***ETEC 510 Design Proposal***

**E-Mentoring for Professionals**

**A technology mediated environment supportive of mentor growth and relationships.**

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February 5, 2011

**Key Frameworks**

*The Focus*The focus of this design project is to create a constructivist learning environment to support professionals to develop necessary skills and knowledge relating to mentoring. The context is within a professional, job embedded model of blended support and will incorporate key elements to create a community of practice. The historical image of a mentor, as outlined in Greek mythology, is that of a trusted guide and friend. This project will focus on the framework in which people with experience and expertise invest time, skill and resources with those who are less experienced in professional environments such as teaching or nursing.

*Academic Literature:*

The design activities are informed by academic literature relating to mentoring, e-mentoring, adult learning, constructivist learning, knowledge building theory and concepts of communities of practice.

Mentoring is a response to the need of a workforce that is more self directed and autonomous (CU360 Newsletter, 2009) and has become a business imperative. Mentoring is done as a retention strategy to address high annual attrition costs (Kennedy & Cavanaugh 2010).  Mentoring is a means of career development (Loureiro-Koechlin & Allan 2010), facilitation of professional growth and advancement (Vitale 2010; Zachary) as well as improving productivity, job satisfaction and achievement (Johnson 2009; Shea 1994).  Mentoring is a leadership strategy that connects to practices as outlined by Kouzes and Posner (The Leadership Challenge, 2007)  These practices include: model the way, inspire a shared vision, challenge the process, enable others to act and encourage the heart.

Traditional mentoring models are challenged by distance, lack of available mentors, role specific demands and available time.  Mentoring practices are being adapted to include on-line components since e-mentoring formats allow for mentoring practices to span time, space and context. It can involve a blend of face to face as well as online and virtual communications. (Loureiro-Koechlin & Allan 2010). It can provide a variety of interactive components to enhance skill development, concept attainment and depth of discussion.

E-mentoring allows for a flexible schedule that can be more responsive to the individual needs of the mentor pair. Providing an e-community can support and provide models for all participants to enhance mentoring, engagement and persistence. (Thompson, Jeffries & Topping 2010)  E-mentoring can provide support for employees in the areas of personal and professional growth, expanding professional networks, increasing interpersonal effectiveness and enhancing personal confidence. (CU360 Newsletter, 2009)

*Ideas about learning and learning environments*

Constructivist learning environments are lived by novice employees. Jonassen’s insights into constructivist learning will frame how the design elements will be structured.  The elements, as described by Jonassen (1999) include "unstated goals and constraints; multiple solutions, solution paths or no solution; multiple criteria for evaluating solutions; uncertainty about concepts, rules, and principles; no general rules or principles for describing or predicting outcomes; and requiring judgements to problems and defending judgements by expressing personal opinions or beliefs." (Jonassen, p. 219) Instructional strategies that support learners in constructivist learning environments include modelling, coaching and scaffolding. (Jonassen, p. 216)

Knowledge building (Scardamalia & Bereiter 1993) is based on principles of ‘symmetric knowledge advancement”. Members of a mentoring network can improve their own knowledge by helping others advance theirs. Knowledge building is a process to increase cultural capital in the work environment. Learning in the workplace is a process to make cultural capital available to all. Knowledge building within a mentoring program includes forms of collaborative learning, guided discovery, project based learning, communities of learners, communities of practice and anchored instruction (IKIT website). According to Scardamalia, knowledge building allows individuals to  "Set ideas forth, have them contrasted with other ideas, stay active and competitive". This is reflective of what occurs between mentors in a mentoring community.

*Theoretical insights and perspectives*

Vygotsky’s (2000) notions of “social cognition” are relevant to considerations of mentoring since it relates to how individuals can work together to collaboratively create new knowledge. The notion of 'zone of proximal' learning is applicable for mentors who support protégé’s at critical points.

Dick and Carey (1996) presented theoretical insights into the systematic design of instruction that will inform the design of learning environments that relate to mentoring.

Donald Schon (1983) presented thinking about ‘the learning society’, ‘double loop learning’ and ‘reflection in action’ which impacts on our notions of how to create learning organizations where employees support and are supported by and with each other.

Perspectives on reflective practice with the concept of 'third things' as demonstrated in the work of Parker J. Palmer (2010) will be incorporated into the interactivities.

*Framing the primary educational activities*

Primary educational activities need to frame within an adult learning model. Leib (1991) described the six aspects critical for adult learners: to be autonomous and self directed, to engage and recognize accumulated life experiences and knowledge, to be goal oriented, to be relevancy oriented, to be practical and to be respected. Features that motivate adult learners include: social relationships, external expectations, social welfare, personal advancement, escape/stimulation and cognitive interest. Four elements of learning that must be addressed when designing material for adult learners is motivation, reinforcement, retention and transference.

Educational activities will also be framed within models for online learning. Anderson (2008) illustrated affordances within technology supported learning environments that included activities that are "simultaneously learner centred, content centred, community centred and assessment centred." (p. 66)

The modules will also be framed in the context of the medicine wheel from aboriginal beliefs since it relates to key elements relevant to mentoring relationships and practices - the intellectual self, spiritual self, emotional self, and physical self.

*Framing the educational media*
Educational media will be selected based on specific skills, topics and themes relevant to mentors as they work with each other and as they work with their protégée. Interactive, creative and explorative activities will be incorporated. These will provide a "third thing" on which to focus conversation, skill development and reflective practice.

**Intentions and Provisions**

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| The key accomplishment with this course design is to provide mentors with the proficiencies and skills to mentor others. A computer – mediated technology environment is the perfect medium to support mentors in this endeavour. Time restraints are one of the major obstacles relating to not wanting to participate in mentorship programs. CSILE environments provides the ability to engage in the program at one’s own pace, is easily accessible, and provides asynchronous communication which allows thoughtful and reflective responses in an inclusive environment. The ability to provide just-in-time learning, combined with course flexibility will aid the learners in engaging with the course material at their own pace. A web CT structure and design has been determined to be the best construct for this course, supported by a wiki designed particularly for mentors in mind. Through the intentional constructivist design, mentors will obtain the necessary aptitude to be experts in providing leadership, developing relationships with their mentees, enhancing communication skills, and acquiring personal and professional growth and development that will enhance and improve, not only the work place and work force, but their personal lives as well. This design-oriented course will focus on the goals for learning versus a description oriented focus which examines the end result of events (Reigeluth, 1996). Using constructivist principles, mentors will work through real-life and authentic tasks that are relatable to their own experiences which will provide meaningful learning opportunities to be shared with the mentee. Examples will provide advance organizers that will aid in linking prior knowledge to new knowledge. Progressive scaffolding and problem-solving  activities will provide a framework in assisting the mentors in developing skills that will be built upon previously learned skills. The medicine wheel will provide a backdrop in developing concepts to be used throughout the course.According to Reigeluth, (1996) learning should be constructed to provide clear information, thoughtful practice, informative feedback and provide strong  intrinsic/extrinsic motivation. These elements will be present in the design by providing clear and concise learning objectives along with expected outcomes. Opportunities for feedback from the instructor and mentee will be provided throughout the modules and will guide further discussions. Learning activities will be interactive and collaborative, which will encourage participation and motivation from all participants. Information will be broken down into attainable steps that allow the mentor opportunities in achieving the objectives. Thoughtful practice activities will include a knowledge-building community through discussion within the modules, and a collaborative wiki site that will foster positive relationships amongst other mentors, provide problem solving with real-life situations, and which will promote professional practice. A collective and collaborative knowledge building community will be fostered throughout this course as a means of developing expert knowledge built upon previous knowledge. Reflective learning activities will be situated throughout the learning modules in an effort to provide opportunities in evaluating cognitive and social growth and developments. The intention of the design is to provide effective visionary leaders who can facilitate, coach, display successful communication skills, empower decision making and time management skills, exhibit emotional intelligence, and improve management skills within a culturally diverse environment. The mentor will use this skill set to successfully engage and coach their particular mentee. This course will move the mentor along the continuum from novice to expert while acquiring the necessary skills through self-directed learning.        There are a number of benefits to ementoring which includes increasing employee performance, including productivity and effectiveness, providing professional networking, increasing interpersonal effectiveness, job satisfaction and providing confidence within the workplace (CU360, 2009).  Mentors not only provide useful knowledge transfer, but encouragement, direction and the key to understanding various perspectives (CU360, 2009). Mentoring retains employees in the workforce, increases morale and provides knowledgeable employees. Investing in mentorship programs aids organizations in retaining collective knowledge by building on previous knowledge and provides the ability to move forward despite staff attrition/turnover. Mentors are able to assist in the transition from University to the workforce, and play a critical role in the success of novices (Stanulis, 2009). Historically, Train the Trainer models fail to achieve their objectives related to the fact that participants fail to remain engaged with the mentor as they practice applying their new knowledge and skills within the work paradigm (Graves, 2009). In a shifting and changing global job market, where demanding workplaces require a high skill set from their employees, the stress of the transition into new workplaces can be overwhelming. Stress and burnout can lead to loss of human resources to competing companies. Retaining employees strengthens organizations and provides continuity and longevity of the organization’s future and goals. With the impending retirement of baby boomers, the transition of knowledge has become increasingly more important.  Building knowledge on previous knowledge encourages an organization’s innovation and growth.  Knowledge building and creation are essential to the health and wealth  of our country/systems (Scardamalia 2010) Employers may not value these goals due to time constraints on human resources, cost, IT requirements and breakdowns, personality and relationship difficulties, low participation and  lack of motivation. Lack of accountability and interaction can also hamper the learning objectives. Initial cost-benefit analysis may not initially show benefit realization, particularly in monetary forms. The inability to pick up on social and visual clues, and the lack of immediate feedback can contribute to miscommunication and misrepresentation (Scarlet). Barriers to a successful mentor program need to be identified early on to ensure a seamless transition for new employees. |

**Key Concepts and contexts**

The primary concepts that we need to develop are related to the theories that are sustaining our project (know that) and the procedures we expect to design (know how). In the table below you will see the definitions about them:

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| **Conceptual “Know that”** |
| * **Constructivist Learning Environments (CLE)**: support problem-bases learning by providing a question, issue, problem or project that a learner will attempt to solve or resolve (Jonassen, 1999).
* **Communities of Practice**: are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly (Wenger 2009).

There are three elements of community of practice (Wenger 2009).- *the domain*: it has an identity defined by a shared domain of interest. Membership implies commitment and shared competences within the domain.- *the community*: members build relationships that enable them to learn from each other through collaboration and active participation in activities and discussion.- *the practice*: the members are involved with each other through collaboration and sustained interaction.*Why E-mentoring?*Online learning environments (Pallof & Pratt, 2003):-        Develop open and supportive relationships.-       Facilitate learner-centered education.-       Is flexible, allowing asynchronous and synchronous discussion to potential frequency of discourse.-       Offer active learning processes.*Limitations and constrains of E-mentoring*-       Lack of knowing about mentees reality and needs. How much help/experience could a mentor provide through distance learning?-        Engagement and persistence.-        Lack of social and non-verbal richness of face-to-face environments (Thompson, Jeffries & Topping, 2010). |

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|  **Procedural “Know How”** |
| * **Emotional Intelligence**: This term has been in study since 1990s. Peter Salovey and John D. Mayer have been the leading researchers in this area. They define the term as the “capacity to reason about emotions and of emotions to enhance thinking” (Mayer, Salovey, & Carusso, 2004). It involves abilities to perceive one’s own and others’ feelings and emotions, to discriminate among them and using this information to guide one’s thinking and actions (Salovey & Mayer, 1990).
* **Active Listening**: is a process in which a student acquires skills involved in an effective verbal and non-verbal communication. Active listening requires attention, paraphrasing (relating a message using other words, checking periodically that the message is understood) clarifying (bringing vague into precise), empathizing, reflecting, and summarizing.
* **Problem Solving**: helps constructing better comprehended, retained and transferable knowledge and requires intentional learning. Argumentation is an essential and powerful skill in learning to solve problems (Jonassen, 2010).
* **Collaborative Learning** is a process in which students shift form passive to active agents and are engaged in the construction of knowledge. Collaborative learning help students working together, developing structured group activities and promoting social skills. It represents a shift from teacher-centered to learner-centered instruction. Collaborative learning takes on a variety of forms and is supported by different disciplinary backgrounds, the most common of them the Constructivist approach.
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We will design this project around the theme of the medicine wheel. Each module will focus on a specific topic related ideas (e.g., earth, fire, water, and air). This project will be an 8 module plan with 2 year cycle. On the first year the course will be related specifically to skills for mentors. During the second year, the course will be related to deeper themes, such as elements/tasks that could be done between mentors and mentees.

**Interactivities**

The activities generated by our design are meant to be woven together and shared within a community of practice. They are reflective of the five umbrella goals that the team is proposing in the design and parallel the most current ideas regarding mentoring found within academic literature. The goal of each module is to allow the mentor to engage introspectively upon their personal practice and then generate a reflective analyse with their mentee in a provocative and inclusive manner.  Together, they will be challenged by the information presented and required to manipulate it to reflect the needs of their particular profession. Our goal is to present the entire design in a WebCT formatted course with seven distinctive modules that are aligned with a very ancient design; the Medicine Wheel. The rationale behind the medicine wheel symbolism is simple; by incorporating a holistic approach that seeks to honour the many aspects of the self - both mentor and mentee will grow as professionals in both their practice and their leadership (Montour 2010) . The medicine wheel provides an effective backdrop for the interactivities because of how it allows a person to identify with who they are as an individual. An effective mentor must be confident in themselves as an individual before they can establish a mentor repartee with a junior colleague that is beneficial and supportive.

    Each module will have a brief synopsis that highlights the important points and goals. The activities will be designated as either specific for the mentor, specific for both mentor and mentee, or specific for the mentee. The mentors and mentees will share these in a collaborative setting with each other and with their designated groups in a WebCT forum. Challenging, engaging and thoughtful activities will accompany each module. An example of one of our forecasted ideas will be mentors using *audacity.sourceforge.net* to create a podcast where they reflect on their individual professional growth to share in an introductory fashion. The teams will also contemplate accomplishment indicators for the separate modules and share them with their colleagues. Finally, reflective questioning will be incorporated to challenge the teams to critically examine their own practice and shared best practice within their professional community.

Please visit the following link for our table of prospective interactivities:

<https://sites.google.com/site/ementoringforprofessionals/interactivities---patricia>

References

Anderson, T. (2008). Toward a theory of online learning. In T. Anderson & F. Elloumi (Eds.) *Theory*

*and Practice of Online Learning*, Chapter 2 (pp. 45-74).

CU360 Newsletter (2009) [**Mentoring** Goes **Online**.](http://web.ebscohost.com/ehost/viewarticle?data=dGJyMPPp44rp2%2fdV0%2bnjisfk5Ie46bNOtaivUbKk63nn5Kx95uXxjL6nrUqwpbBIr6eeULiot1Kvqp5oy5zyit%2fk8Xnh6ueH7N%2fiVa%2bntEuzrbFKsqikhN%2fk5VXj5KR84LPgjOac8nnls79mpNfsVbKqt0iuq7NRpNztiuvX8lXk6%2bqE8tv2jAAA&hid=10) 35 (18), p6-8, 3p Retrieved from EBSCO*host*

 [Jan, 2011]

Dick, W. & Carey, L. (1996) The Systematic Design of Instruction. Retrieved from

http://books.google.ca/books?id=auxLAAAAYAAJ&dq=dick%20and%20carey&source=gbs\_book

\_other\_versions [Jan, 26, 2011]

Graves, Scott M., Abbitt, Jason, Klett, Mitchell D. & Changhua Wang. (2009) A **Mentoring** Model for

Interactive **Online** Learning in Support of a Technology Innovation Challenge Grant. *Journal of*

*Computing in Teacher Education*, 26 (1), p5-16 Retrieved from <http://web.ebscohost.com> [Jan,

26, 2011]

Jonassen, D. (1999).[Designing constructivist learning environments](https://www.vista.ubc.ca/webct/urw/lc4274316161121.tp4274316185121/displayContentPageTargetedResource.dowebct?tocID=-1&tocLinkID=-1&pageID=-1&newWindow=true&relativePath=/PDF/Jonassen-1.pdf). In C. Reigeluth (Ed.), *Instructional*

 *design theories and models: Volume II*. Mahwah, NJ: Lawrence Erlbaum.

Leib, Stephen (1991) Principles of Adult Learning. Retrieved from

<http://honolulu.hawaii.edu/intranet/committees/FacDevCom/guidebk/teachtip/adults-2.htm>

[Jan26, 2011]

Loureiro-Koechlin, Cecilia & Allan, Barbara (2010) Time, space and structure in an e-learning and e-

**mentoring** project. *British Journal of Educational Technology*, 41 (5), p 721-735. Retrieved from

EBSCO*host.* [Jan, 26, 2011]

Kennedy, Kathryn & Cavanaugh, Catherine. (2010) Development and Support of **Online** Teachers: The

Roles of Mentors in Virtual schools. *Journal of Technology Integration in the Classroom*, 2 (3),

p37-42. Retrieved from EBSCO*host.* [Jan, 26, 2011]

Mayer, J., Salovey, P., Carusso, D. (2004) Emotional Intelligence. Theory, Findings and Implications.

 Psychologycal Inquiry, 15 (3), 197-215. Retrieved from:

<http://www.unh.edu/emotional_intelligence/EI%20Assets/Reprints...EI%20Proper/EI2004Mayer>

SaloveyCarusotarget.pdf [Jan, 26, 2011]

Montour, L. (2000) The Medicine Wheel. 4 (1) Retrieved from:

 <http://xnet.kp.org/permanentejournal/winter00pj/wheel.html> [Jan, 17, 2011]

Pallof, R, & Pratt, K. (2003). Building Learning Communities in Cyberspace. Effective Strategies for the

 Online Classroom. San Francisco: Jossey-Bass.

Palmer, R & Zajonc, A. (2010) The Heart of Higher Education. A Call to Renewal. San Francisco:

 Jossey-Bass.

Salovey, P., Mayer, J., (1990). Emotional Intelligence. *Imagination, Cognition and*

*Personality,*9*.*Retrieved from:

 <http://www.unh.edu/emotional_intelligence/ei%20Reprints/EIreprints%201990->

1999.htmf [Jan 26, 2011]

Schon, Donald. (1983) The reflective practioner. Retrieved from <http://www.infed.org/thinkers/et->

 schon.htm [Jan, 26, 2011]

Reigeluth, C.M. (1999). What is instructional-design theory and how it changing? In C.M. Reigeluth

(Ed.), *Instructional-design theories and models: A new paradigm of instructional theory*, Vol.2 ,.

Mahwah, NJ: Lawrence Erlbaum Associates.

Scardamalia, M, & Bereiter, C (1993-1994). Computer Support for knowledge-Building Communities. The

Journal of the Learning Sciences, 3(3), 265-283.
Scardamalia, M. What’s the next revolution in education going to be? Retrieved form:

http://medispace.oise.utoronto.ca/experts/april2004/mscardamalia300.mov [January 22, 2011]

Stanulis, Randi Nevins & Ames, Karen T. (2009) Learning to Mentor: Evidence and Observation as

Tools in Learning to Teach. *Professional Educator*, 33 (1). Retrieved from EBSCO*host*. [Jan, 26,

2011]

Thompson, L., Jeffries, M., Topping, K (2010). E-**mentoring** for e-learning development. *Innovations in*

 *Education & Teaching International*, 47 (3), p305-315. Retrieved from EBSCO*host*. [Jan, 26,

2011].

Triple Creek. (2009). Mentoring goes online*. CU360 Newsletter*, 35 (18), 0. 6-8.

Vitale, Anne T. (2010) Faculty Development and Mentorship Using Selected **Online** Asynchronous

 Teaching Strategies. Journal of Continuing Education in Nursing. 41 (12), p 549-556.

 Retrieved from EBSCO*host*. [Jan, 26, 2011].

Wenger, Etienne (2009) Communities of Practice and Social Learning Systems. Retrieved from

<http://www.ewenger.com/pub/pubpapers.htm> [Jan27, 2011].