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Three views of learning experiences using Technology-Enhanced Teaching: how online video conferencing sessions can promote students' construction of knowledge

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Abstract: This paper describes how online video conferencing sessions offered through the Internet can promote college students' construction of knowledge. Our goal in writing this paper is to explain the processes involved in utilizing a Technology-Enhanced Teaching method from three different points of view: an instructor, student, and presenter. Multiple perspectives of those involved in the sessions can contribute to better understanding of Technology-Enhanced Teaching methods and serve as a source of information for others who are interested in offering online video conferencing sessions.

In recent years technology has advanced so rapidly that it has influenced all levels of society (Morrison, 2007). Today's young children experience technology-related activities at very early ages. Because of this rapid expansion of technology and its early influences on young lives, early childhood educators themselves need opportunities to experience and to explore technology-based education in order to prepare children in a competitive society. Teachers' clear understanding of how technology can support their charges determines the kinds of classroom experiences for children. For these reasons, this paper describes how incorporating technology (online video conferencing sessions) into teaching methods for college students who are majoring in early childhood education can facilitate their construction of knowledge. We refer to this process as Technology-Enhanced Teaching (TET).

Our goal in writing this paper is to present this method of TET from three different points of view. One perspective comes from the view of a person responsible for designing and offering a course on constructivism through TET, another from a person who participated in such a course by presenting her sessions through online video conferencing, and yet another view is from a graduate student who took this course and participated in these sessions. Our perspectives are shared through eight steps that include: (1) methods of writing this article, (2) steps of organizing online video conferencing sessions, (3) teaching methods, (4) initial impressions of online video conferencing sessions, (5) students participating in such sessions, (6) online



sessions as a way of constructing one's own knowledge, (7) our final impressions and reflections, and (8) implications for education. A general narrative approach is used in the first three sections and the last four sections include our individual narratives. The final section of the paper includes suggestions for those who are interested in implementing this process.

Methods of Writing This Article

Many researchers offer alternative ways of organizing multiple case data (Hatch & Barclay-McLaughlin, 2006; Lichtman, 2006), and this paper highlights our teaching method of using online video conferencing sessions through multiple sources of information from multiple participants (Lichtman, 2006; Lichtman & Taylor, 1993). Additionally, we consider a college classroom as a learning community of people with different experiences, points of views, cultural and language backgrounds, and values (Magee & Jones, 2004). When everyone has a voice, learning experiences are authentic and rich. Likewise, when the above mentioned perspectives of the two insiders and of the one outsider are discussed, such teaching methods can be fully understood as to how to offer authentic and rich online video conferencing sessions to students.

Understanding a TET approach is important because we can add to the body of knowledge of teaching and learning from the viewpoint of an insider (the creator of this class) as someone who understands the processes, preparation, and experiences. Another insider who is experienced (as a student) in such a class also can provide a more in-depth description. We feel it is equally important to examine the viewpoint of an outsider who presented to this class and who also participated in and experienced the same educational sessions. An outsider might see the same phenomena and experiences differently or interpret them differently. These observations are based on the notion of a constructivist theory of qualitative research, and in describing our experiences, we are not trying to recreate a reality that exists independently of ourselves. We all believe in the notion that reality is a constructed interpretation of perception and is dependent on the viewpoint of the researcher (Lichtman, 2006; Lichtman & Taylor, 1993). Through the lenses of both insiders and outsiders as educators, we will describe the notion of multiple realities. In other words, we will describe our experiences through the multiple voices of two insiders and of one outsider (Hatch & Barclay-McLaughlin, 2006).

As we mentioned earlier, we present our case study by describing our three views of the same experiences (online video conferencing sessions), and we tell our experiences both separately and together. The first author, Satomi, has been a college instructor for 15 years, teaching constructivism in an early childhood education course and offering online video conferencing sessions for two semesters. Dorothy, the second author, is a college administrator and teacher educator with a history of 25 years in education, who embraced constructivism as a teaching method in early childhood education classes and who was invited by Satomi to join in the 2004 online video conferencing sessions twice. Satomi and Dorothy collaborated on how to create authentic online sessions. Sandra, the third voice, is an administrator of a university laboratory school as well as a doctoral student majoring in early childhood education. Before becoming an administrator of a laboratory school, she was a college educator in early childhood education for many years. Throughout this paper we write our individual perspectives so that, collectively, we can create a more informed view of this process.



Steps in Organizing Online Video Conferencing Sessions

Online video conferencing sessions can provide early childhood education students with authentic learning environments through technology (Izumi-Taylor & Lovelace, 2007). Because students should actively construct their own professional knowledge by interacting with their educational materials and with their social and intellectual environments (Taylor & Hsueh, 2005), video conferencing technology through the Internet affords an enriched environment in which students can interact with other educators at different locations. The use of online video conferencing in conjunction with teacher education courses can be an effective way to facilitate students' understanding of constructivism. This view is in agreement with the basic knowledge that constructivism allows students to understand how children construct their own knowledge through interaction with their environments; thus, teachers may experience the processes of how they construct their own knowledge as well.

In sessions held in 2003 and 2004, video conferencing sessions made accessible a world of ideas and intellectual resources that were not otherwise available in one university setting (Taylor & Hsueh, 2005). Students majoring in early childhood education read and studied constructivist teaching approaches, "met" with and interacted with experts in the field through video sessions that made their learning consequential and helpful. This TET method opens the world for students and is based on Duckworth's notion (2006) that in order for people to construct their own knowledge, they need to incorporate new experiences in meaningful ways that make sense to them.

To provide comparable sessions for our students, the first author and her colleague obtained a technology Access Fee grant through the University of Memphis in order to support this effort. The next step was to write letters to 10 renowned scholars/educators in the field of teacher education, asking for their participation in our video sessions as well as asking about the availability of IP-based video conferencing via the Internet. Two scholars in the United States were unable to accept our invitation to participate in this effort because of their schedules. Additionally, although efforts were made to include two international scholars from Japan and Sweden in the 2003 and 2004 sessions, they could not join because of time differences. In the 2003 sessions, six scholars participated, and in the 2004 sessions, seven scholars participated. The participating scholars included Kathryn Castle of Oklahoma State University, Arleen Dodd of Long Island University, Rheta DeVries of the University of Northern Iowa, Eleanor Duckworth of Harvard University, Stephen Graves of the University of South Florida, Constance Kamii of the University of Alabama, Birmingham, Joseph Tobin of Arizona State University, and Dorothy Sluss of Clemson University. Some of these educators participated in sessions occurring in both semesters, and Dorothy Sluss participated in two video sessions occurring in one semester. Because Dorothy Sluss participated twice in these sessions and has the perspective of an outsider, she was asked to join in writing this paper.

After scheduling each scholar's appearance in class, the network connectivity was tested. New course materials such as articles and book chapters written by each educator were collected and made available to students. Just before the beginning of each semester, the network connectivity was again tested. Personal phone calls were made to each scholar informing them that a question and answer session would be used to



promote discussions, and that if they wished to talk about their research at the beginning of the session, they could notify us when the session started.

Teaching Methods

The topic of the course was constructivism in early childhood education, and it was offered to 13 graduate students as one part of their teacher education program. Although the class size could be a maximum of 25 students, 13 were enrolled each semester. Course requirements included the following assignments: attending online video conferencing sessions after reading each lecturer's reading materials and preparing questions; responding to a reflection form after each session; observing a constructivist teacher's classroom and writing results based on the scale provided by the instructor; creating one activity which promotes construction of children's knowledge and presenting it in class; and writing and presenting a research paper regarding constructivism. Students received 10% credit for participating in these sessions and 10% for responding to reflection forms after each session. Students were in one large classroom communicating with our lecturers, and the lecturers were at different locations in the United States (Florida, North Carolina, Boston, New York, Alabama, Arizona, Oklahoma, and Iowa). Students were able to communicate with the lecturers between the sessions and some were able to communicate with the lecturers after the sessions through email. However, students kept communicating with lecturers for only two weeks after the sessions, not throughout the duration of the course.

Again, because this course focused on constructivism, the first step of such sessions was engaging students in some meaningful discussions in which they could relate their own classroom experiences. Students were then encouraged to ask questions based on their reading materials written by these experts and to have the authors respond to them directly. This allowed students to experience their own ways of interacting with these experts, to construct their own knowledge, and to make meaningful connections. The next step was to encourage students to generate their own questions. Some questions on both sides could be thought out in advance, or both students and experts could spontaneously generate questions through the course of these sessions (Izumi-Taylor & Lovelace, 2007). Although not all questions could be answered by the experts, the act of questioning promoted students' rethinking skills.

Each session generally lasted from 90 minutes to two hours and was videotaped. Each videotape was available for students to review later. Students responded to a reflection form asking about their experience in class after each session. Students' forms were collected after each session, and the first author read, made comments, and returned the forms to the students. The reflection forms included such requests as a) write your reflective comments, suggestions, and questions regarding today's online video conferencing session, b) based on your experience with today's presenter, specifically your comments, suggestions, and questions you wrote in question number one, describe how you would take your thinking and learning to a higher level, and c) after today's session with the presenter, do you have any questions for which you want to find the answers? If so, how do you go about searching for the answers to your questions?



Initial Impressions of Online Video Conferencing Sessions

As we considered and reconsidered the process, we shared our initial experiences with each other. These thoughts are recorded in the following section under our names. Note that Satomi, the teacher, focused on class effectiveness; Dorothy, the guest lecturer, examined her own presentation, and Sandra, the student, reacted to the classroom experience. This was not unexpected.

Satomi: Many people say that first impressions are very important and strong. My first impressions can be summed up in one word, "Wow!" As soon as the first presenter's face came on our big TV screen, my heart started pounding with excitement. It felt really good to be able to see these renowned educators and to be able to talk to them directly. Since these were my very first sessions using this technology, I did not know what to expect. At first, I felt I was well prepared for them, but in actuality I was not. I felt humble and also very fortunate that we have such technology with which we can offer students these experiences.

I will never forget the first comments made by two excited students on the first day of our session, "I can't believe this is happening! I am actually taking to Dr. Graves! I grew up reading his books as a teacher!" and "When you said it will be online video conferencing sessions, I never dreamed it would be this good and exciting! How come we don't do this kind of learning more often?"

Dorothy: As an experienced teacher educator and lifelong learner, I readily agreed to participate in the online conference sessions. I was initially excited by the prospect of engaging in a new teaching experience that involved the use of technology as a means of delivering instruction. To guest lecture in a classroom that is located halfway across the continent seemed amazing, novel, and interesting. I was honored to be listed among the other guest lecturers and was looking forward to the experience. Because I taught classes three days a week, presented at national conferences, and had recently authored a textbook on the topic of my lecture, I was confident that I could speak with authority on the topic I selected (Sluss, 2005). In addition, working with graduate students would be both exciting and rewarding.

On the day of the taping, I got up in the morning, dressed as usual, and prepared to engage in this new experience. As the time drew closer, I reviewed my lecture notes, brushed my hair again, and was, quite frankly, surprised by the butterflies in my stomach. Traveling downstairs to meet the videoconferencing coordinator, I began to experience a bit of angst as I wondered how the students would react to this experience. Will I be interesting to them? Will I be just a talking head? How will this work? When I saw the class on the television screen, all my anxieties disappeared. At the onset, I could hear the students but they could not hear me. What a marvelous use of technology, eaves-dropping on a class! As they became aware that I was online, they became equally excited. I could see and talk to them as though they were next door. What an amazing use of resources.

Sandra: I, along with four of my supervising teaching staff, enrolled in this course because Satomi told us about it, and we wanted to be a part of the innovative teaching and learning experience. At the onset of the semester I responded to the content and context of the class with much excitement because of the ability to have a two-way conversation with constructivist



'gurus' whom I had respected for years in my chosen field of early childhood education. The technology was so shiny and flawless that we felt as if we were in the room with the guest speaker in each session.

During the course of the semester, I found that my enthusiasm for the class did not wane nor did the enthusiasm of my staff. Each week, the technology brought us into an almost intimate conversation with a different guest expert. My own notions about constructivist teaching and learning were edified by these great teachers who visited our classroom each week. They answered our questions candidly in a manner that was not so pedagogical as it was to build camaraderie in our shared field of early childhood teaching and learning. I felt a much deeper meaning to the work my staff and I do each day at the university early childhood lab school.

Students Participating in Online Video Conferencing Sessions

Satomi: I have never seen students so excited and attentive! I noticed that all of them were enthralled that they were able to have two-way conversations with these esteemed educators who could hear their questions and respond to them. Many of them were well prepared because they read the materials and asked many insightful questions. They were more actively involved than I have previously witnessed! I was very impressed by the students' innovative and insightful questions and could readily see the positive interactions between them and the session presenters as well as the joy inherent in their conversations. Some of their questions included, "Can you tell me how to deal with the school administrators who want me to teach more and to let students have less play time in the classroom, Dr. Kamii?", "I have to meet the standards and sometimes it is impossible to implement constructivist approaches of teaching since it takes time for children to explore and to think of ways to find answers to their questions. What should I do?" or "Can you tell me how I can start to become a constructivist teacher?"

This is the unique interaction of constructivist teachers who believe that in order for students to construct their own knowledge, they need to discover the answers to questions for themselves. I observed the students asking a multitude of interesting questions to the session presenter and taking notes, and it was nice to see all of the students actively involved in their learning. Focusing students' attention for a long time is not an easy task since most of these students are teachers or administrators who put in long workdays and attend classes already exhausted. This session was an inspiration; through this online videoconferencing, these students had opportunities to interact with renowned educators.

As Dorothy and I reflected on these sessions, Dorothy reminded me of the intersubjectivity of such sessions which can refer to the process where we begin a task of understanding constructivism with different points of view and arrive at a shared understanding after talking or working together (Berk & Winsler, 2002; Newson & Newson, 1975; Trevarthen & Aitken, 2001). I am glad that she pointed this out to me because some students mentioned this after the sessions. To illustrate, one student wrote in her reflection form after a session with Kathryn Castle: "After today's session, I have come to realize that I am a constructivist to some extent, but I also apply other methods in my teaching ... After today I feel comfortable saying I am not totally a constructivist."



Dorothy: It was amazing to watch the students and professors interact with each other at the beginning of the class. I wondered what others would see if they watched my class as we prepared to engage in learning activities. Even though I required my students to videotape lessons, I had not videotaped my college lessons. As I watched the students and professors actively engage in conversations, I decided that I would begin videotaping my classes and engaging in self-reflective activities; thereby replicating the student's experience and facilitating the development of my own teaching skills (Rogers & Sluss, 1996). As for now, as the moment approached, I realized that I could relate to these students on a personal note also.

We began the session with introductions, and I jotted the names of the participants on a blank page on my computer as they were introduced. After initial introductions, they begin to pose questions about my interest in play and constructivism. I explained that my study of play as curriculum emanated from my experiences with young children in the classroom. They were genuinely interested in my responses to these questions. This was a refreshing experience because we had reached the midpoint of the spring semester and my seniors sometimes appeared more interested in graduation and spring break. Our familiarity as students and teacher had led to a comfort level that left them less in awe of my accomplishments.

It was, as Satomi said, humbling to discuss my research and the issues that still caused consternation. As the questions were posed, the density level of the questions increased and the students seemed to be impressed with the questions of their peers. When I shared with some of the students that their question was one that could lead to a doctoral dissertation, they watched their colleague with amazement and respect. As I continued to engage the students, I realized what an equally amazing experience it would be for my students to be exposed to a new face/voice at this point in the semester. The value for everyone when students can present themselves as upcoming scholars is tremendous. Electronic video conferencing provides a powerful medium for students to claim the mantra of scholar as they display their newly acquired knowledge. The sincerity of the conversation moved the entire class to a level of inquiry that I have seldom seen. As we ended our conversations, I honestly wanted to work with several of these students and offered to continue our discussion next week – with the permission of the instructor.

Online Video Conferencing Sessions as a Way of Constructing One's Own Knowledge

Satomi: I have always wondered how children construct their own knowledge as well as how we, as teachers, construct our own knowledge. As a former early childhood teacher, I have always been amazed at how much knowledge children had before they came to my classroom. I am a firm believer in children being truly capable of constructing their own knowledge with a little support from us. Likewise, I do believe that we go through the same process in order to construct our own knowledge, and when I reflected on these online sessions, I discovered that I had also constructed my own knowledge of how to offer such sessions. Each time we interacted with our presenters, I had to rethink my thinking as to how to better conduct these sessions. Rethinking one's way of thinking is one of the most important components of constructivism (Branscombe, Castle, Dorsey, Surbeck & Taylor, 2003). I asked myself many questions about



these sessions, redefined and coordinated my old ways of thinking in order to improve on how to use technology to teach graduate classes. By writing this paper, I am finding out that I am going through the same process in constructing my own way of teaching.

Dorothy: Like Satomi, I believe that adults construct knowledge through active engagement and this situation certainly provided an opportunity for dialogue, constructing and reconstructing views on our instructional techniques. When I initially spoke to Satomi, I readily agreed to participate because I was sure that I could respond well to the questions that would be posed. Although I had pulled some notes together and put together a tentative lecture, I began questioning my techniques. Was I relying too much on directive approaches when preparing the lecture? Was I prepped sufficiently for a Q and A session? How could I construct exercises that would encourage them to question and move to a higher level?

The video session began. The students asked me questions about my research studies and I was able to respond easily. “My study of young children evolved from my experiences in classrooms for over a decade. I intuitively knew that children learned from others and I wanted to understand this interactive process.” The next question was much more difficult. “Did you discover how this occurred?” I looked at the student and responded, “I think you have a dissertation topic.” As the students laughed, they realized the value of the process of thinking and talking together. The next students asked about the methods that I had used in several articles. “Do you think this is the best methodology for understanding how knowledge is transferred?” No, I replied, this study should have used a different approach. As I explained why I would add another layer of analysis to this study today, I realized that this process in and of itself reflects the very essence of what Vygotsky referred to as the zone of proximal development (1930/1978).

It surprised me that as I had carefully planned the cognitive deliberations that I wanted them to experience, I realized that I did not always take this approach with my own students. With these visitors, I prepared as though I was an invited guest speaker. I read extensively, prepared notes for questions that might arise, and then considered a few remarks that might challenge their conceptions. In contrast, I realized that -with my own students I prepared as though they were very familiar. Instead of the inquiry-based approach that I ascribed to, I had slipped into a more directive approach that would ensure that their scores would be at the top of the Praxis II scores in their content areas. Because the students that I typically taught were undergraduates, I had slipped into a position of assuming that they could not engage in a completely constructivist approach. I had approached the course in a very prescriptive way that involved objectives, pacing, and evaluation that mimicked my own preparation as an undergraduate. This caused me to pause.

I had long advocated teaching students through the use of techniques that reflect the developmental level of the students-regardless of the age (Rogers & Sluss, 1996). Unfortunately, I realized that in my quest to ensure that they were content specialists in early childhood education and early mathematics, I may have ignored my own best advice. In my own classes, I focused on the material that should be covered to prepare them for the test. I used a variety of techniques including math manipulatives, small group work, power point presentations, and projects. Still, there was a specific focus. It appeared as though I was the director instead of a facilitator. I had to reclaim what Bruner referred to in his Acts of Meaning (Bruner, 1990, 1991).



As I interacted with the students in Memphis, I realized that I needed to revive my techniques of questioning and teasing a part research studies; encouraging students to challenge; and engaging them in legitimate acts of inquiry. As the questions intensified, I realized that I had to restructure my courses again with the same excitement as at the beginning of my career and with the knowledge that evolves with experience.

Sandra: All of life is a conversation. Sometimes in academia there is a tendency to relegate learning to just what it is written and we do not have the personal contact with those whose thoughts we are considering. After a good conversation about this course with Carol Cordeau Young, one of the Lipman School supervising teachers who also took the course, she surmised the experience in these words, "This course added the dimension of giving life, if you will, or a persona, to the written words of these respected teachers. Now when I read their words, I can hear their voices and see their faces in my mind and it has made inferences for me in ways I had not thought of before."

When I reflected on Carol's thoughts, it occurred to me that as a constructivist educator, I use conversation as a teaching methodology more often than even materials. This is true whether I am engaging the minds of university students, area caregivers or the children at Lipman School. It also dawned on me that it was not the import of my words but the authenticity of the example and sometimes the passion with which I spoke that got the student further along his/her path. This is what I came to appreciate the most about this videoconferencing course: that I got to be a human being within the context of other human beings as we shared our ideas fluidly across the miles that separated us physically but not intellectually or emotionally or perhaps, spiritually.

Our Final Impressions and Reflections

Satomi: Part of me did not stop reacting when these sessions ended because of my excitement and having been able to collaborate with such esteemed educators. My only regret is that such good things must always come to an end. As I start remembering our successful online video sessions, I just cannot forget one student's comments regarding Kathryn Castle's session:

When Dr. Castle began speaking, I took many notes. I wanted to remember everything! I was excited to hear from her and wanted to preserve every word! The more she talked, the more she drew me into the experience. I was like a young child so engaged in the process that the product wasn't at the forefront of my mind any longer. Because I was so engaged, I don't have problems remembering things she said. This helps me validate the essence of constructivism in my mind.

How could we get this kind of reaction from our students if we did not have these renowned educators agree to participate in our sessions? I cannot imagine offering such successful sessions to my students without these educators.

Dorothy: The camera stopped at the end of the session and I wondered how they would critique the session. I felt comfortable that my knowledge of play was sound, but I was less certain of my ability to inspire and challenge them in a way that would encourage them to seek additional knowledge. Satomi and I had agreed to communicate after the session. I placed a call to



Memphis and waited. I have never anticipated semester evaluations with as much dread and anticipation. What did the students say about the session when it was over? Were they disappointed? Satomi's response was comforting, "The students loved you and they all want to study play." I was thrilled and volunteered to share additional insights about constructivism next week.

This time, I knew how to prepare. I would rely on my knowledge of cognitive development and again prepare for an inquiry based lesson to inspire and excite. At the end of the second session, I was equally in awe. As I engaged the students, I developed a closeness to them and wanted the sessions to continue. Watching Satomi with her students, I was envious of their opportunity to engage in these conversations on a weekly basis. Had Satomi been on my campus, I would have been in the class every week. Because the students are talking to the authors of the articles, they can understand the material at a different level and are engaging in an authentic constructivist experience (Tam, 2000). Questions that might have gone unanswered or unexplored were answered and discussed. Students were stimulated to seek additional scholarship in a way that is unequalled in the regular classroom. As I considered the experience, I considered how I might implement this plan in my classroom next semester... I wanted my students to experience the richness of this situation. How difficult would it be to set up a group of professors who would engage in on-line discussions with classes? Would it be possible to develop a bank of people who would engage in these experiences? "Satomi, we are only on the tip of the iceberg."

This activity utilized technology and constructivism optimally. That is, the use of technology was seamless. I failed to mention my interactions with the "controller" who monitored the session because it was translucent. After the setup, the "controller" went to another room and I was left alone with the students in the monitor. Although we lost the signal twice during the broadcast, it did not interrupt the experience. The dialectical nature of the activity demonstrated constructivism in action. Few activities can capture both so effortlessly.

Sandra: At the end of the course, we created a file with each guest speaker's profile and some of their publications to which we continually add new works. We constantly refer to that resource file and feel that we are colleagues with these giants in our field. From an economic standpoint, this course was amazingly cost effective. For the price of tuition for a three hour graduate course, we got a two hour intensive workshop with internationally recognized early childhood leaders who could charge large fees for their time. And yet, this technology brought them to us and us to them each week for an uninterrupted two hour period. The pedagogical exchange was very significant and all it cost was tuition and books!

Implications for Education

According to Branscombe et al (2003), authentic tasks promote one's intellectual development, and offering online video conferencing sessions can be categorized as such. To nurture such development in students and others who are involved, we need to actively rethink old ways of thinking. Based on our experience, we suggest the following practices:

1. Inform the guests of what is expected of them, since one guest's expectations were not aligned with those of the students. There was some



confusion as to how to start the session with this particular guest. Good advance communication with guests will further promote opportunities for students to connect to the ideas with which they have become familiar through readings (Taylor & Hsueh, 2005).

2. Prepare students for a constructivist experience. Some students may feel uncomfortable talking to the experts without having adequate knowledge of constructivism. Explain that social constructivism involves everyone in the conversation and that they all may begin at different places, but the goal of the process is to create new knowledge through dialogue. The presenters as well as students may start at different points, after talking to each other, a shared understanding emerges. This process is referred to as intersubjectivity and is enhanced through online video conferencing sessions.

3. Ensure that the students have copies of several articles and that they have read them. Familiarity with the content enables students to think deeply about the topic areas.

4. Before offering sessions, make sure each university has a “broadband network infrastructure with access to the Internet” (Taylor & Hsueh, 2005, p. 132). It is important to be familiar with and to test the compatibility of the technical equipment and connectivity between the participating universities.

Final note: After the experience, Dorothy revisited the teaching strategies used in the experience and used it with an undergraduate class in human development. The students rated this as one of the best courses that they had taken and Dorothy received a teaching award. The process of examining and re-examining our own teaching has the power to move university faculty to a higher level of effectiveness. TET can be a powerful model for improving teacher education at all levels.

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