

the LEADING EDGE

Cor ad cor loquitur | Contemplare et contemplata aliis tradere

February 2016

CONGRATULATIONS DECEMBER GRADUATES!



A Message from the Editor:

This winter has already held two festivities for the Ed.D. program. The first celebration was graduation. The graduation took place at a new site, Monona Terrace, and the sweeping arches of the building were perfect backdrops to celebrate the hard work and dedication shown by our students. One of our graduates, Dr. Bing Liang, was featured as the graduate speaker during the ceremony and was introduced by his advisor, Dr. Mark Barnard. His address was heartfelt and demonstrated Dr. Liang's growth as a leader and a learner.

The second celebration was a reception to honor the 15th anniversary of the Ed.D. program. Many founders and early builders of the program were present, as well as alumni, students,

advisors, editors, and faculty and staff. Everyone enjoyed the fine food and collegiality. Dr. Scott Flanagan, president of Edgewood College, delivered opening remarks, and we premiered a video featuring the strengths and unique character of the Ed.D. program.

Please enjoy this issues' focus on student accomplishments and our 15 year celebration.

Dr. Suzanne C. Otte, Editor

Above (left to right): Drs. Kelly Seichter, Bing Liang, Rebecca Galvan, Madalena Maestri, and Michael Kurtz. Not pictured: Drs. Vicki Ansorte, Maria Barreras, and Deb Bebeau.

STUDENT ACCOMPLISHMENTS



Effects of Participation in a Virtual Situated Case Scenario on Occupational Therapy Students' Academic Performance and Self-Efficacy

Debbie Bebeau, MS, OTR



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Introduction

Background:

- Evaluating instructional strategies used to train future occupational therapy practitioners and creating innovative instructional methods that produce positive educational outcomes is essential to achieving the AOTA Centennial vision (Gommers, Williamson, & Beting, 2012).
- Using electronic media for instruction is expected by institutions of higher education and their accrediting bodies, such as the Accreditation Council for Occupational Therapy Education (Parker and Burkhardt, 2010).
- Substantiating the evidence supporting technologically-advanced teaching methods in occupational therapy education is lacking despite an apparent increased demand for instructional delivery through electronic media.
- Using virtual worlds and immersive simulations for both educational and research purposes is growing (Dowdy & Debie, 2013).
- Creating evidence that informs the design, development, and implementation of immersive simulated clinical experiences is imperative for best practice in occupational education.

Purpose:

- To better understand the effectiveness of a virtual situated case scenario as compared to a traditional text-based case study to educate occupational therapy students about spinal cord injury rehabilitation.

Research Design Methods

Participants:

- Students enrolled in a Master's of Science Occupational Therapy (MS-OT) core curriculum course at a large public mid-west university (N=38)
- 81.5% females
○ 18.5% self-identified as White
○ 18.4% self-identified as Students of Color
- All of the participants were adults, and their ages ranged between 22 and 45 years old.

Methods:

- Random assignment to the virtual situated case scenario (VSCS) group or text-based case study (TBCS) group
- All participants completed Pre- and Post-Academic Self-Efficacy Assessments to measure pre- and post-participation perceived self-efficacy in relation to six embedded skill-related factors.
- assess (interpret patient charts),- evaluate (analyze patient information),- interview (define occupational therapy to client),- technology utilization (gather information),- use (apply knowledge to clinical situations), and
- diagnostic (examine/diagnose).

- Five non-graded, content related questions regarding spinal cord injury on class midterm examination were used as a measure of academic performance.

- VSCS group viewed the video prior to the course midterm exam ; TBCS group viewed post-midterm exams.

- Analysis:
 - Interaction effects between VSCS and TBCS for self-efficacy were tested using the ANOVA and paired ASEAs measures were used for testing ANOVA.
 - A t-test comparing mean scores on five content-related questions on a multiple choice mid-term exam was used to assess differences in academic performance.

Study approved by University Institutional Review Board (IRB) and College Human Participants Review Board (CHPR) prior to data collection.

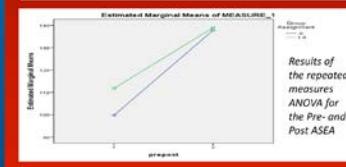


Results

Table 1 Demographic characteristics of participants				
	Text-based CS Mean	%	VSCS Mean	%
n	19	19		
Age (SD)	27(5.233)		26(6.801)	
Male	3	15	4	21
Female	16	84	15	79
White	17	89	14	74
Other	2	11	5	26
				.213

Note: P-values are differences between the two randomized groups; SD, standard deviation

	Text-based Case Study Group	Virtual Situated Case Study Group	Mean Difference	P
Mean Mutual Score (SD)	3.58 (1.12)	3.58 (1.01)	.000	.100



Conclusions

- Traditional and virtual case studies had a significant positive effect on occupational therapy students' self-efficacy.
- Among the students in this study, the virtual situated case scenario did not result in significantly enhanced academic performance or self-efficacy when compared to the text-based case study.

Previous research has shown an illusory superiority in social psychology is well documented as a potential confound in studies that use a self-report measure of one's own intelligence, performance or personal characteristics. Since this study relied on self-report measures of self-efficacy, the data may have been affected by an illusory superiority bias during the pre-test assessment.

- Limitations of this study include:
 - small sample size,
 - confounding variables such as learning about spinal cord injury via other means,
 - academic homogeneity of participants

- Future research is needed to investigate:
 - effect of a larger sample size
 - effect of different levels of participation in virtual situated case studies such as engagement
 - qualitative reports of the virtual experience

Implications for Practice

- Virtual situated learning experiences may provide a technologically savvy instructional method for healthcare and specifically, occupational therapy education curricula; however, further study of effectiveness is recommended.

- Intentionally developed virtual situated case scenarios have the potential to provide students with experiences that will enhance learning for real-life practice through interaction with realistic patients.

- Virtual situated case scenarios may provide OT students with a methodology that is effective for learning and increases the perceived self-efficacy of occupational therapy students.

References

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NEW FACULTY FACES



We would like to welcome Dr. Meng as a fantastic addition to our research faculty. Dr. Christine Meng received her Ph.D. degree from the Department of Curriculum and Instruction at the University of Wisconsin-Madison. Her area of concentration is in early childhood education with a minor in quantitative statistics. With her quantitative statistics background and knowledge in mixed method methodology from conducting her dissertation, she is now teaching Introduction to Research Methods in the Doctoral Program in Educational Leadership.

Debbie Bebeau presented her research in a poster presentation in October at the [2015 AOTA/OTCAS Education Summit](#). Congratulations, Debbie on presenting your research to a broad audience. This conference "provides a venue for educators, scholars, post professional graduate students and clinicians who share the common vision of enhanced understanding of teaching and learning in occupational therapy education." (www.aota.org). See Dr. Bebeau's abstract in this issue.



Mei Reeder, a member of Cohort 13, was named a [UW System Outstanding Women of Color in Education Award Recipient!](#) This award recognizes the achievements and contributions of women of color within the University of Wisconsin system. We are proud to have Mei Reeder earn this outstanding award. Recipients were recognized on Oct. 9 in Madison at an awards ceremony and luncheon.

CONNECTIONS

Please visit our [Facebook](#) page! It is a great place to connect with alumni and engage in significant conversations regarding the world of education.

Our [LinkedIn](#) page gives you an opportunity to network and find out what's happening in the Ed.D. program.

15 YEAR ANNIVERSARY CELEBRATION

Watch Our Video:



1. Sara Jimenez Soffa, Director of Research; Peter Burke, Program Director 2. Robert Toomey, Tammy Werble, Suzanne Otte 3. Pam Nash, Steve Koch, Chuck Taylor, Taysheedra Allen 4. Elizabeth Watson, Beth Johns 5. Opening Remarks by Scott Flannagan

NOTABLE DISSERTATIONS

The Advising Community nominated some of the outstanding dissertations they encountered over the last year. Some of their suggestions are highlighted here as notable dissertations. Click on the dissertation title to access the abstract and link to the study, or request a copy from the Oscar Rennebohm Library.

[Developing Critical Thinking in Online Learning Environments](#)

Madalena Maestri, Ed.D.



Abstract: This systematic review investigated strategies and activities for developing critical thinking in online learning environments situated in settings consistent with the elements of the Community of Inquiry (CoI) model that includes cognitive, social, and teaching presence. The review was conducted in three parts. First, a literature review on the topic of critical thinking was completed to operationalize critical thinking for the purposes of the study. Second, study review parameters were defined and applied to a comprehensive search to identify relevant data sources. Third, data were analyzed through narrative synthesis. Support for the CoI model was found through data analysis, though questions remain related to achieving upper levels of cognitive development espoused in the model. Key findings indicate that achieving high level cognitive presence representative of critical thinking through specific strategies and activities is possible, though challenging, in the online environment. The success of

such strategies and activities is dependent upon a) purposeful course design, b) the instructor's role in course facilitation, and c) the role of the learner who must be an active and engaged participant in order to develop high order thinking.

Q: *What was the most memorable experience about completing your dissertation?*

A: The most memorable serious experience about completing my dissertation was the crystallization of the distinction between critical thinking and critical thinking skills. Often used synonymously, the terms are not interchangeable. Understanding this early on provided a solid foundation for the research to develop. The most memorable funny experience was my committee chair arriving to my defense proposal meeting in a Jaba the Hut costume because I was presenting on Halloween.

Q: *How have you or others used your research?*

A: I use my research on a regular basis as critical thinking is essential to everyday life. I have also been approached by a company that creates online courses to provide feedback on their curriculum.

Q: *How have you changed your perspective on leadership as a result of your research?*

A: The research highlighted and solidified the importance of considering multiple perspectives and avoiding assumptions in decision making. These are essential qualities for a leader. My leadership approach has expanded to focus on and include the perspectives of others rather than relying on my perspective alone, particularly in decision making situations.

[Teacher Retention: Why Do They Stay?](#)

Michael Kurtz, Ed.D.



Abstract: This study addressed teacher retention at the school level. The research question that guided this study follows: How do teacher characteristics and organizational characteristics relate to teachers' decisions to remain at their current schools? This study used a purposive sample of PK-12 teachers from four Wisconsin school districts of similar size. A quantitative survey was completed by 425 practicing teachers during April 2015. Perception data were gathered from 319 teachers who planned to continue teaching at their current school. The findings from the study indicated that the teacher turnover rate as reported by the future plans of practicing teachers was higher than national averages. The findings from analysis of the teacher perception scale indicated

teacher characteristics associated with intrinsic motivation and school organizational characteristics based on school climate had the most influence on teachers' decisions to remain. Reasons teachers provided for remaining were influenced by gender, age, current school teaching experience, and grade level. The study provided recommendations for administrators designing or evaluating teacher retention plans.

Q: What was the most memorable experience about completing your dissertation?

A: I administered my survey electronically during a very busy time of year and it would have been easy for teachers to delete my email and go on with their hectic day. Instead, many teachers participated and I found myself excitedly checking and reporting the response rate to my advisor throughout the day as the numbers rolled in.

Q: How have you or others used your research?

A: Since my study is so recent, I sent results to district administrators of participating school districts and also to other administrators who seemed interested. I am hopeful that

the results of my study will help administrators reduce teacher turnover in their schools, saving valuable school resources, and potentially improve student achievement.

Q: How have you changed your perspective on leadership as a result of your research?

A: I have learned about the value of research and collaboration when making leadership decisions. For example, my study confirmed my fundamental belief that most teachers remain in education because they believe they can make a difference in the lives of their students. School leaders who support and empower teachers to develop strong relationships with their students and colleagues will not only retain more of their highly qualified teachers, their students will experience more success.

Exploring the Effectiveness of a Virtual Learning Methodology in Occupational Therapy Education

Deborah Bebeau, Ed.D.

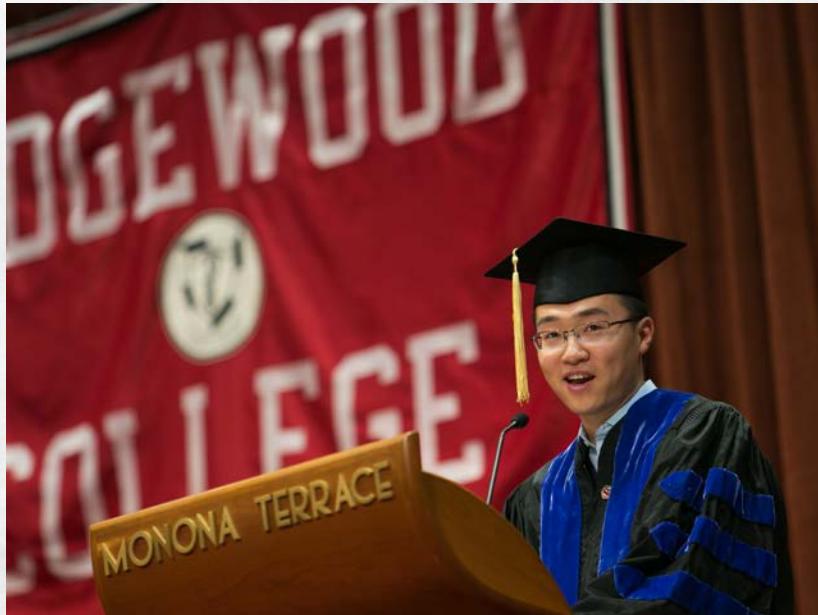
Abstract: This quantitative, randomly controlled study sought to find relationships between occupational therapy students' participation in a virtual situated-case scenario (VSCS) and enhanced perceived self-efficacy as well as academic performance when compared to participation in a text-based case study. To determine effects of participation in virtual or text-based case studies on self-efficacy and academic performance, a repeated mixed-measure analysis of variance (ANOVA) and t-tests were run, respectively. There were no statistically significant differences found between the two groups' mean midterm examination

scores, or between the two groups in the change scores from pre- to post-ASEA. Both groups, however, demonstrated significant differences in their within group mean change scores between pre- and post-ASEA surveys. These findings showed that participation in the VSCS may be as effective for learning as text-based case studies. Because virtual simulation tools were also correlated with enhanced perceived self-efficacy, this study concluded that they provide occupational therapy educators with a viable science-driven virtual pedagogical option that meets the needs of contemporary students.

DECEMBER 2015 GRADUATION

We were proud to host a reception for our December graduates. They were the first group to have the graduation take place at Monona Terrace. Our own Bing Liang was the graduate commencement speaker.

Below (left to right): Bing Liange speaking as Commencement, Bette Lang hooding Mike Kurtz, Sue Aplanalp hooding Rebecca Galvan, Bette Lang hooding Kelly Seichter



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