

CALL FOR PAPERS
INTERNATIONAL ASSOCIATION FOR COGNITIVE EDUCATION AND PSYCHOLOGY
NORTH AMERICAN REGIONAL CONFERENCE
CENTURY PLAZA HOTEL AND SPA, VANCOUVER, BC, CANADA
JULY 11 and 12, 2016

THEME: **Teaching for Success: Mediational Teaching and Learning**



STRANDS:

A: Mediation/cognition and multicultural aspects in the classroom

B: Mediation and core concepts/critical thinking skills: teaching cognitive functions and problem solving

C: Mediation and Special Needs/Autism

Submission Requirements and Directions

All proposals must include both an ABSTRACT and separate SUMMARY of the presentation. Please indicate whether you propose to present a poster, paper or symposium, and indicate the strand or strands as appropriate. Titles should not exceed 10 words. Brief Papers: 20 minutes; Longer Papers: 40 minutes; Symposia, with two to five presenters: 90 minutes. For symposia, the form on the next page should identify each of the presenters, and summaries should give brief details for each of the separate presentations that are included.

Due Date: Submissions will be due on February 29, 2016, with notification of acceptance to presenters by March 31, 2016.

Abstract. Use the form below to submit a brief abstract of no more than 120 words (not counting title and presenter name and affiliation). The abstract should include the title, presenter(s), affiliation, purpose and brief description of the presentation, and outcomes for participants. If accepted, this will be published in the conference program.

Summary. The proposal summary of no more than 600 words (not counting title and key references, if any) should include the title, purpose, background, method, and outcomes of the presentation. Do not include identifying information on the summary.

Electronic Submission. Proposals should be submitted by e-mail to the program chair, Carl Haywood: carl.haywood@vanderbilt.edu with a copy to Kathleen Jeffrey : kathleen@mediatedlearningacademy.org

For inquiries and further information, write to the program chair.

INTERNATIONAL ASSOCIATION FOR COGNITIVE EDUCATION AND PSYCHOLOGY
NORTH AMERICAN REGIONAL CONFERENCE, Vancouver, BC Canada
July 11 and 12, 2016



PROPOSAL TO PRESENT

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TITLE OF SYMPOSIUM PRESENTATION: Mediation, Gender, Professional Development, Transformative Learning: The Perceived Role of Technology in Educational Learning Environments.

*Symposium in group B: Mediation and core concepts/critical thinking skills: teaching cognitive functions and problem solving.

STRAND (check all that apply)

- Cognitive Education
 Diversity/Multi Cultural
 Special Needs

TYPE OF PRESENTATION

- Poster Session
 Brief Paper Longer Paper
 X_ Symposium

ABSTRACT (Symposium)

Elisabeth "Alfie" Weinbaum, Ph.D. (Moderator & Presenter), University of Phoenix, School of Advanced Studies (SAS), Center for Educational and Instructional Technology Research (CEITR).

Helen Schleckser (Presenter) University of Phoenix, Center for Educational and Instructional Technology Research (CEITR).

Beth Krone, Ph.D., (Presenter) Center for Educational and Instructional Technology Research (CEITR).

From non-profit online universities to adaptive digital tools mapping student's individual progress, technology is transforming the 21st century student. During the duration of this symposium, we will reflect upon the paradigm shift in higher education and what it means for learning and research. Thus the purpose of this symposium is to reflect upon past, present, and future research exploring the role of technology in educational learning environments. Our discussion will center around the potential influence of mediation, gender, professional development, transformative learning in the digital age. First we will reflect upon research studies which indicate that transformative learning (defined as: centrality of experience, critical reflection, and rational discourse) is significant to the learning process. Secondly, we continue to reflect upon the concept of 'trust' (* operational behavior based on expectation and responsibility and defined as having the best interests of the students in mind) and most recent investments in technology-enhanced evaluation and assessment within higher education which is aimed at validating the notion of trust; reliability, confidence, credibility, and educational harmony. Finally, we will reflect upon past research on gender/subject-learning interactions in traditional classroom settings, and we postulate that these do not necessarily lead to realization of student potential due to the conflict between traditional gender role perceptions clashing with the requirement to be hostile-aggressive in securing high level roles within the field. Through our interactive symposium discussion, the audience will gain valuable insights as to the role of online faculty in facilitating/mediating core concepts/critical thinking skills to promote cognitive functions, problem solving skills, and improving program completion rates.

SUMMARY (Presenters: Elisabeth "Alfie" Weinbaum, Ph.D. & Helen Schleckser)

Empirical studies indicate that transformative learning (defined as: centrality of experience, critical reflection, and rational discourse) founded on theoretical mediation models is significant to the learning process. This descriptive case study will look at (via online surveys, virtual interviews, and document reviews) technology embedded in E-learning classroom platforms and student-teacher interaction in online graduate students. We will study the role of Feuerstein's theory of Structural Cognitive Modifiability (SCM) in (a) facilitating the development of transformative learning skills and (b) assisting online graduate students in reaching their learning potential (or Vygotsky's ZPD). We will explore the perceptions articulated by online faculty members related to specific elements within learning environments that provide meaningful interaction opportunities between instructors and students ("active learning") and thus advance transformative learning. The focus will be on experiences related to faculty facilitation centered within the framework of Feuerstein's applied system of the Shaping of Modifying Environments (SME): equal opportunity and access, conditions of positive stress, planned and controlled encounters with tasks, and individualized instruction and mediation. Insights about positive, transformational supporting elements in online graduate learning may guide strategies (such as improving the IT infrastructure and increasing faculty development) designed at strengthening the quality of the experience for the student in online doctoral programs aimed at developing strong, adaptable, ethical, leadership skills. The potential lack of an effective transformative learning environment creates a lack of engagement among online doctoral students, resulting in sub-optimal learning experiences. These potential barriers may prevent students from becoming capable, ethical leaders for the 21st Century, "that can lead a life of service" (Sternberg, 2013) and obstruct institutions of higher learning from achieving the long-term goals of lower dropout rates, increased retention, and achieving financial stability. Transformational learning may bridge the gap between human capacity and technology (Kruger-Ross, 2013). Technology-enhanced learning environments have potential in supporting transformational learning, but additional exploration into how this can be achieved is needed. Feuerstein's Theory of Structural Cognitive Modifiability (SCM) provided the theoretical framework for our study. According to Sternberg (2014), Feuerstein's theories of intellectual modifiability are unique in their close association with assessment and cognitive learning, with applicability to both psychological and educational practice. Feuerstein's SCM theory is realized through Mediated Learning Experience (MLE), the way in which experiences in the learning environment are facilitated (North American Feuerstein Alliance, 2010). MLE processes are characterized by interaction between a mediator and a

learner, founded on the assumption that individuals learn through two modalities: direct exposure to stimuli and mediated learning experiences (Tzuriel, 2014). By listening to the shared experiences of online doctoral faculty members (Weinbaum, E., Kass, M., Turner, Gutekunst, Priest & Johnson-Lutz, 2013; Weinbaum, Schleckser, Gutekunst & Kass, M.2015).), we tried to capture experiences relative to both exposures to technology-enhanced stimuli and examples of how mediation is applied. Findings from our case study and suggestions for technology-enhanced learning environments will be discussed.

SUMMARY (Presenters: Elisabeth “Alfie” Weinbaum, Ph.D. & Helen Schleckser)

In general terms, the notion of trust implies reliability, confidence, and credibility, as well as the ability to create a climate of educational harmony in the online classroom. Within the context of higher education, trust represents an operational behavior based on expectation and responsibility (*defined as having the best interests of the students in mind). Investments in technology-enhanced evaluation and assessment within higher education, intended to measure progress, mark achievement, and highlight areas of opportunity for improvement, may be aimed at validating the notion of trust; reliability, confidence, credibility, and educational harmony. Sternberg’s WICS model (2010), characterized by wisdom, intelligence, and creativity, synthesized, represents a documented model for successful educational leadership. While leaders in education, acting as stewards for responsible, accountable, manifestation of organizational goals, educational values that place a heavy reliance on technology. It is unknown if a reliance on technology amplifies, diminishes, or has no effect on the notion of trust. The perceptions articulated by online faculty members related to trust promoted through automated assessment tools and the role of transformative leadership, as well as Sternberg’s WICS model as it applies to transformative educational leadership will be explored, in relationship to online doctoral programs aimed at developing critical thinking skills. Emphasis will be on a discussion of current 'first' data set (as presented in a doctoral faculty-online survey), and then move on with our discussion to focus on a brief analysis of 'what is' and 'what should be.

SUMMARY (Presenter: Elisabeth “Alfie” Weinbaum, Ph. & Beth Krone, Ph.D.)

Science, Technology, Engineering, and Math (STEM) initiatives promoting spatial cognitive modifiability are premised on the common finding that poor spatial rotation ability predicts working harder for lower grades, and a greater likelihood of dropping out of STEM programs (Uttal & Cohen, 2011). Online interventions, even in the form of videogames, are well established as cognitive modifiers of key spatial cognitive skills promoting STEM success (Blasko & Holliday-Darr, 1999; Uttal & Cohen, 2011). In traditional classroom environments, female students are disproportionately affected by poor spatial cognition, making spatial cognition a prime target for modification to enhance student success and ameliorate gender disparities in the STEM workforce. However, the perniciousness of gender disparities in achievement, despite development and implementation of successful modification programs (Stieff & Uttal, 2015; Newcomb 2010), is evidence that gender disparities in STEM success may not reflect gendered spatial cognition, but rather some combination of gender biased teaching strategies, classrooms, and work environments, or gender differentiated intrinsic motivation (Gunderson et al, 2012). This study developed a more ecologically valid model of STEM achievement through cognitive modification (Krone, 2012). Spatial cognition, aggression, and impulse control interacted with gender to create a Cognitive-Affective-Behavioral (C-A-B) construct that moderated STEM success, with females being disproportionately punished for impulsivity and aggression, and less well rewarded for spatial cognitive skill, even when C-A-B constructs were equivalent. This provides several avenues for targeting gender disparity interventions, such as psychological and emotional interventions to individual female students whose affective state limits their ability to attain success despite having the cognitive capacity to do so; and providing systemic supports to prevent females from being unduly and differentially penalized for affective responses. Future

studies may focus on online classrooms, which allow students to interact through gender-neutral avatars, to examine the presence (or lack of) systemic gender biases which has been found in traditional classrooms. Yet further research is needed to examine whether in-group bias exists in online learning environments.

Q & As

(Presenters: Elisabeth "Alfie" Weinbaum, Ph.D. & Helen Schleckser)

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