of the individual is not simply derived from social interaction; rather, the specific structures and processes revealed by individuals can be traced to their interactions with others" (Palincsar 2002). It is individuals' interactions with community that helps to give shape to their knowledge.

This is where Vygotsky's zone of proximal development enters the learning process. The zone of proximal development is the range of potential that each person has for learning, where learning is shaped by the social environment in which it occurs (Nicholl 1998). This learning is facilitated by an exposure to others with greater intellectual abilities, thus pushing individuals toward a higher level of learning. Vygotsky defines the zone as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving . . . in

collaboration with more capable peers" (Vygotsky 1978, 86). Or, in other words, individuals can, with help from others who are more advanced, master concepts and ideas that they would otherwise not understand.

Bruner would later expound Vygotksy's notions of learning as a social process by introducing the idea that learners are able to construct original ideas and concepts by building upon their current knowledge, also known as "scaffolding." Building upon the structure of their current knowledge (or "schemata") enables learners to transform new information, making it meaningful while adding to what they already know. Often, language is reflected and expanded in this process, helping the individual to clarify new positions.

The theories offered by these two linguistic pioneers have inspired other theorists to further develop social constructivism. Ann E. Berthoff asserts that "neither language nor thought is meaningful outside a social context" (Berthoff 1997, 313). Language clearly plays a central role in the learning process, but its significance is heavily reliant upon the individual's interaction within a social setting. Berthoff goes on to state that "by naming the world, we hold images in mind; we remember; we can return to our experience and reflect on it. In reflecting, we can change, we can transform, we can envisage. Language thus becomes the very type of social activity by which we might move toward changing our lives" (emphasis mine) (Berthoff 1997, 316). The activity of learning is clearly a recursive process: the individual first engages in conversation, reflects upon what is said, and then applies the new information to his or her previous knowledge.

As the field of composition studies emerged in the early 1980s, Kenneth Bruffee wrote an important essay, "Collaborative Learning and the 'Conversation of Mankind," which links significant points of theory to the role of community in learning. He wrote, "To the extent that thought is internalized conversation, then, any effort to understand how we think requires us to understand the nature of conversation; and any effort to understand conversation requires us to understand the nature of community life that generates and maintains conversation" (Bruffee 1997, 399). Because the first step in gaining knowledge is participating in active dialogue, the importance of community cannot be overstated. The atmosphere of a community often dictates its conversations; hierarchal, restrictive environments will confine dialog to a few individuals

while "communities of status equals" encourage others to join the conversation.

The Unique Medium

One of the main criticisms of Bruffee's essay on collaborative learning focuses on the role that social hierarchy plays in a typical classroom learning environment. John Trimbur, in his essay "Consensus and Difference in Collaborative Learning," directly challenges the conclusions of Bruffee's earlier essay. He accuses Bruffee of presenting utopian-like images of discourse while neglecting to recognize or acknowledge the role of social hierarchies or the "dominant power relations that organize the production of knowledge" present within the classroom (Trimbur 1997, 440). While Trimbur agrees that the knowledge is socially constructed, he believes Bruffee overlooks the social forces that help structure this learning.

I agree with Trimbur's assertion that both teacher authority and social hierarchy play pivotal roles in shaping the classroom environment. His point that certain voices are privileged over others is apparent within most school environments, with examples ranging from "teacher's pets" to members of select social cliques controlling conversations. Whether or not this teacher recognition of a few students is intentional, it does plays a key role in the final resolution of group conversations. The fear of not being heard may prevent insecure members of the community from feeling free to participate in the conversation.

It is for these reasons I believe that the Internet offers a unique medium of communication to consider in the field of Composition Studies. Jay David Bolter, in his book Writing Space: The Computer, Hypertext, and the History of Writing, places the invention of the computer, with its subsequent effects on the nature of writing, alongside the invention of the printing press. The computer has made the act of writing a more fluid and dynamic process, an example of which is manifested in the establishment of virtual communities on the Internet. In compelling ways, these online communities help break the established social order and offer an opportunity for even the most insecure person a voice to be recognized and heard. The open and democratic nature of the Internet, readily accessible to anyone with a modem, allows for an environment that is closer to Bruffee's utopian ideals.

These virtual communities invite a new application of social constructivist theory. There are a variety of communities available ranging from the ultra-democratic (open to the public, unmoderated) to the very structured (closed membership, all postings moderated). They are composed of people from around the world who gather freely to discuss different issues. This voluntary structure distinguishes virtual communities from the traditional classroom, where participants are joined in a specifically formed community. The freedom of anonymity also helps eliminate social hierarchy. People are free to post their thoughts and ideas without worrying about the implications of race, nationality, appearance, or other issues that might normally discourage them from contributing in a traditional faceto-face conversation.

Analyzing a Community's Reaction: "The Prancing Pony Inn"

My community of focus falls in between the two extremes of available online communities. Located in the forums section of Imladris: The Lord of the Rings Movie News (www.imladris.net/forums), "The Prancing Pony Inn" derives its name from a section in J.R.R. Tolkien's book, The Fellowship of the Ring. website, and the community that formed around it, was originally established as a place to discuss the released and upcoming Lord of the Rings movie adaptations. This particular forum is an offshoot of the movie discussions and is the place where members go to discuss conversations that do not relate to Tolkien or the movies. I chose this particular virtual community because I have observed its reactions to the events of September 11 firsthand. As a member of this community for more than two years, I have participated in several dialogs where my own opinions and thinking were challenged and changed through the course of online discussion. While I could focus much of my attention on the rhetorical background behind these postings, emphasizing the common interests that bind these community members together, instead I will dedicate my attention to analyzing the heuristic process of conversation and the various ways it impacts the thinking of individuals.

"The Pony" is a place where conversations covering a range of topics occur simultaneously, presenting a variety of perspectives. The open nature of this forum encourages conversation in a relaxed atmosphere. Discussions take place in a variety of "threads" or strings of replies that are posted by members concerning a subject. On September 11, after the first tower was hit, a thread entitled "World Trade Center Terrorist Attack" was posted by a member. People immediately turned to this topic to post the latest news and express their perspectives on what was happening. In a matter of hours, the thread had an abnormally large number of replies. Hundreds of people were reading about and discussing the events of the day. Such a large response in a limited time clearly illustrates the immediate need people felt for social interaction; this need "to talk" was so strong that reading and responding to the written reactions of others helped members of the community cope with the crisis. The various web reactions to the events of September 11 provide excellent illustrations for several aspects of collaborative learning. An examination of these postings reveals how members affirmed, extended, and sometimes challenged each others' ideas by borrowing another's language as a way to understand these events. The nature of these responses written in a community environment establishes a type of selfcreating artifact that allows for a direct analysis of individual conversations.

The initial reaction to the attacks varied from shock to anger. One poster, Nazgul, responds by writing, "TO ARMS!!! TO ARMS!!!!!!!! THEY WANT A FIGHT I SAY LETS GIVE THEM ONE!!!!!!!"(9-11-01,11:18AM)⁵. Another member, Entman, follows his idea and writes, "Thoughts and prayers out to anyone who had family in any place that was hit. Prayers for us all. I'm afraid this is a sign of more bad things to come. We live in a messed up world. It's time to mess some other people up. THIS CANNOT BE BORNE!!!" (9-11-01, 11:21AM). These two reactions, made within moments of each other, both affirm a similar idea of vengeance. Notice how Entman ends his posting by mimicking the language (down to the caps and repeated exclamation points) of the poster who wrote before him. Entman, imitating Nazgul's contribution, echoing both the idea and the way it was expressed, shows how he has internalized Nazgul's assertion and reflected it back through language. Following these two responses, a poster named Deagol takes the idea of revenge in a different direction:

To arms?? Again, who are we going to fight? At this point, there isn't anyone to go after. Let's not pick a fight with someone just out of a kneejerk reaction. Also, let's remember Oklahoma City. At

first, everyone thought its was some terrorist group from the middle east, but it turned out to be one of our own nuts Beware jumping to conclusions (9-11-01, 11:24AM).

Here is an example of Deagol internalizing another poster's language (Nazgul's "To Arms") in order to provide a different perspective on the situation. Deagol's contribution prompts reflection and thought about the implications of such drastic calls for vengeance supported by Nazgul and Entman. The effect of these words is seen in a later clarification by Entman, posted a few hours after Deagol's:

I want to clarify something I said earlier. When I said "THIS CANNOT BE BORNE!!" I certainly was not crying for the blood of any race or nationality. If we've learned anything, we should have learned from Oklahoma City that we have some wackos. I am crying for the blood of the GUILTY, whoever they may be. Guilty is guilty and I don't care if they're American or whatever" (9-11-01, 2:58PM).

After reading the response of Deagol, Entman felt a need to clarify both his thoughts and reaction while distinguishing his position from Nazgul, showing how his internalized thought was both clarified and changed through social interaction.

This interchange reflects Bruffee's assertion that "If thought is internalized conversation, then writing is internalized conversation re-externalized" (Bruffee 1997, 400). The physical act of posting to an online bulletin board reflects the effects of conversation in the act of writing. Bruffee continues, "Writing is at once two steps away from conversation and a return to conversation. We converse; we internalize conversation as thought; and then by writing, we reimmerse conversation in its external, social medium" (Bruffee 1997, 400). Entman's postings reflect the process that Bruffee outlines; after initially expressing his perspective, he steps away from the conversation, returning after other contributions and an interlude of thought, in order to further clarify his ideas.

The virtual writing space of the message board also acted as a place where several different perspectives could be voiced. While the majority of voices heard echoed the same sense of shock and anger, other voices surfaced that reflected different perspectives. No one voice or opinion concerning the tragedy was

privileged over another; the atmosphere and open nature of the community allowed for several differing insights to be expressed. One member, Carcharoth, thinks aloud to the community as he writes, "I wonder if this tragedy is just worse because it happened to people and places we know and can identify with . . . I also wonder, will even more crimes be committed in the aftermath? Human nature never ceases to both amaze and apall me" (9-12-01, 3:06AM).

The introspective ideas expressed in this response reflect a different tone than the ones that preceded it. Similar to Deagol's earlier post, Carcharoth is challenging the consensus within the community in order to present a different perspective of the tragedy's implications, or what is known in collaborative learning as abnormal discourse.

Social constructivists divide the learning process into two types of discourse: normal and abnormal. Richard Rorty defines normal discourse as "the sort of statement which can be agreed to be true by all participants whom the other participants count as 'rational'" (Bruffee 1997, 407). The end result of normal discourse is a community consensus where existing knowledge (or the status quo) is actively sustained. Knowledge is gained through the process of abnormal discourse; it "sniffs out stale, unproductive knowledge and challenges its authority, that is, the authority of the community which that knowledge constitutes" (Bruffee 1997, 407). Abnormal discourse "shakes up" the atmosphere of the community and forces its members to re-evaluate their positions to either accept or reject this new information.

The community's reactions to Carcharoth's post were positive overall, as several members wrote in support of his position. One member, Iamradagast wrote, "I back Carcharoths thoughtful comments but also want to offer my deepest sympathies for all those affected by this tragedy. I will be praying for you" (9-12-2001, 6:51AM). Another member named Belegund adds to the supportive dialog when he writes:

Thanks to everyone for their insight and sharing regarding this incident. There are a lot of wise sentiments on this thread, which is no surprise considering the company. Anyway, I echo Carchy's [Carcharoth's] comments, and IamRadagast's, among others, and Brandir's, too – . . ." (9-12-2001, 1:45PM).

Notice how Belegund's comments include support not only for Carcharoth's ideas, but also for several other member's unique written thoughts concerning the tragedy. While Carcharoth's ideas did not echo the consensus of the community at the time, they were still absorbed and accepted as members considered his different perspective.

Not all instances of abnormal discourse are accepted as new knowledge within a community. There were several other examples of abnormal discourse that were not as well received. A member named DrudwynXavior revealed his radical thoughts to his peers when he wrote:

I have great compassion, even empathy, for the terrorists involved. I do not think that they were cowardly or inhumane . . . I am not sure that I can respect the point of view that is being propagated on so many discussion boards of late. Those men were brave. Those men were methodical. Those men were skilled. Those men were soldiers. I respect that. (9-18-2001, 9:32AM).

DrudwynXavior clearly intended to go against the normal discourse of the bulletin board by posting these contrary ideas. Immediately after posting his message, members of the community reacted negatively to these thoughts. Danjerboy, a member who reacted particularly strong against DrudwynXavior's ideas, wrote in response:

Those men were cowards. Sorry. You're wrong. Warriors do not slay innocent children and women, even if it involves them being stupid (you call it courageous) enough to commit suicide . . . These are not the actions of heros, or warriors. They are the acts of cowardly terrorists (9-18-2001, 10:20AM).

Unlike the previous example of abnormal discourse, these interchanges were not absorbed as knowledge within the community, as members did not accept these radical statements as truth.

The community of the Prancing Pony Inn is close-knit and consists of members from all around the world. After the attack on the Trade Centers, members from other countries posted their condolences and thoughts, reflecting a sense of membership in a global community. Feeank, a member from Venezuela writes, "I was attacked, WE were attacked, none of us, in our

sane mind, is removed enough not to feel the pain our Americans brothers are feeling rigth now. This tragedy doesn't have borderlines because human spirit doesn't have either" (9-12-2001, 12:52PM). Relating to the tragedy by using such words as "we" and "our American brothers" clearly illustrate the camaraderie felt between members of the community. In a similar way, another member, Le Bobolito, responds, "My condoleances to the American people. This is a sad day for all humanity. Just know that the thoughts of all civilized people around the world is with you in this dark hour" (9-11-01, 4:38PM). Several members of the community experienced the tragedy firsthand. In response to the grief of one member, Gorbag writes, "Lyric, my thoughts are with your family. I hope your cousin is okay. Everyone in Britain is shocked to the core by this. My thoughts go out to all our American friends" (9-11-01, 11:42AM).

Concern was also shown for those members of the community who actually lived in areas near the attacks. One member, Reba, writes, "candles and incense lit, prayers said for the already lost souls, for the dying, for the forces on the way, and for the families. And for the friends we've not heard from yet' (9-11-01, 12:44PM). Reba's message echoed the concerns of many within the online group. In a few hours the missing members were contacted, much to the relief of the rest of the community. Reba illustrates this with a follow-up to her earlier post, "Gwindor just emailed me back again . . . he's on the phone with Turin, he's ok! They're both okay! *Reba is ready to faint from relief*" (9-11-01, 2:09PM). The Pony provides an environment that not only fosters communication but also offers intellectual and emotional support in times of crisis. Bruffee and other social constructivists would argue that examining this type of community would lead to an understanding of the nature of the conversation that it produces and generates (Brufee 399).

After the initial reactions, additional topics of discussion were generated that engaged other aspects of the tragedy. One conversation entitled, "Terrorism Solution Options," inspired some especially meaningful discussion. The topic was initiated by Ren Girion, and in the first post he asked several questions — literally inviting other members to respond and participate in the conversation:

I'd like to know if anyone has any creative ideas for fighting terrorism. I do not believe that there is a

viable military solution to combatting terrorism . . . To determine a strategy for defeating terrorism in general, we may first need to examine what causes terrorism as a phenomenon. . . . I'm not saying that I have any concrete ideas on this, or any better feasible option than the warlike options suggested already. What I'm saying is, we won't have any better option until we seriously think about it, and we desperately need a better option. (9-12-01, 4:09PM)

Notice the repetition of "we" in the last sentence of Ren Girion's post, ending it with the phrase "until we seriously think about it." The language of this post clearly reflects an intent to "talk" about this subject with his peers — admitting his lack of knowledge while welcoming the communal input of other options and opinions as remedies for a difficult situation.

One member, Gildor, responds to these questions by simply stating, "Actually there will allways be terrorists and theres nothing we can do" (9-12-01, 4:30PM). Later, Ren Girion replies to Gildor by saying:

I see your point. This is how the struggle of mankind goes: some form of evil arises and it is defeated, then another form arises which must be defeated. We can't just leave terrorism undefeated because we fear for the new evil that will replace that. We must endeavor to squelch it and pray that whatever evil arise to replace it is a lesser one. (9-12-01, 5:23PM).

Ren Girion first validates Gildor's assertion then expands it to include his own perspective. Minutes later Gildor responds, "Ren G: Youre quite right. We must continue the everlasting fight for good. I was just saying that terrorism will never be totally quenched" (9-12-01, 5:59PM). Throughout the development of this conversation between members of an interpretative community, both the presentation and clarification of ideas are evident in the dialog. This is the process of external conversation, reflective thought, and reexternalized conversation that reflects the nature of collaborative learning that social constructivists find so vital to an individual's learning process.

In addition to the mere reflection of another's thoughts, there is a physical function ("quote") in the bulletin board system that enables users to specifically cite another member's postings. Unlike the traditional

face-to-face conversation, the written nature of these dialogs produces a lasting artifact where members can read and respond to others, hours after the original postings. Within the "Terrorism Solution Options" thread several of these dialogs took place between members. One member, Mel Headstrong, found another's words were more suited to her feelings than ones she could verbally express:

I've been trying to work my way through how I feel about all this for a few days. I tried to write something yesterday, but it came out all wrongsounding and I deleted it. But I like what danjerboy said above, especially this: quote: (Originally posted by danjerboy) Long term we may need to evaluate our policies and actions in other countries, but short-term we need other actions (9-14-01, 1:38PM).

Following the quote, Mel Headstrong continued to elaborate on an idea that danjerboy had posted hours before she joined the conversation. This dialog is but one example of how the Internet, in the form of community discussion boards, helps to stimulate conversation while immortalizing it in written form.

The opportunity to read and engage in ongoing conversation is what make these communities popular, and is also what attracted people who were trying to make sense of the events of September 11. A level of tolerance surfaced in the course of these conversations that allowed for frank dialog when discussing these traumatic events and their effects. A member named Amrael wrote about the effects of both the conversation and the community in the way she dealt with the crisis:

I would like to give a great hug to everybody here at Imladris. I came here looking for news about a film about 6 months ago and lurked without posting for 4 months. I've found a great community and a level of tolerance among strangers that is VERY unusual. It is a pleasure to hang around here and discuss things, even when it means probing into such terrible and painful matters (9-20-2001, 02:45PM).

The concept of social constructivism is a theory that is at the same time complicated and simplistic. The idea that our conversations provide more than just entertainment is clear, but when we take the time to examine the contents of our interactions with others we discover much about the social nature of learning.

Looking at one online community's reaction to September's terrorist attacks we can see how social interaction leads to the clarification of thought and the birth of new knowledge. Knowing this, it is easier to explain why millions of people reached out to others, through the Internet, to join a global conversation inspired by a difficult event. This examination of one online community's response demonstrates the pivotal roles that both discourse and community serve in an individual's learning process.

Notes

- 1. Rebekah Bennetch graduated in May 2002 with a BA in English from Armstrong Atlantic State University in Savannah, Georgia. She is currently studying English in the University of Saskatchewan Graduate program in Saskatoon, Saskatchewan, Canada.
- 2. Ernst von Glasersfeld, in Mark S. Cracolice, "Social Constructivism: A Theory Base for Peer-Led Team Teaching. Lecture Notes, University of Montana. www.sci.ccny.ccny.edu/~chemwksp/ Dissemination Manual1/RTFUnit% 206-Notes.rtf>
- 3. Vanessa di Mauro of the Cambridge Information Network. In *Knowledge Trends*. Edited by Dr. David J. Skyrme. www.skyrme.com/ktest/bb.htm
- 4. This term originally surfaces in Stanley Fish's book, *Is There a Text in This Class? The Authority of Interpretive Communities*. Fish writes of the importance of social interactions and how they relate to the individual emphasizing the importance of the community's role over that of the individual: "it is the interpretive communities, rather than either the text or the reader, that produce meaning" (Fish 1980 14).
- 5. The following excerpts from various postings are quoted as they appeared on the bulletin board site with no grammatical or spelling errors corrected.

References Cited

Berthoff, Ann E.

1997 Is Teaching Still Possible? Writing, Meaning, and Higher Order Reasoning.

Cross Talk in Comp Theory: A Reader.

Edited by Victor Villanueva, Jr. Urbana, IL:

NCTE.

Bolter, Jay David

1991 Writing Space: The Computer, Hypertext, and the History of Writing. Hillsdale, NJ: Erlbaum.

Bruffee, Kenneth

1997 Collaborative Learning and the 'Conversation of Mankind.' In *Cross-Talk* in *Comp Theory: A Reader*. Edited by Victor Villanueva, Jr. Urbana, IL: NCTE.

Bruner, Jerome

1985 Vygotsky: A Historical and Conceptual Perspective. In *Culture, Communication, and Cognition: Vygotskian Perspectives*. Edited by James K. Wertsch. Cambridge: Cambridge University Press.

Cracolice, Mark S.

1980 Social Constructivism: A Theory Base for Peer-Led Team Teaching. Lecture Notes, University of Montana. www.sci.ccny.cuny.edu/~chemwksp/DisseminationManual1/RTFUnit%206-Notes.rtf

Fish, Stanley

1980 Is There a Text in This Class? The Authority of Interpretive Communities.

Cambridge: Harvard University Press.

Hanley, Susan

1994 On Constructivism. MCTP: Maryland
Collaborative for Teacher Preparation.
www.inform.umd.edu/UMS+State/UMDProjects/MCTP/Essays/Constructivism

Kearsley, Greg

2001 Constructivist Theory: Jerome Bruner.

Explorations in Learning & Instruction:

The Theory Into Practice Database.

http://tip.psychology.org/bruner.html

Kornblum, Janet

2001 Web Archives Will Preserve the Terror Attacks, Our Reaction. *USA Today* October 11. Final ed.: D11.

Nicholl, Trish

1998 Vygotsky. Massey University Department of Psychology, New Zealand. www. massey.ac.nz/~alock//virtual/trishvyg.html

no author

2002a Reconstructions: Reflections on Humanity and Media After Tragedy. Program in Comparative Media Studies, MIT. http://web.mit.edu/cms/reconstructions

2002b The September 11 Web Archive.
September 2001. The Library of Congress,
the Internet Archive, and WebArchivist.
orig. January 20. september11.archive.org

1996 The Practice Implications of Constructivism. Letter. Southwest Educational Developmental Library. 9.3 (August 1996).www.sedl.org/pubs/sedletter/v09n03/practice.html

Palincsar, A. Sullivan

2002 Social Constructivist Perspectives on Teaching and Learning. *Annual Review of Psychology* 49(1): 345-376. January 13. www.findarticles.com/ cf_0/m0961/v49/21036272/p1/article.jhtml?term

Pew Internet and American Life Project

2001a Online Communities: Networks that Nurture Long Distance Relationships and Local Ties. October 31. www.pewinternet .org/reports/toc.asp?Report=47

2001b The Commons of the Tragedy: How the Internet Was Used by Millions After the Terror Attacks to Grieve, Console, Share News, and Debate the Country's Response. October 10. www.pew internet. org/reports/toc.asp?Report=46

2001c How Americans Used the Internet After the Terror Attack. September 15. www.pewinternet.org/reports/toc.asp?
Report=45

Dr. David J. Skyrme, editor

no date Knowledge Trends. www.skyrme.com/ ktest/bb.htm

Trimbur, John

1997 Consensus and Difference in Collaborative Learning. In *Cross Talk in Comp Theory:*A Reader. Edited by Victor Villanueva, Jr. Urbana. IL: NCTE.

Vygotsky, L.S.

1978 *Mind in Society*. Cambridge: Harvard University Press.