Building the Future with Cohorts: Communities of Inquiry

David W. Rausch and Elizabeth Crawford

Abstract

With recent interest in communities of practice, learning communities, and critical inquiry theory, the University of Tennessee at Chattanooga (UTC) developed, implemented, and studied the relationship of community and the cohort model. This paper shares information about successes and opportunities for improvement. Cohort-based learners across a number of degree levels (master's, education specialist, and doctorate) participated in various distance-learning programs. Factors related to retention, academic rigor, and persistence to degree are addressed. In addition, the cohort model and its relationship to existing affinity groups are explored.

From the early 1990s to present, the practice of cohort-based learning has been on the rise in colleges, universities, organizations, and even some K–12 programs across the nation. Cohort learning can be best defined as a group of students or participants (usually adults) who proceed through a program of learning (often upper-level university degrees) taking all of their courses or instruction in a sequential manner (Reynolds and Hebert 1995). This type of learning model uses the power of the interpersonal relationships to enhance the learning process and provide additional support to the cohort members as they move toward program completion (Saltiel and Russo 2001). Seifert and Mandzuk (2006) assert that the cohort learning model promotes mutual intellectual and academic stimulation, establishes socially supportive relationships among students (participants), and provides for administrative ease of design and delivery through the use of lock-step program scheduling. In a study of cohort-based doctoral learners, Nimer (2009) corroborates the cohort use of lock-step programming stating that the planned course of study eases anxiety and stress related to registration issues identified by adult learners who are juggling multiple priorities. With the emergence early in the century of online and distance programs and classes, programs using cohort learning models have embraced the concept of e-learning communities (Coole and Watts 2009). Coole and Watts (2009) link the success of e-learning models to the effectiveness of social constructivist learning styles that add to the richness of knowledge construction and transfer. Saltiel and Russo's research (2001) supports this concept in their reference to the power of the cohort bonding process. Even if cohort members don't know each other coming into the program, the structure of the program builds community right from the start with discussions and group projects designed to increase the socialization process of the learners as a collaborative team. Saltiel and Russo (2001) call this the "Collaborative Intensive Group Learning Experience" (p. 78). Reflection on UTC's history of the use of cohort-based learning models yields a similar story.

Where We Have Been

Based on requests from community schools and school systems, The University of Tennessee at Chattanooga began face-to-face cohort delivery of our Master of Education non-licensure program in 1999. These programs were usually a mix of teachers from one or more schools in a school system or local area. The classes were held on site at a school or system building geographically close to the majority of the participants. Since all the participants were full-time teachers, many with families or other outside considerations, the university chose to offer the program using an alternate schedule format designed to minimize disruption. Courses were delivered live on site, one night per week, for a five- to six-hour period. Traditional semester dates were observed (fifteen weeks) with six credit hours offered per semester for a total of six straight semesters (fall, spring, and summer). For ten years, the university used this model of delivery.

In 2001, the same model was used as a basis to establish additional cohort-based programs for the Education Specialist in Technology. This program was a mixed method of face-to-face and online delivery, meaning that half of the courses were delivered face-to-face, while the other half were delivered in an online format. Participants took six hours per semester (three hours completely face-to-face and three hours completely online). With the subsequent rise of the use of the Internet for course delivery, the Master of Education program was moved to a fully online delivery format in fall 2007. This online delivery was still designed using the cohort delivery model, but the university was able to spread the learning opportunities to a larger geographic area without a major increase in resources (travel dollars, faculty, and so on).

The doctoral program in Learning and Leadership at UTC was offered initially in 2005 using an executive delivery format that used six to eight concentrated weekend sessions during a semester for each course. This initial method did not take advantage of any asynchronous or other learning management system tools other than document/syllabus delivery, but encouraged the students to create study groups to meet in between class sessions in whatever way they felt was best for them. As with any graduate program, the large quantity and variety of foundational seminal knowledge for success poses a major learning challenge. It was recognized early that connecting the program participants in a more formal way in between executive seminar sessions would be critical to helping them work through all of the concepts and literature needed for competency. Over the next several semesters, we worked to develop a hybrid method of delivery that maximizes the strengths of the cohort learning model through a mix of the virtual classroom and face-to-face sessions.

The strengths of a cohort model are consistent and enhanced by the hybrid learning environment (Nimer 2009). Our experiences with cohorts have been that they are incredibly useful as a starting point to build a sense of community. The desire to belong is why many people find themselves very uncomfortable with strictly online learning, as they do not feel membership in any group relative to a course, a program, or even a specific university during the learning experience. In fact, the same

anonymity that we believe adds strength to the virtual classroom in a hybrid delivery is the anonymity that is disquieting for learners when they are struggling or feeling otherwise alone in a purely online course setting.

A variety of approaches to the hybrid model are based on teaching styles, course content, course size, and course objectives or goals. The hybrid course design that UTC embraces looks to generally reduce face-to-face class time by 50 percent, thus eliminating one weekend class per month and replacing that time with a variety of project-based or interactive online assignments. Hybrid learning seeks to use the best of face-to-face classroom experience and the online tools that allow us to create a truly virtual classroom. By virtual classroom, we are referring to the learning space that exists in a learning management system, a blog, a wiki, or other directed synchronous or asynchronous environment. With continued demand for convenient access and learners' desire to control the "when" and "where" of their engagement and contribution to the learning process, we can no longer rely on the traditional face-to-face model of learning taking place at the institution's discretion, scheduling, and geography.

The growth of the fully online (only) course and program has allowed for all of the convenience sought by the learner, yet in many cases has ignored or actively undermined the social aspects of learning. From the creation of clear instructional objectives to the facilitation of active experiential-based discussion forums, the art of facilitating the learning process in an asynchronous virtual environment is in its infancy.

Knowledge cannot simply be generated by instructors and linearly transmitted to students to use whether in the face-to-face or virtual classroom environment; it is built up through the synthesis of social experiences that occur in the learning environment. Therefore, the use of a discussion forum learning environment requires careful and complete preparation for the effective experience in which participants become the focus and, thus, play an active role in the teaching and learning process. This learning environment helps create opportunities to generate and construct new knowledge through interactions between instructors and learners, learners and learners, and learners and learning materials. Practitioners have emphasized the need of knowing how the new technology can affect learning outcomes when it is used by different types of learners under different circumstances. It is obvious that just making discussion forums available does not result in effective use.

We find the hybrid model more conducive to the expectation of academic rigor that underlines graduate study. By structuring face-to-face meetings with virtual classroom activity and time designed in between sessions for analysis, reflection, and synthesis, we are much better able to create, support, and facilitate levels of rigor expected by the program participants and faculty.

Our hybrid learning approach seeks to find the best practice of the faculty role in the classroom, whether face-to-face or virtual. In traditional face-to-face lectures, the faculty role of sharing information traditionally has been to disseminate knowledge (sage on the stage) to a group of students/learners. In the newer online classroom, the faculty role has

changed little as they became an "administrative discussion thread counter" and possibly a "sage on the screen." The responsibility of a faculty member to lead the learning journey is critical in a hybrid model and probably more akin to a leader participant role than merely a lecturer/audience relationship. The dynamism of active conversation between learners and faculty can be even richer in a virtual environment. The social interaction, which takes place in the face-to-face session combined with the virtual classroom setting appears to strengthen the learning process by balancing the relationship aspects from the face-to-face classroom with the asynchronous format provided in the virtual classroom for analysis, reflection, and synthesis.

According to Kearsley (2000), the most significant applications of communication in virtual learning environments are discussion forums. Discussion forums in the virtual classroom provide a way for students to extend the classroom discussions. They provide better cognitive and exploratory learning (Haggerty, Wan, and Wang 2008), increased student-to-student discussion and cooperation (Kassop 2003; Stodel, Thompson, and MacDonald 2006), superior learner empowerment (Kassop 2003), upgraded critical-thinking skills (Shapley 2000; Collison et al. 2000), and the requisite time needed for specific learner reflections, which weave content constructs and the experiential learning unique to each student.

Asynchronous learning, especially at the graduate level where analysis, reflection, and ultimately synthesis are critical elements of the experience, is designed perfectly to allow the requisite thinking and processing time for the learner as well as the faculty. In a face-to-face class, when a statement is made or a question is posed, the excitement and passion of the moment, which can add value to the learning, also color any purposeful and reasoned response that may be required. With the desire to be first to answer, to be noticed in the class, and to "please" the instructor, responses rarely can be thoughtful and reasoned as no time is allowed for processing. Just imagine posing a question in a face-to-face class and asking the students to pick up the discussion over the next twenty-four hours as they reflect upon their life experiences and how the theoretical constructs introduced in the class may impact their current view of those experiences. Obviously, everyone would not hold still in the classroom for the twenty-four hours.

An incredible benefit of hybrid learning is the complete engagement that the virtual classroom allows and the way that engagement can enrich the face-to-face classroom experiences. We have often said there is no back row in the virtual classroom. Through careful instructional design and discussion facilitation, every member must contribute, which, as we all know, does not take place in a traditional face-to-face classroom. In a graduate seminar of twenty-five people, our experience shows twelve engaged, eight offer tidbits, and five are nearly invisible. In a well-designed virtual classroom, every participant must respond, within the instructional guidelines. After being actively engaged in the virtual classroom, we believe that the comfort given by the anonymity of the virtual classroom response contributes to a sense of confidence that encourages greater contribution in the focused face-to-face meetings that are part of a hybrid model.

Establishing the personal relationship between the learners themselves and the learners and the faculty is a critical aspect of all face-to-face learning experiences. The initial ice-breaking activities create a "safe," comfortable, welcoming, and unbiased learning environment. We find these activities are always best done with face-to-face sessions. Once "Grace" meets "Evan," has made eye contact, and been welcomed by a faculty member whose strategic mission includes turning this group of students into a group of learning community participants, the social aspects of the cohort of learners is established and can foster the deeper interaction desired in a program of higher learning.

By embracing the features of a learning management system (Blackboard), faculty and participants were able to stay connected in between class sessions and to informally engage in dialog related to the vast background work required for the program. Beyond merely assisting with knowledge acquisition and access, this use of the learning management system (LMS) further strengthened the relationship of learners to one another and to the faculty enhancing the social elements, which contribute to effective learning. (This almost provided the equivalent of texting your learning friends with questions and ideas as it fits your schedule before tweeting and texting were quite so popular—a virtual place to go with your information, on your time, at your convenience).

A couple of years into the program, it became obvious that the value of face-to-face time was not content distribution, but was the opportunity to create a tool that furthered the discussions that were taking place outside of class between learners and faculty. In fact, we found that the working professionals in the program might need to miss one of the six to eight face-to-face sessions, but were anxiously and consistently communicating with other participants and faculty in the virtual classroom. Fewer, richer face-to-face meetings created a much more robust and engaged face-to-face learning environment while allowing program participants the time and space for analysis, reflection, and ultimately synthesis of the content information required. The current program delivery model includes four weekend seminars during a semester (per course) as an entire class, plus ongoing facilitated discussion forums which are experiential and reflection-based rather than a posed question with a correct answer/response possibility. Study groups are formed organically by members of the cohort and they choose face-to-face, asynchronous, or synchronous virtual meeting times as they deem appropriate. Faculty often are invited to these sessions. We have transitioned from a faculty/student perspective to a participant/facilitator model designed to demonstrate the value of recent literature about the learner-centered approach.

What We Learned

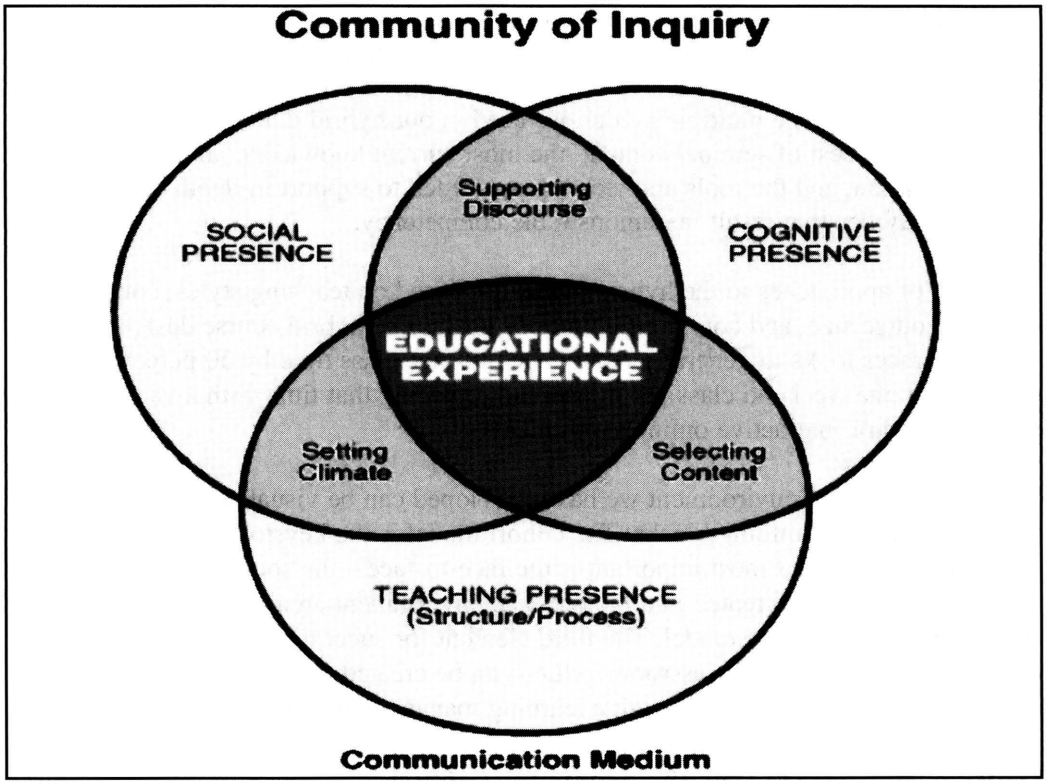
Through initial face-to-face master's cohort programs, the university noted that the communal learning process of the cohorts brought increased awareness of master's level work to the school hosting the program. This awareness and subsequent appreciation caused the development of a bigger "community of learners" in the schools/systems as the members of the cohorts shared and encouraged coworkers to try

out new approaches, or even to join the next cohort program. This expansion of the "community of learners" was enhanced, as programming was expanded into a delivery model of mixed face-to-face and online programs. Since the online component broadened the access to the program, there was a greater mix of students who took the shared community of learners experience back to their schools, creating an inter-organizational effect across the greater community with representation from most local systems and a large number of regional schools. Saltiel and Russo (2001) support this concept that the community of learners goes out into its greater community and spreads the process. They surmise that this process is part of the greater societal movement to build connections among people in order to develop a greater sense of community.

In the area of retention, Master of Education face-to-face cohorts, as well as the EDS retention/completion rates were greater than 95 percent. Saltiel and Russo's research (2001) supports this finding in their reference to the power of the cohort bonding process. Though prior research states that online retention in many programs averages as low as 50 percent (Gleason 2004), expansion from face-to-face and mixed delivery models to a totally online master's program delivery at UTC has yielded similar results to the face-to-face and mixed methods approaches. Totally online Master of Education retention is better than 90 percent (currently in the fifth cohort). Even though the online cohorts do not know each other coming into the program, the structure of the program (including a face-to-face orientation night prior to the first day of class) builds community right from the start with online discussions and group projects designed to increase the socialization process of the learners as a collaborative team. This community approach to learning is the heart of the success of the cohort model.

A construct that has attracted considerable attention in higher education that serves this purpose is that of a community of learners (Cleveland-Innes, Garrison, and Kinsel 2008). Higher education consistently has viewed community as essential to support collaborative learning and discourse associated with higher levels of learning. Moreover, the asynchronous nature of online communication and the potential for disconnectedness has focused attention on the issue of community. In support of this perspective, there is evidence that a sense of community can be created online, although this is not a trivial challenge. It has also been shown that sense of community is associated significantly with perceived learning.

Our understanding of the collaborative aspects of the cohort model incorporates the best of Wenger's Community of Practice and Garrison's Community of Inquiry (Wenger 2009; Cleveland-Innes, Garrison, and Kinsel 2008). Wenger states (2009) that learning in a social context requires contribution and recognition of the learner's experience and practice as a critical element in developing competence. Garrison's (Cleveland-Innes, Garrison, and Kinsel 2008) work recognizes the critical aspects of a Community of Inquiry including three interdependent elements that are necessary to ensure a meaningful learning experience: social presence, teaching presence, and cognitive presence.



The term "community" is used as a shortcut for community of learners, which is defined as a learning partnership among people who find it useful to learn from and with each other about a particular domain. They use each other's experience of practice as a learning resource. And they join forces in making sense of and addressing challenges they face individually or collectively. UTC has been relatively successful in employing the properties of asynchronous learning networks. The more in-depth analysis of the educational and transactional issues requires a theoretical framework that can provide order and parsimony to the complexities of online learning. Our interpretation and implementation of these elements is stated here.

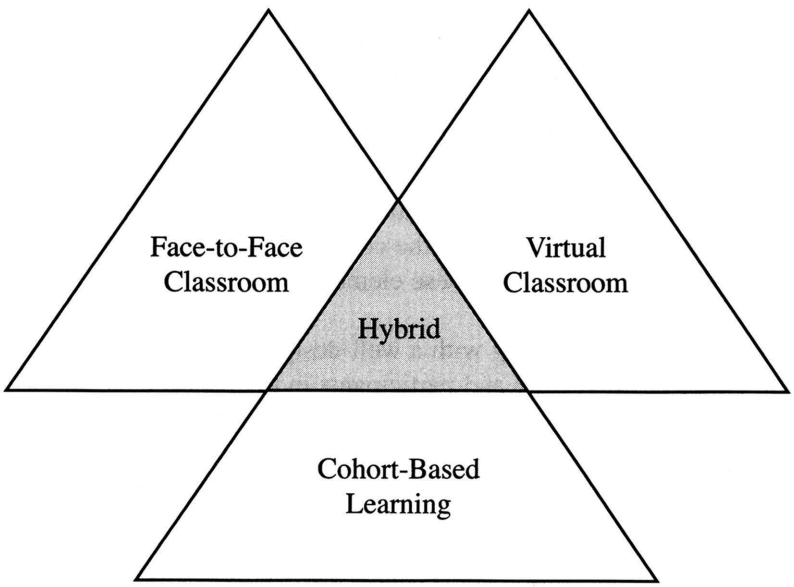
> Social presence—By beginning with a well-designed face-to-face session, we begin to invest the faculty and participants in the cohort concept consistent with the necessary elements needed to build a true sense of community. With the social presence, we are creating the climate and modeling a supportive, participative, and contribution-oriented discourse that will characterize the program.
>
> Teaching presence—The role of faculty is critical for success. Modeling a supportive and facilitative role that is primarily focused on participant success is crucial to the trust relationship that will prove to be pivotal for retention and progress.

Cognitive presence—With a hybrid cohort model, we transcend the mere acquisition of data by the student and create opportunities for program participants to flex cognitively with greater emphasis on analysis, reflection, and synthesis. The multiple modalities used in our hybrid delivery seek to engage the best of seminal content, the most current knowledge and resource information, and the tools and techniques needed to support in-depth discourse and activities that result in demonstrable competency.

A variety of approaches to the hybrid model are based on teaching styles, course content, course size, and course objectives or goals. The hybrid course design that UTC embraces looks to generally reduce face-to-face class time by 50 percent, eliminating one weekend class per month and replacing that time with a variety of project-based or interactive online assignments.

The hybrid learning environment we have developed can be visualized as composed of three foundational building blocks. The cohort model is the keystone of this construction. The next most important is the face-to-face—the social elements and trust relationship best created in a face-to-face environment are critical ingredients to our success in the hybrid model. The third element for success in the hybrid learning environment is the virtual classroom, which can be created with the asynchronous and synchronous tools provided through a learning management system.

Figure 2. Our Hybrid Learning Community Model



Conclusion

The most important lesson learned with our hybrid model that incorporates face-to-face sessions with the virtual classroom has to do with the timing of the initial face-to-face session. In order to capitalize on the trust and safe environment we seek to create, the initial face-to-face session should occur prior to significant virtual interaction among the cohort (especially in the initial semester). Cohort formation and sense of belonging is best launched with initial face-to-face sessions that provide the basis for success measures and the group norms to come while specific longitudinal data needs to be collected, codified, and analyzed to further define cohort effectiveness.

Within a cohort program, our focused face-to-face course schedule, along with the robust use of the virtual classroom have allowed a number of opportunities for delivery of the program beyond the traditional campus setting. This benefit promotes further community engagement with the university and provides access for program participation for a more diverse group of learners.

The development and implementation of our hybrid learning community model has allowed us to begin additional research in the areas of instructional design, program development, course assessment, online facilitation, and professional/faculty development. As a metropolitan, engaged university, we believe this model will allow us to further serve our existing constituents while providing an opportunity for us to support the needs of learners in the future.

References

Cleveland-Innes, Martha, Randy Garrison, and Ellen Kinsel. 2008. "The Role of Learner in an Online Community of Inquiry: Responding to the Challenges of First-Time Online Learners." In *Solutions and Innovations in Web-Based Technologies for Augmented Learning: Improved Platforms, Tools, and Applications*. Edited by Nikos Karacapilidis. Hersey, Pennsylvania: IGI Global Publishing.

Collison, George, Bonnie Elbaum, Sarah Haavind, and Robert Tinker. 2000. *Facilitating Online Learning: Effective Strategies for Moderators*. Madison, WI: Atwood.

Coole, Hilary, and Mike Watts. 2009. "Communal E-learning Styles in the Online Classroom." *Research in Education* 82 (November 2009): 13-27.

Garrison, D. Randy, Terry Anderson, and Walter Archer. 2000. "Critical Inquiry in a Text-Based Environment: Computer Conferencing in Higher Education." *The Internet and Higher Education* 2 (2–3): 87–105.

Gleason, B. J. 2004. "Retention Issues in Online Programs: A Review of the Literature." Paper presented at the Second AIMS International Conference on Management." Accessed October 6, 2011. http://thinairlabs.com/papers/216.pdf.

Haggerty, Nicole, Zeying Wan, and Yinglei Wang. 2008. "Why People Benefit from E-learning Differently: The Effects of Psychological Processes on E-learning Outcomes." *Information and Management* 45 (8): 513–21.

Kassop, Mark. 2003. "Ten Ways Online Education Matches, or Surpasses, Face-to-Face Learning." *The Technology Source Archives* (May/June). Accessed October 6, 2011. http://technologysource.org/article/ten_ways_online_education_matches_or_surpasses_facetoface_learning/.

Kearsley, Greg. 2000. *Online Education: Learning and Teaching in Cyberspace*. Belmont, CA: Wadsworth.

Nimer, Mary. 2009. "The Doctoral Cohort Model: Increasing Opportunities for Success." *College Student Journal* 43 (4): 1373–1377.

Reynolds, Katherine, and F. Ted Hebert. 1995. "Cohort Formats and Intensive Schedules: Added Involvement and Interaction for Continuing Higher Education." *Journal of Continuing Higher Education* 43 (3): 34–41.

Saltiel, Iris M., and Charline S. Russo. 2001. *Cohort Programming and Learning: Improving Educational Experiences for Adult Learners*. Malabar, FL: Krieger.

Seifert, Kelvin, and David Mandzuk. 2006. "Student Cohorts in Teacher Education: Support Groups or Intellectual Communities?" *Teachers College Record* 108 (7): 1296-1320.

Shapley, Patricia. 2000. "On-Line Education to Develop Complex Reasoning Skills in Organic Chemistry." *Journal of Asynchronous Learning Networks* 4: 43–62.

Stodel, Emma J., Terrie L. Thompson, and Colla J. MacDonald. 2006. "Learners' Perspectives on What Is Missing from Online Learning: Interpretations through the Community of Inquiry Framework." *International Review of Research in Open and Distance Learning* 7 (3).

Wenger, Etienne. 2009. "Social learning capability: four essays on innovation and learning in social systems." *Social Innovation*. Accessed October 1, 2011. http://wenger-trayner.com/resources/publications/essays-on-social-learning-capability/.

Author Information

David W. Rausch, PhD, is Director of the Doctorate in Learning and Leadership at UTC. Dr. Rausch has experience in the creation and implementation of graduate-level learning programs using a wide range of delivery modalities.

Dr. Elizabeth Crawford, EdD, is Assistant Professor in the School of Education and was formerly the Director of Continuing Education at UTC. Her primary research interests include the use of technology for learning and the cohort model.

David W. Rausch
Director-Learning and Leadership Doctoral Program
Associate Professor
College of Health, Education, and Professional Studies
103 Pfeiffer Hall, Dept. 2242
University of Tennessee at Chattanooga
615 McCallie Avenue
Chattanooga, TN 37403-2598
E-mail: David-Rausch@utc.edu
Telephone: 423-425-5270

Elizabeth Crawford
Learning and Leadership Doctoral Program
Assistant Professor
College of Health, Education, and Professional Studies
111 Pfeiffer Hall, Dept. 2242
University of Tennessee at Chattanooga
615 McCallie Avenue
Chattanooga, TN 37403
E-mail: Beth-Crawford@utc.edu
Telephone: 423-425-5286