Assessment in an Introductory Business Course
Christina Force, Bloomsburg University, Bloomsburg, PA

Awareness of Business Education Instructors of the Employment Capabilities of Persons Who are Blind or Visually Impaired
C. Shareefah Muhammad, The Chicago Lighthouse, Chicago, IL

Creating an Instructional Framework to Prepare Teacher Education Candidates for Success on a Performance-Based Assessment: A Follow-up Study
Tamra S. Davis, Illinois State University, Normal, IL

Creating a Teaching Focused Community of Practice
Mark Julien, Brock University, St. Catharines, ON (Canada)
Russell Clayton, Saint Leo University, Saint Leo, FL

Designing Discussion Forums to Enhance Cognitive Presence in an Online Entrepreneurship Course
Thomas Mays, Miami University, Middletown, OH

Employability Skills with Purpose: Service-Learning in Graduate Business Education
Molly J. Wickam, Bethel University, St. Paul, MN

Enhancing Online Students’ Learning Outcomes
Jim Larsgaard, Eastern Kentucky University, Richmond KY

High School Teachers’ Perceptions of their Application of Student-Centered Learning Instructional Strategies
Lindsay Rock, The University of Georgia, Athens, GA
Elaine Adams, The University of Georgia, Athens, GA

Increasing Student Engagement with Augmented Reality: Innovative Approach to Curriculum and Instruction
Cari Cline, Northwest Missouri State University, Maryville, MO
Nancy Zeliff, Northwest Missouri State University, Maryville, MO
Lean, Mean, and Ready to Complete the edTPA
Elizabeth Hodge, East Carolina University, Greenville, NC

Perceptions of College/School of Business Faculty Involving the Content and Scope of a Business Communications Class and Self-Efficacy to Evaluate Business Communications Skills of Students
Tamra S. Davis, Illinois State University, Normal, IL
K. Virginia Hemby, Middle Tennessee State University, Murfreesboro, TN

Reinvigorating Business Education: From Pre-School to College
Marcel Robles, Eastern Kentucky University, Richmond, KY

Reject the Tech? Students’ Views on Technology for Instruction and Collaboration
Carol Wright, Stephen F. Austin State University, Nacogdoches, TX
Ashley Hall, Stephen F. Austin State University, Nacogdoches, TX

Student-Centered Organic Learning (SCOL)
Albert Catarro, William Tennent High School, Warminster, PA

Technology, Presence, and Learning in Online Business Courses
Thomas Mays, Miami University, Middletown, OH

The Implementation of Keyboarding Instruction at the Elementary and Middle School Levels
Carol Parker, Rockvale Middle School, Rockvale, TN

Undergraduate Business Students’ Perceptions of Teaching Presence in Online Business Courses
Lacey Finley, Kansas State University, Missouri Southern State University, Shawnee, KS

Using Digital Storytelling to Incorporate Critical Thinking into the Online College Classroom
Kenneth Embry, Saint Leo University, Saint Leo, FL
Russell Clayton, Saint Leo University, Saint Leo, FL
Mark Julien, Brock University, St. Catharines, ON (Canada)
The 2017 Business Education Research Conference theme focuses on research studies that have a purpose—that serve to add to the field of business education. Our goal is to ensure that research is not conducted simply for the sake of doing research; but, more importantly, that research studies are conducted that produce relevant data or information for stakeholders in the field of business education.

**TUESDAY, APRIL 11, 2017**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
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</thead>
<tbody>
<tr>
<td>8:30 a.m. to</td>
<td>NBEA CONVENTION REGISTRATION</td>
<td>5th Floor Registration Desk</td>
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<tr>
<td>6:00 p.m.</td>
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<tr>
<td>4:00 p.m. to</td>
<td>2017 BUSINESS EDUCATION RESEARCH CONFERENCE OPENING RECEPTION</td>
<td>To Be Determined</td>
</tr>
<tr>
<td>5:30 p.m.</td>
<td>Welcome: NBEA President, Priscilla Romkema; ARBE President, Marcel Robles; NABTE President, Allen Kitchel</td>
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</table>

A networking opportunity to “kick off” the 2017 Business Education Research Conference (BERC). Anyone registered for and attending the NBEA Convention is invited to participate. Join us to learn more about the Business Education Research Conference and how attending the BERC sessions can benefit your teaching.

*Reception sponsored by the National Association for Business Teacher Education (NABTE)*

**WEDNESDAY, APRIL 12, 2017**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>8:00 a.m. to</td>
<td>General Research Session: Writing Winning Proposals for Delta Pi Epsilon Foundation Grants</td>
<td>Michigan/Michigan State</td>
</tr>
<tr>
<td>9:20 a.m.</td>
<td>Location: Michigan/Michigan State (6th Floor)</td>
<td>(6th Floor)</td>
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The DPE Research Foundation, Inc., was established as a separate 501(c)(3) organization to allow “Friends of the Foundation” to make donations to support research endeavors outside of the operating budget of Delta Pi Epsilon (now known as the Association for Research in Business Education [ARBE]). The Foundation's purpose is two-fold: (1) to provide for the advancement and extension of technical and scientific investigation, research, and experimentation in the field of study commonly known as Business Education, and (2) to make grants and gifts to support and assist in such investigation, research, and experimentation.

The Foundation supports studies that are descriptive, experimental, qualitative, and developmental. The size of grant will vary depending on the type and magnitude of the proposed study. Partial funding may be available for
projects which are partially supported through other sources.

In this General Research Session, panelists will discuss the Delta Pi Epsilon Foundation grant process and describe the research for which they received grants. Participants will be provided with a copy of the DPE Foundation Grant Proposal guidelines and form.

**Facilitator**
Robert B. Mitchell
University of Arkansas
Little Rock, AR

**Panelists**
Elaine Adams
The University of Georgia, Athens, GA

Carol Blaszczynski
California State University, Los Angeles, CA

Edward C. Fletcher, Jr.
University of South Florida, Tampa, FL

Cheryl Wiedmaier
Department of Career Education, State of Arkansas, Little Rock, AR

**COFFEE BREAK** [Sponsored by Association for Research in Business Education (ARBE)]

<table>
<thead>
<tr>
<th>SESSION TRACKS</th>
<th>Business Education Research</th>
<th>Business Teacher Education Research</th>
<th>Innovative Instructional Practices</th>
</tr>
</thead>
</table>
| 9:25 a.m. to 10:25 p.m. | Undergraduate Business Student Perceptions of Teaching Presence in Online Business Courses This study examined Business students’ perceptions of good teaching in the online learning environment, focusing on Teaching | A Comparative Study of Teacher Qualification Requirements for Career and Technical Cooperative Education Coordinators in Secondary Schools in the United States At the center of all cooperative education | Using Digital Storytelling to Incorporate Critical Thinking into the Online College Classroom Critical thinking is a “crucial capability” for business students. However, business textbooks “only weakly support the
Presence and the Teaching Presence Components of Design and Organization, Discourse Facilitation and Direct Instruction. Using qualitative research methods to study Business students’ perceptions of Teaching Presence, its components, and how exemplary faculty demonstrated Teaching Presence in online Business courses provided a robust and meaningful understanding of the nature and attributes of Teaching Presence in online Business courses.

Lacey Finley
Missouri Southern State University
Shawnee, KS

Technology, Presence, and Learning in Online Business Courses

Developing presence in online courses is often a goal for instructors and course designers alike. This session reports the use of the Community of Inquiry (CoI) model to measure online presence in three business course. Of specific concern is the variety of the technologies students used to access the course, and if there is a relationship between the presences described in the CoI model and student performance.

Thomas A. Mays

Lacey Finley
Missouri Southern State University
Shawnee, KS

Developing an Interdisciplinary Approach to a Business Communications and Report Writing Research Project: A Case Study of Converting a Business Research Project into an Article for a University Newspaper

This research investigates students’ perceptions of writing an article for a university newspaper instead of doing a careers research study in Business Communications and Report Writing. Three sections of Business Communications and Report Writing (75 students) worked on newspaper articles.

Kathy Mountjoy
Illinois State University, Bloomington, IL

Enhancing Online Lower Division Course Learning Outcomes through Stimulating Students to Read Faculty Feedback

Do many of your students fail to read your assignment feedback and therefore fail to achieve the quality of academic performance that they would if they would have read and incorporated your feedback? In this presentation, you will learn how this author entices his students to read his assignment feedback, and you will learn how he knows if his students have read his assignment feedback. Additionally, this author will discuss his analysis of his development of students’ capacity for critical thinking” (Errington & Bubna-Litic, 2015: 774). In this session, we will demonstrate an instructional approach we developed to incorporate critical thinking into our business courses. This approach integrates Nosich’s (2012) SEE-I technique with Microsoft’s Sway application. We will also discuss the results of a pilot study using this assignment in the college classroom.

Kenneth Embry
Saint Leo University, Saint Leo, FL

Russell Clayton
Saint Leo University, Saint Leo, FL

Mark Julien
Brock University, St. Catharines, ON (Canada)
During one semester. Although 22 group articles were created by the students, only six articles were submitted for publication. This research investigates students’ perceptions of research, writing, reading, university newspapers, and collaboration across disciplines.

Margaret A. O’Connor  
Bloomsburg University of Pennsylvania  
Bloomsburg, PA

**SESSION TRACKS**

<table>
<thead>
<tr>
<th>Business Education Research</th>
<th>Business Teacher Education Research</th>
<th>Innovative Instructional Practices</th>
</tr>
</thead>
</table>
| Session Liaison: Marcel Robles  
Location: Michigan/Michigan St. (6th Fl)  
(ARBE DOCTORAL DISSERTATION AWARD*)  
Employability Skills with Purpose: Service-Learning in Graduate Business Education | Session Liaison: Maggie O’Connor  
Location: Lincolnshire I & II (6th Fl)  
Lean, Mean, and Ready to complete the edTPA! | Session Liaison: Susan Hall Webb  
Location: Great America I & II (6th Fl)  
Increasing Student Engagement with Augmented Reality: Innovative Approach to Curriculum and Instruction |
| Molly Wickam  
Bethel University, St. Paul, MN |  
Elizabeth Hodge  
East Carolina University  
Greenville, NC |  
Nancy Zeliff  
Northwest Missouri State University  
Maryville, MO  
Cari Cline  
Northwest Missouri State University  
Maryville, MO |

Service-learning is a useful experiential pedagogy for getting students to connect business content knowledge with purposeful service in their communities. This presentation will discuss results of a mixed-methods, comparative research study that examined outcomes of students’ development of employability skills through service-learning participation in capstones embedded in MBA programs. It will also discuss which employability skills are enhanced by service-learning. Findings and recommendations for how college business instructors can implement service-learning in business courses will be shared.

Business and Information Technology Education is designed to prepare pre-service teachers to enter the field of education. However traditional approaches to teaching are not as successful with the millennial generations who often have a short attention span and easy access to relevant bite-sized information through online search engines and social media. The presentation will provide post-secondary teachers with strategies for preparing pre-service millennial teachers to develop edTPA artifacts.

The use of Augmented Reality (AR) increases student engagement in educational settings. Research shows that engaged students are more motivated and achieve higher levels of learning. Instruction using AR was implemented in the middle school environment and with graduate and undergraduate students studying instructional technology and business. AR best practices with K-12 and higher education students and a review of the literature will be discussed.
Core and Noncore Teachers: Perceptions Concerning Application of Student-Centered-Learning Instructional Strategies

Study investigated influence of gender, primary subject area, and education level on high school teachers’ perceptions of their application of student-centered-learning instructional strategies. An original survey was used. A total of 470 valid responses were returned, yielding a response rate of 45.6%. No statistically significant differences were found based on gender or education level. A statistically significant difference was found based on primary subject area. Statistically significant positive correlations were found between teachers’ perception and school administration and fellow teachers’ support of these strategies.

Elaine Adams  
The University of Georgia  
Athens, GA

Lindsay Rock  
The University of Georgia  
Athens, GA

Using Performance Data to Modify the Instructional Framework Used to Prepare Teacher Education Candidates for Success on a Performance-Based Assessment

Teacher education candidates in Illinois are required to complete a performance-based assessment. After implementation of an instructional framework to prepare the candidates for classroom success, the researcher sought to determine if the framework impacted the first group of candidates mandated to complete the assessment. Comparison of data from a two-year pilot study to the data of the candidates who were required to complete the assessment identified areas of strengths and weaknesses in the instructional framework.

Tamra Davis  
Illinois State University  
Normal, IL

Creating Space to Learn: Fostering Student Engagement through Active Learning Spaces and Strategies

This presentation will introduce attendees to active learning spaces. Session attendees will learn: (a) the definition of an active learning space, (b) the history of active learning spaces, (c) typical configurations of active learning spaces, (d) benefits and drawbacks of active learning spaces, (e) effective active learning instructional strategies, and (f) strategies for student and instructor success. Results of a survey of students about their experiences in an active learning classroom will be presented.

Carol Blaszczynski, California State University, Los Angeles  
Los Angeles, CA

12:00 p.m. to 1:15 p.m.  
BUSINESS EDUCATION RESEARCH CONFERENCE LUNCHEON  
Ticket Required  
Location: Grand Ballroom – Salon I (7th Floor)
| SESSION TRACKS | Business Education Research  
Session Liaison: Steve Lewis  
Location: Lincolnshire I & II (6th Floor) | Business Teacher Education Research  
Session Liaison: Allen Kitchel  
Location: Great America I & II (6th Floor) |
|----------------|-----------------------------------------------|-----------------------------------------------|
| 1:30 p.m. to 2:30 p.m. | **Awareness of Business Education Instructors of the Employment Capabilities of Persons Who Are Blind or Visually Impaired**  
The purpose of this study is to provide business educators with awareness of the employment capabilities of persons who are blind or visually impaired, and to encourage them to be proactive, to advocate, and to recommend for employment competent persons who are blind or visually impaired. Pretests and posttests were administered to participants for their perceptions in observing persons who were blind or visually impaired performing computer job tasks utilizing assistive technology.  
*Shareefah Muhammad*  
The Chicago Lighthouse  
Chicago, IL |
| | **Entrepreneurial Competencies and Emerging Business Trends**  
Academic institutions have a major responsibility to educate students and develop future business leaders who can move their organizations forward. This research-based presentation explores future business trends and entrepreneurial competency gaps. It provides insights into the needed skills and reaffirms the notion that organizations demand competent entrepreneurs to lead global enterprises. There is a great need for new managerial practices and innovative entrepreneurial talent that will drive organizations' success and shape our nation's economy.  
*Irina Weisblat*  
The Forbes School of Business & Technology at Ashford University  
San Diego, CA |
| | **The Good, the Bad, and the Ugly: Truths of an Online Business Teacher Education Program**  
As enrollment continues to decrease in traditional Business teacher education programs nationwide, institutions must develop innovative ways to recruit and retain students. Although many teacher education programs now include online courses, very few have adopted a 100 percent online format due to a variety of circumstances. This session will provide an overview of these circumstances, by presenting tribulations, successes, and future goals of an online undergraduate business education program at a research-intensive university in Mississippi.  
*Pamela Scott Bracey*  
Mississippi State University  
Mississippi State, MS |
| | **The Implementation of Keyboarding Instruction at the Elementary and Middle School Levels**  
This session will highlight a Doctoral Dissertation titled Differences in Middle School TCAP Writing Assessment Scores Based on Keyboarding Skill. By utilizing the dissertation research, this session will address the following:  
1. Early Implementation of Keyboarding Skills  
2. The Role of Business Educators in Elementary Keyboarding  
3. Essential Keyboarding Instruction Time  
4. Impact on Secondary and Post-Secondary Education  
*Carol Parker*  
Rockvale Middle School  
Rockvale, TN |
3:30 p.m. to 5:00 p.m. | OPENING GENERAL SESSION  
NBEA NATIONAL CONVENTION  
Location: Grand Ballroom – Salons II & III (7th Floor)

5:30 p.m. to 6:30 p.m. | NABTE BUSINESS MEETING  
Location: Lincolnshire I & II (6th Floor)  
Presiding: Allen Kitchel, NABTE President

THURSDAY, APRIL 13, 2017

| SESSION TRACKS | Business Education Research  
Session Liaison: Beryl McEwen  
Location: Lincolnshire I & II (6th Floor)  
| Innovative Instructional Practices  
Session Liaison: Ruthann Williams  
Location: Great America I & II (6th Floor) |

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<tr>
<th>Track</th>
<th>Session Title</th>
<th>Speakers</th>
<th>Locations</th>
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</thead>
</table>
| Business Education Research | Reinvigorating Business Education: From Pre-School to College Graduation | Marcel Robles  
Eastern Kentucky University  
Richmond, KY | Lincolnshire I & II (6th Floor) |
| | Reject the Tech? Students’ Views on Technology for Instruction and Collaboration | | |
Lake Forest College  
Lake Forest, IL | Great America I & II (6th Floor) |
| | Designing Discussion Forums to Enhance Cognitive Presence in an Online Entrepreneurship Course | | |
students like to use technology in some form, and they prefer to use “older," proven tools to collaborate like email and text-messaging instead of trying new technology.

**Carol Wright**  
*Stephen F. Austin State University*  
*Nacogdoches, TX*

**Ashley A. Hall**  
*Stephen F. Austin State University*  
*Nacogdoches, TX*

The design tool is also purposed for encouraging more authentic interaction among students. The design tool, examples, and results from the entrepreneurship course will be reviewed.

**Thomas A. Mays**  
*Miami University*  
*Middletown, OH*

| SESSION TRACKS | Business Education Research  
Session Liaison: **Larry Pagel**  
Location: Lincolnshire I & II (6th Floor) | Innovative Instructional Practices  
Session Liaison: **Sharon Rouse**  
Location: Great America I & II (6th Floor) |
|----------------|-------------------------------------------------------------------------------------|
| 11:00 a.m. to 12:00 p.m. | **Perceptions of College/School of Business Faculty Involving the Content and Scope of a Business Communications Class and Self-Efficacy to Evaluate Business Communication Skills of Students**  
Employers report that graduates lack business communication skills upon graduation; however, many business schools/colleges do not require students to complete a business communications course. Additionally, faculty report that they struggle to evaluate student writing. This study investigated if and where a business communication course is taught, faculty perceptions of content taught in a business communications course, faculty self-efficacy to teach and evaluate student work related to business communication, and faculty responses related to business communications.  
**Tamra Davis**  
*Illinois State University*  
*Normal, IL*  

**K. Virginia Hemby**  
*Middle Tennessee State University*  
*Murfreesboro, TN* | **Outside In, Inside Out: Restructuring Your Business Education Curriculum**  
As education professionals, we don’t always have a current pulse on the changing market for business and technology professionals. Come hear how our school “reversed” our curriculum process by developing an advisory team comprised of corporate professionals in Technology and Business to advise us on what we SHOULD be teaching in our classrooms – and how we adjust curriculum every six months to ensure our students are getting the relevant skills they need to succeed. Student success stories and strategies to start your own advisory will be shared.  
**Tony Pecucci**  
*Leyden High Schools District 212* |
<table>
<thead>
<tr>
<th><strong>SESSION TRACKS</strong></th>
<th><strong>A Multi-Case Study Analysis of High School Information Technology Academies Following the National Academy Foundation’s Model</strong></th>
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<tbody>
<tr>
<td></td>
<td>To increase participation in IT related programs and careers, education stakeholders have explored new avenues to establish a pipeline of students interested in pursuing IT pathways at the high school level. The career academy model has grown in popularity as it has been found to positively promote factors related to student success. This study sought to determine how career academies might contribute to the college and career readiness of high school students.</td>
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| **Edward C. Fletcher, Jr.**  
**University of South Florida**  
**Tampa, FL** |  
**Business and Marketing Advisory Councils: What is and What Could be Happening in [State] Secondary Programs** |
|  | Advisory councils are a critical link between high school business programs and the workplace. This session examines the findings from a study of the utilization of advisory councils by high school business programs in Idaho. Topics include council structure, council management, and teacher’s perceptions of the extent to which councils do, and should, influence the identification and delivery of business knowledge and skills. The findings may be used to inform teacher practice and preparation. |
| **Allen Kitchel**  
**University of Idaho**  
**Moscow, ID** |  |
| **Tammy Domras**  
**University of Idaho**  
**Moscow, ID** |  |
| **John Cannon**  
**University of Idaho**  
**Moscow, ID** |  |
| **SESSION TRACKS** | **Innovative Instructional Practices Research**  
**Session Liaison: Tamra Davis**  
**Location: Lincolnshire I & II (6th Floor)** |
|  | Assessment in an Introductory Business Course  
This session discusses a research study conducted on an Introduction to Business course. A pre- and post- test was administered to each student enrolled in all sections of the course. The purpose of the assessment was to examine the curriculum, assess course goals and track student achievement. The average score on the posttest increased. The validity, benefits and drawbacks of a pre- and post- test will also be discussed.  
**Christina Force**  
**Bloomsburg University of Pennsylvania**  
**Bloomsburg, PA** |
| **Innovative Instructional Practices**  
**Session Liaison: Elizabeth Hodge**  
**Location: Great America I & II (6th Floor)** | **Community of Practice**  
This case study discusses the formation of a teaching-focused community of practice in a university. This community of practice was formed to discuss challenges of teaching today’s students, sharing best teaching practices and providing support to each other. We would like to solicit input from the attendees to understand if attendees have had experience fostering communities of practice at their schools and identifying the challenges of sustaining these communities.  
**Mark Julien**  
**Brock University, St. Catharines, ON (Canada)** |
SCOL—Student-Centered, Organic Learning: A Skills-Based Educational Paradigm Built on a Foundation of Partnerships

Student-Centered, Organic-Learning is an authentic, skills-based curriculum. The outcomes are unique, and student-driven. The process is dynamic and creative. Organic Learning is a learning paradigm, built on a foundation of partnerships, to develop transferable career related skills in an innovative, solutions based, design-thinking, environment. This organic process utilizes input from school staff, students, business professionals, and community agencies to foster authentic educational experiences. Students develop solutions to actual industry related problems with the input of teachers and business professionals.

*Albert Catarro*
*William Tennent High School*
*Warminster, PA*

Examining the Use of Contextual Teaching and Learning in a Business Education Methods Course

*Russell Clayton*
*Saint Leo University*
*Saint Leo, FL*

*Timothy Thornton*
*Emporia State University*
*Emporia, KS*

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<tr>
<th>5:15 p.m. to 6:15 p.m.</th>
<th>Association for Research in Business Education (ARBE) GENERAL MEMBERSHIP/BUSINESS MEETING</th>
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<td>Presiding: Marcel Robles, ARBE President</td>
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Assessment in an Introductory Business Course

DR. CHRISTINA FORCE
ASSISTANT PROFESSOR OF BE
CFORCE@BLOOMU.EDU

BLOOMSBURG UNIVERSITY OF PENNSYLVANIA
400 E. 2ND ST. BLOOMSBURG, PA 17815

THURSDAY, APRIL 13, 2017
2:30 PM
<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Part I</strong></td>
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<tr>
<td>• Background</td>
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<tr>
<td>• Purpose of the Study/Objectives</td>
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<td>• Research Questions</td>
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<td>• Literature Review</td>
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<tr>
<td>• Methodology</td>
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Background

Introduction to Business BUSED101

- This course provides a study of business and its environment, organization, operation, and the interrelationships with government and society.
- Required course for all business majors.
- Elective course for all others that provides General Education credits in the Social Sciences.
- Works in conjunction with the ZCOB Professional Development program call “ZIPD”
What is ZIPD?

- Comprehensive educational experience to build the personal and professional skills necessary for career success through:
  - Training and education
  - Business etiquette
  - Professional attire
  - Interviewing
  - Networking
  - Resume writing
How does ITB relate to ZIPD?

- Typically students first business course
- Gain a better understanding of the interconnectedness of the primary areas in business
- Create a business plan and complete a career assignment in which they can earn ZIPD points
The purpose of this exploratory research study is to examine how a pre and posttest for an introductory business course assesses students’ knowledge of business.

Objectives:
Examine a college of business introductory business course, determine student performance on a pre and posttest and assess course goals and objectives.
• What business knowledge are students bringing to an introductory business course?
• What business knowledge have students gained from an introductory business course?
• Is a pre and posttest an appropriate assessment tool?
What are Pre/Post Tests?

- Administered upon an agreed upon “entry point” and “exit point.”
- Assess knowledge prior to completing the course and after course completion
- Typically standardized to test for a broad understanding within a specific discipline or course.
Literature Review-Why use a pre/posttest?

- To quantify the knowledge learned in the course
- AACSB assessment/ZCOB Assessment/University Assessment/
- To assess pre-existing knowledge on the course topic
- May allow students to test out of course
- To inform the instructor about areas that need more or less emphasis
• Measure learning attained from the course
• Analyze if course objectives were achieved and what improvements to the course should be made
• Target students who may need assistance
Most assessment tools measure the ability to recall information and not a true understanding.

It may be hard to determine if increase in score is from the course:
  - Other business courses, school experiences, age, desire to acquire knowledge.

The posttest results may not be accurate unless you are assessing the same students:
  - Requires the removal of students who dropped the course from pre/posttest scores.

Instructors may teach to the test.

Students take the same test twice and may naturally do better the second time.
Methodology

- Data was collected from all students in 12 sections of introductory business course.
- A pre and posttest was administered to all students at the beginning (first week) and end of the semester (last two weeks).
- First question was demographic... which college did they attend
  - Business, Education, Liberal Arts, Science and Technology, Undecided
- 49 multiple choice and true/false questions
- The scores were analyzed by student, question, section and the entire course.
Participants

- A total of 561 students completed the pretest
- A total of 524 students completed the posttest

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<tr>
<th>College</th>
<th>Pretest</th>
<th>Posttest</th>
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<tbody>
<tr>
<td>Business</td>
<td>338</td>
<td>319</td>
</tr>
<tr>
<td>Education</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Liberal Arts</td>
<td>80</td>
<td>87</td>
</tr>
<tr>
<td>Science &amp; Technology</td>
<td>52</td>
<td>47</td>
</tr>
<tr>
<td>Undecided</td>
<td>86</td>
<td>58</td>
</tr>
<tr>
<td>No response</td>
<td>1</td>
<td>1</td>
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Findings

- Average Pretest Score Fall 2016 59.93
- Average Posttest Score Fall 2016 69.06
- Relatively no change in those majoring in business from beginning to end of semester (60.76/319, 60.25/338)
- Number of Undecided majors increased (11.05/58, 15.33/86)
- Average Pretest Score Spring 59.46 (374 participants)
Conclusions

- A pre and posttest can be a useful in analyzing students, classes and the course as a whole.
- It is important to use questions that relate to course objective.
- Examine the timing, time limit and if points/grade should be assigned to the assessments.
Limitations

- Did not remove students from pretest score who dropped the course
- Data examined was for only one semester
- No incentive aside from personal motivation for the students to do their best on either test
- Different instructors
Future Recommendations

- Conduct over a long period of time
- Track individual students’ performance
- Administer the same assessment later in their academic career
- How much of an increase from pre to posttest is significant


AWARENESS OF BUSINESS EDUCATION INSTRUCTORS OF THE EMPLOYMENT CAPABILITIES OF PERSONS WHO ARE BLIND OR VISUALLY IMPAIRED

PRESENTER: C. SHAREEFAH MUHAMMAD
CSHAREEFAHMUHAMMAD@YAHOO.COM
THE CHICAGO LIGHTHOUSE
2017 BUSINESS EDUCATION RESEARCH CONFERENCE (BERC)
WEDNESDAY, APRIL 12, 2017
1:30 PM
# Outline

- Nature of Problem
- Purpose of Study
- Research Question
- Literature Review
- Research Design
  - Sequential Transformative Strategy
    - qual QUAN
- Methodology: Mixed Methods
  - Qualitative/Quantitative
- Sample Size, Validity, Reliability
- Limitations/Delimitations
- Data Collection & Analysis
  - Qualitative: Case Study/ Semi-structured Interviews
  - Quantitative: Video Clips, Survey Instruments (Survey Monkey: Likert, Close-Ended, Open-Ended), SPSS: Chi Square, T Tests
- Findings and Results
- Conclusions and Recommendations
- References

C. Shareefah Muhammad

April 12, 2017
Negative public attitude is one of the many reasons which researchers in the literature attributed to the problem of the high unemployment rate for persons who are blind or visually impaired.
Purpose of the Study

- To provide business educators with awareness of the employment capabilities of persons who are blind or visually impaired, and to encourage them to be proactive, to advocate, and to recommend for employment competent persons who are blind or visually impaired. Pretests and posttests were administered to participants for their perceptions in observing video clips of persons who were blind or visually impaired performing computer job tasks utilizing assistive technology.
Research Question

- How can a business education instructor become aware of the employment capabilities of a person who is blind or visually impaired?

The majority of the managers mistakenly believed that there were few jobs in their organizations that could be successfully performed by persons who were visually impaired. Lynch emphasized the need to increase awareness to the business community and the employers about the capabilities of persons who are blind or visually impaired who are skilled and productive, and hold various positions which include production, technical, managerial, professional, administration, and senior executive.
• In a news release June 21, 2016, the U. S. Bureau of Labor Statistics (BLS) reported a 2015 10.7% unemployment rate for persons with a disability, which was twice the rate of 5.1% for persons with no disability.

• Web sites, videos, brochures, and similar media were available to help employers comprehend how persons who are visually impaired can gain access to printed material, use computer technology, and perform routine office procedures.
Methodology/Research Design
Mixed Methods

- **Sequential Transformative Strategy**
  - Creswell (2009, pp. 62-69, 208-209)
- From qualitative to quantitative with focus on inequality of an underrepresented group of persons with disabilities
## Methodology/Sample Size, Validity & Reliability

### Mixed Methods

<table>
<thead>
<tr>
<th>Qualitative</th>
<th>Quantitative</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nonprobability Sampling</strong></td>
<td><strong>Snowball, Purposeful</strong></td>
</tr>
<tr>
<td><strong>Probability Sampling</strong></td>
<td><strong>Random (External)</strong></td>
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<tr>
<td><strong>Validity</strong></td>
<td><strong>Reliability</strong></td>
</tr>
<tr>
<td>(External) 2 Demonstrator Participants (Internal) Trustworthiness, Credibility, Triangulation, Member Checks, C. Shareefah Muhammad</td>
<td>Coding, Thick Description</td>
</tr>
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<table>
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<tr>
<td><strong>Validity</strong></td>
<td><strong>Reliability</strong></td>
</tr>
<tr>
<td>(External) 22 Observer Participants</td>
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<tr>
<td>Group 1 11 Group 2 11 (Internal) Chi-Square T Tests</td>
<td>Chi-Square T Tests</td>
</tr>
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</table>

April 12, 2017
## Limitations/Delimitations

<table>
<thead>
<tr>
<th>Limitations</th>
<th>Delimitations</th>
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</thead>
</table>
| **Limitations of the Study**  
From a quantitative aspect, there were no control and experimental groups. Thus, the participants were not randomly assigned. Since the sample size was small, the results could not be generalized to the population at large and only to the participants in this particular study. However, the study can still be replicated and the procedure can be used to test and analyze similar groups of participants. | **Delimitations of the Study**  
For the demonstrator participants who were blind or visually impaired, the criteria required that assistive technology be used to perform job computer tasks. The age limit for the participants was 18 years old and above. |
## Methodology/Data Collection & Analysis

### Mixed Methods

<table>
<thead>
<tr>
<th>Qualitative</th>
<th>Quantitative</th>
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</thead>
<tbody>
<tr>
<td>- Case Study and semi-structured interview questionnaires for demonstrator participants</td>
<td>- Video Clips, Survey Instruments (Survey Monkey: Likert, close-ended, open-ended)</td>
</tr>
<tr>
<td></td>
<td>- SPSS, Chi-Square, T Tests</td>
</tr>
</tbody>
</table>

C. Shareefah Muhammad

April 12, 2017
The research design was mixed method consisting of qualitative and quantitative components. The first phase included the qualitative case study approach involving observations and interviews of the two participants who were demonstrators. The researcher visited the site on three nonconsecutive days and interviewed each participant separately, totaling three 30-minute interviews for each participant. The quantitative was the second phase which included Survey Monkey questionnaire instruments designed by the researcher and administered to the observer participants.
Methods and Procedures
Recruitment of Participants

- For the two demonstrator participants, the researcher contacted by email and phone a social service agency which served persons with disabilities.

- For the observer participants (11 business instructors and 11 business persons) the researcher contacted in person the participants following professional organization meetings, business workshops, and community meetings at a local library. These were meetings which the researcher attended and received permission from the persons in charge of the meetings to recruit the participants immediately following the meetings. Participation in the study was voluntary.
On the researcher’s first visit to the site, the researcher used an iPhone to video tape each of the two demonstrator participants separately. One of the participants was blind and used the screen reader program JAWS to demonstrate using Microsoft Word and Excel as well as the keyboard in general. The second participant was visually impaired (low vision) and used the screen magnification program ZoomText (with speech enabled) to demonstrate using the mouse and shortcut key commands in Microsoft Word. Following the first visit, the researcher edited the video clips using iMovie. On the researcher’s second visit to the site, the researcher met with each of the participants separately to decide upon which video clips to use. Based upon the time frame and quality, the two video clips selected were using JAWS with Excel (3-4 minutes) and ZoomText with Word (1-2 minutes). On the researcher’s third visit to the site, the researcher met with each participant separately and finalized the case study component which included the demographics.
The observer participants were administered a pretest Survey Monkey hard copy (independent variable) of their perceptions of the potential employment competencies of persons who are blind or visually impaired. The researcher conducted a demonstration on a laptop and an iPhone of the video clips of the demonstrator participants who were blind or visually impaired using assistive technology with technological devices (intervention and independent variable) that can enhance the employment of persons who are blind or visually impaired.
Methods and Procedures

- Immediately following the demonstration, the observer participants were administered a posttest Survey Monkey hard copy (dependent variable) of their perceptions of the potential employment competencies of persons who are blind or visually impaired. At a later time, the researcher uploaded the hard copies of the pretests and posttests into Survey Monkey online to conduct a Survey Monkey data analysis. Later, the researcher used the SPSS software program version 23 to conduct data analyses with the chi-square value and t tests.
## Findings and Results

<table>
<thead>
<tr>
<th>Demographics: Demonstrator</th>
<th>Participants</th>
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<tbody>
<tr>
<td>2 participants</td>
<td>Three 30-minute face-to-face interviews each on three separate occasions.</td>
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</table>

<table>
<thead>
<tr>
<th>Demographics: Observer</th>
<th>Participants: Instructors and Business Persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 business instructors (Group 1) (secondary and higher education)</td>
<td></td>
</tr>
<tr>
<td>11 business persons (Group 2) (government, corporate, finance, accounting, etc.)</td>
<td></td>
</tr>
<tr>
<td>Survey Monkey</td>
<td></td>
</tr>
<tr>
<td>Summary Questions</td>
<td></td>
</tr>
<tr>
<td>Likert, close-ended, open-ended</td>
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</tr>
</tbody>
</table>

C. Shareefah Muhammad
How can a business education instructor become aware of the employment capabilities of a person who is blind or visually impaired?
Findings and Results
Chi-Square Tests

- With the SPSS, Chi-Square tests were used to analyze the frequency of the expected and observed responses on the posttests survey questions:
- Q9 Survey. Posttest: After the demonstration, on a scale of 1 to 5, with 5 being the highest, how likely would you recommend a person who is totally blind for employment to perform computer job tasks?
- Q10 Survey. Posttest: After the demonstration, on a scale of 1 to 5, with 5 being the highest, how likely would you recommend a person who is visually impaired (low vision) for employment to perform computer job tasks?
The Chi-Square tests did not show any significant difference of the frequency between the expected and the observed responses on either of the posttests survey questions Q9 and Q10.
The Paired Samples T Test, within the SPSS program, was used to analyze the pretest and posttest scores of the 11 business instructors and the 11 business persons.
Findings and Results
Paired Samples T Test
Survey Q7 Pretest, Q9 Posttest

- Q7 Survey. Pretest: Prior to the demonstration, on a scale of 1 to 5, with 5 being the highest, how likely would you recommend a person who is totally blind for employment to perform computer job tasks?
- Q9 Survey. Posttest: After the demonstration, on a scale of 1 to 5, with 5 being the highest, how likely would you recommend a person who is totally blind for employment to perform computer job tasks?
Findings and Results
Paired Samples T Test
Survey Q7 Pretest, Q9 Posttest

2.228 Table critical value of t (two-tail test) at df = 10 (degrees of freedom) at the alpha level of < (less than) .05

Instructors - The paired t was significant:
(t(10) = -2.667, p<.05)
Pretest Mean 3.6364  Posttest Mean 4.3636
Mean Difference .72727

Business Persons – The paired t was significant:
(t(10) = -3.130, p<.05)
Pretest Mean 2.9091  Posttest Mean 4.1818
Mean Difference 1.27273
Q8 Survey. Pretest: Prior to the demonstration, on a scale of 1 to 5, with 5 being the highest, how likely would you recommend a person who is visually impaired (low vision) for employment to perform computer job tasks?

Q10 Survey. Posttest: After the demonstration, on a scale of 1 to 5, with 5 being the highest, how likely would you recommend a person who is visually impaired (low vision) for employment to perform computer job tasks?
Findings and Results

Paired Samples T Test

Survey Q8 Pretest, Q10 Posttest

- 2.228 Table critical value of t (two-tail test) at df = 10 (degrees of freedom) at the alpha level of < (less than) .05
- Instructors - The paired t was not significant:
  - (t(10) = -2.206, p>.05, ns)
  - Pretest Mean 3.8182  Posttest Mean 4.3636
  - Mean Difference .54545
- Business Persons – The paired t was significant:
  - (t(10) = -2.834, p<.05)
  - Pretest Mean 3.1818  Posttest Mean 4.4545
  - Mean Difference 1.27273
The Independent Samples T Test showed no statistical significance in comparing the means of the ratings by the instructors and business persons on the posttest Q9 for the blind nor on the posttest Q10 for the low vision.
Conclusions and Recommendations
Chi-Square Tests

- Since the Chi-Square tests did not show any significant difference of the frequency between the expected and the observed responses on either of the posttests survey questions Q9 and Q10, it can be assumed that the projected and the actual responses were congruent on how likely the study participants would recommend persons who are blind or visually impaired for employment to perform computer job tasks.
Conclusions and Recommendations
Paired Samples T Test Advantages

- Reduction in the estimated standard error of difference by a factor related to the size of r.
- Increase in the size of the t ratio.
- Increase in the chances of rejecting the null hypothesis and achieving significance.
- (Sprinthall, 2007, p. 446).
Conclusions and Recommendations

Pretest Posttest Research Design

Advantages

• Frequently used approach in scholarly research to measure before and after knowledge and performance to determine the effectiveness of the intervention.

• Even though the study participants (instructors and business persons) were in two different types of positions, and they could not be randomly assigned to control and experimental groups which were not used in this study, having two groups allowed the researcher to statistically analyze whether the pretest posttest differences were similar which also improved the ability of the study to assess the effectiveness of the intervention (video clips) (Wall Emerson, 2016).
Conclusions and Recommendations
Pretest Posttest Research Design
Disadvantages

- Subject to threats of internal validity:
- Threat of instrumentation – “The act of being measured or assessed influences the performance of the participants” (Wall Emerson, 2016).
- Threat of testing - “If the exact same assessment is used for both the pretest and the posttest, when participants take the posttest, they have already answered the questions or performed the skills it requires” (Wall Emerson, 2016).
Q6 Survey. Prior to this demonstration, I was aware of these employable computer tasks performed by persons who are blind or visually impaired.

<table>
<thead>
<tr>
<th>Instructors</th>
<th>Business Persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>No n = 5</td>
<td>No n = 9</td>
</tr>
<tr>
<td>45% 55%</td>
<td>82% 18%</td>
</tr>
<tr>
<td>Yes n = 6</td>
<td>Yes n = 2</td>
</tr>
</tbody>
</table>

Note. N = 11 total number of instructors, N = 11 total number of business persons. The percentages for each separate group were based upon the Survey Monkey responses.
Likert-Type Scale 1-5
Likelihood of Recommending Employment

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Likely</td>
<td>Indecisive</td>
<td>Moderately Likely</td>
<td>Highly Likely</td>
<td>Definitely Likely</td>
<td></td>
</tr>
</tbody>
</table>

April 12, 2017

C. Shareefah Muhammad
Conclusions and Recommendations
Survey Q6, Q9, Q10 Answer Percentages

In response to awareness of computer tasks prior to the demonstration, for the instructors 6 (55%) answered yes, and 5 (45%) answered no. For the business persons, 2 (18%) answered yes and 9 (82%) answered no.

Regardless of the difference in awareness, the mean was very close for the two groups on recommending the demonstrators for employment: On a scale of 1-5 with 5 being the highest:

• Q9 for the persons who were blind: Instructors 4.36 and Business Persons 4.18.
• Q10 for the persons who were low vision: Instructors 4.27 and Business Persons 4.45
Q7 Survey. Pretest: Prior to the demonstration, on a scale of 1 to 5, with 5 being the highest, how likely would you recommend a person who is totally blind for employment to perform computer job tasks?

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Business Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.64</td>
<td>2.91</td>
</tr>
</tbody>
</table>
Conclusions and Recommendations
Survey Q8, Answer Percentages

Q8 Survey. Pretest: Prior to the demonstration, on a scale of 1 to 5, with 5 being the highest, how likely would you recommend a person who is visually impaired (low vision) for employment to perform computer job tasks?

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Business Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.82</td>
<td>3.18</td>
</tr>
</tbody>
</table>

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April 12, 2017
Q9 Survey. Posttest: After the demonstration, on a scale of 1 to 5, with 5 being the highest, how likely would you recommend a person who is totally blind for employment to perform computer job tasks?

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Business Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.36</td>
<td>4.18</td>
</tr>
</tbody>
</table>
Q10 Survey. Posttest: After the demonstration, on a scale of 1 to 5, with 5 being the highest, how likely would you recommend a person who is visually impaired (low vision) for employment to perform computer job tasks?

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Business Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.27</td>
<td>4.45</td>
</tr>
</tbody>
</table>
Conclusions and Recommendations
Survey Q6, Q9, Q10 Answer Percentages

- Based on the open-ended responses on Survey Q6 awareness prior to the demonstration:
- Some of the participants (especially business persons) gave the highest rating of 5 on the pretest Q7 (blind) and Q9 (low vision) even though they were not aware of the computer job task performance and had not seen the video clips yet. An example of one of the answers was that they (persons who are blind or visually impaired) should have an equal opportunity as everyone else to be employed.
## Student Contact

- Increase student contact with persons with disabilities:
- Preservice field assignments at rehabilitation agencies, observe persons with disabilities in vocational rehabilitation training programs, interview persons with disabilities at their place of work while observing their job tasks performance.

## Avenues of Employer Contact for Instructors

- American Foundation for the Blind Database
- Cooperative Education
- JAN (Job Access Network)
- Employment Services at Human Services and Rehabilitation Agencies

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C. Shareefah Muhammad

April 12, 2017
References

Creating an Instructional Framework to Prepare Teacher Education Candidates for Success on a Performance-Based Assessment—A Follow-up Study

Tamra S. Davis
Illinois State University
Using the Data to Determine Additional Program Changes
Pilot Group 1
- 7 candidates
- 1 “passing”
- Average Score 31.57 (23 – 46)
  - 35 is “passing”
  - Outlier of 46
    - Range without outlier (23 – 33)

Pilot Group 2
- 8 candidates
- 100% pass rate
- Average Score 48.5 (Range 43 – 73)
  - Outlier of 73
    - Range without outlier (43 – 48)
Follow-up Study

• Comparing the first semester of consequential scores to the pilot study scores
• Previous study compared average scores only
• Follow-up study compares scores on each of the 15 rubrics
Consequential Group

- 8 candidates
- 100% pass rate
- Average Score 46.38 Range (38 - 54)
  - Outlier of 38
    - Range without outlier (42 – 54)
Methodology

• Comparative, ex post fact using deductive data analysis, to determine the effects of differing instructional frameworks on candidate performance
• Examination of the effects after the event has occurred
• Researchers acknowledge that it is not possible to establish a causal relationship in this study
Conceptual Framework

Figure 1: Conceptual Framework

Instructor Knowledge of the edTPA

Teacher Candidate Performance

Teacher Candidate Preparation and Support
Kolb’s Model

- Learning is a continuous process grounded in experience.
- Conclusions to new ideas
- Experience and new conclusions
- Repeat
  - Learning takes place
Comparing Consequential to Pilot Groups

<table>
<thead>
<tr>
<th></th>
<th>Pilot 1</th>
<th>Pilot 2</th>
<th>Consequential 1</th>
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<tbody>
<tr>
<td>Student 1</td>
<td>23</td>
<td>43</td>
<td>38</td>
</tr>
<tr>
<td>Student 2</td>
<td>27</td>
<td>43</td>
<td>42</td>
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<tr>
<td>Student 3</td>
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<td>44</td>
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<td>Student 4</td>
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<td>Student 5</td>
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<td>Student 6</td>
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<tr>
<td>Student 7</td>
<td>46</td>
<td>48</td>
<td>50</td>
</tr>
<tr>
<td>Student 8</td>
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<td>54</td>
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<tr>
<td>Average</td>
<td>31.57</td>
<td>48.50</td>
<td>46.38</td>
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</table>
Comparing Consequential to Pilot Groups

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<td>Student 7</td>
<td>46</td>
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<tr>
<td>Student 8</td>
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<td>73</td>
<td>54</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>31.57</strong></td>
<td><strong>48.50</strong></td>
<td><strong>46.38</strong></td>
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<tr>
<td><strong>Average w/o exceptional values</strong></td>
<td>29.17</td>
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### Task 1: Planning for Instruction

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<th>Consequential 1</th>
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<td><strong>Student 2</strong></td>
<td>1.40</td>
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<tr>
<td><strong>Student 3</strong></td>
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</tr>
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<td><strong>Student 4</strong></td>
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<td>3.20</td>
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<td><strong>Student 5</strong></td>
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<td>3.20</td>
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<td><strong>Student 6</strong></td>
<td>2.80</td>
<td>3.60</td>
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<td><strong>Student 7</strong></td>
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<td><strong>Student 8</strong></td>
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<td><strong>Average</strong></td>
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<td>3.45</td>
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<tr>
<td><strong>Average w/o exceptions</strong></td>
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## Task 2: Instructing and Engaging Students

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<td>2.4</td>
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<td>2.8</td>
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<td>3</td>
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<tr>
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<td>3</td>
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<td><strong>Student 6</strong></td>
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<td>3.2</td>
<td>3.4</td>
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<tr>
<td><strong>Student 7</strong></td>
<td>3.4</td>
<td>3.6</td>
<td>3.4</td>
</tr>
<tr>
<td><strong>Student 8</strong></td>
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<td><strong>Average</strong></td>
<td>2.49</td>
<td>3.25</td>
<td>2.95</td>
</tr>
<tr>
<td><strong>Average w/o exceptions</strong></td>
<td>2.33</td>
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<td>3.06</td>
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</table>
Task 2: Instructing and Engaging Students

<table>
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<th>Pilot 2</th>
<th>Consequential 1</th>
</tr>
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<tbody>
<tr>
<td>Student 1</td>
<td>1.2</td>
<td>2.6</td>
<td>2.2</td>
</tr>
<tr>
<td>Student 2</td>
<td>2</td>
<td>2.8</td>
<td>2.4</td>
</tr>
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<tr>
<td>Student 7</td>
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<tr>
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<td>3.4</td>
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<tr>
<td>Average</td>
<td>2.49</td>
<td>3.25</td>
<td>2.95</td>
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<tr>
<td>Average w/o exceptions</td>
<td>2.33</td>
<td>3.00</td>
<td>3.06</td>
</tr>
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</table>
## Task 3: Assessing Student Learning

<table>
<thead>
<tr>
<th></th>
<th>Pilot 1</th>
<th>Pilot 2</th>
<th>Consequential 1</th>
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<tr>
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</tr>
<tr>
<td>Student</td>
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<tr>
<td>Student 7</td>
<td>2.8</td>
<td>3.6</td>
<td>3.6</td>
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<tr>
<td>Student 8</td>
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<td>3.8</td>
</tr>
<tr>
<td>Average</td>
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<td>3.10</td>
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<tr>
<td>Average w/o</td>
<td>1.47</td>
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<td>3.23</td>
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<tr>
<td>exceptions</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
15 Rubrics

- Handout provided
- Rubrics 8, 9, and 10 are areas of concern
Concerning Rubrics

• Rubric 8: Deepening Student Learning
  • How does the candidate elicit student responses to promote thinking and develop business-related conceptual understanding, technical skills, and problem-solving strategies

• Rubric 9: Subject-specific Pedagogy for Business
  • How does the candidate use instructional strategies and materials to help students develop business-related conceptual understanding, technical skills, and problem-solving strategies

• Rubric 10: Analyzing Teaching Effectiveness
  • How does the candidate use evidence to evaluate and change teaching practice to meet students’ varied learning needs
Changes Made for Rubric 8

• Built into the senior methods classes additional units to cover
  • Asking what, why, how questions
  • How to take a student response and build on it for additional learning
  • Teaching strategies to enhance questioning techniques

• Current student teachers were impacted
  • Scores not available at this time
Changes Made for Rubric 9

• Incorporating into the junior-level class additional emphasis on
  • The strategic selection of instructional strategies
  • Students are asked to justify instructional strategies selected in practice lesson plans
  • Students are asked to link the instructional strategies to something that the students in their future classroom would understand

• Senior-level methods will require students to continue the justification process
Changes Made for Rubric 10

• In the junior-level class, additional activities to support this topic are being added
  • Videos from previous students edTPA portfolios are watched
  • Students are asked to identify whole class learning needs and offer suggestions of what should be different

• In the senior-level class
  • Students are watching videos and identifying whole class and individual learning needs and offer suggestions of what should be different

• During student teaching
  • The US is asking the candidate to identify learning needs and discuss changes
Limitations

• Slightly different demographics
  • Mitigated by the consistency of the program
  • All groups took the same classes taught by the same faculty members
• Requirement as part of the grade during student teaching
• Depth of faculty knowledge changed during the 3 years
  • One faculty member is currently undergoing training to be an edTPA Scorer for Pearson
Generalizability

- Generalizing to a population vs. generalizing to a theory
- Results cannot be generalized to a population
- Researchers believe that the results can be generalized to the theory that increased teacher candidate preparation and support and greater instructor knowledge results in higher candidate portfolio scores
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Illinois State University

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Creating a Teaching Focused Community of Practice

Business Education Research Conference
Dr. Mark Julien, Goodman School of Business, Brock University
Dr. Russell Clayton, Donald R. Tapia School of Business, Saint Leo University
April 13, 2017
Agenda

- Defining Community of Practice
- What’s a Teaching Focused Community of Practice?
- Building a Community of Practice
- What’s In it for Me?
- Possible Outlets for Research
- Barriers Moving Forward
- Status of our Community of Practice
Defining Community of Practice

• “Groups of people informally bound by shared expertise and passion for a joint enterprise” (Wenger and Snyder, 2000, p. 139).

• People in communities of practice share their experiences and knowledge in free-flowing creative ways that foster new approaches to problems.
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>What’s the purpose?</td>
<td>Build capacity, knowledge, expertise</td>
</tr>
<tr>
<td>Who belongs?</td>
<td>Voluntary, self-selecting</td>
</tr>
<tr>
<td>What holds it together?</td>
<td>Passion, commitment, self-identification</td>
</tr>
<tr>
<td>How long does it last?</td>
<td>As long as there’s interest</td>
</tr>
</tbody>
</table>
What’s a Teaching Focused Community of Practice?

- Opportunity to discuss problems and challenges of teaching today’s students.
- Opportunity to share best practices and innovations.
- To provide support to each other.
- Whatever participants want it to be.
What’s in it for me as an educator?

- Improved effectiveness in the classroom.
- Valuable social support.
- Opportunity to team build and make new connections.
- Peer support and feedback on conference and publication manuscripts.
- New research outlets (Did he just say research???).
Whoa! I thought you said this was about teaching???
Various Outlets for Conferences

- Business Education Research Conference (BERC)
- Organizational Behavior Teaching Conference (OBTC)
- North American Case Research Association (NACRA)
- Administrative Sciences Association of Canada (ASAC)
- Work Family Research Network (WFRN)
- Academy of Management (AOM)
Various Outlets for Publication

- Business Education Forum
- Journal of Management Education
- Academy of Management Learning and Education
- Case Research Journal
- Organization Management Journal
- Management Teaching Review
Barriers of a Community of Practice

- Perceived lack of time from faculty.
- Organizational culture of the university focused on research.
- Concern that this activity won’t be valued.
- Scheduling conflicts.
- Other barriers?
Status of Our Community of Practice

- First meeting: Half of our faculty attended, great enthusiasm.

- Soon attendance became a problem. Second meeting had three faculty attend and the third meeting was slightly better (five).

- Perception of a lack of time seems to be the biggest contributing factor to the lack of participation with this group.

- Some faculty wanted to discuss the minutia of their course.

- We will attempt to revive this initiative in the Fall.
Questions?
Designing discussion forums to enhance cognitive presence in an online entrepreneurship course

Thomas Mays
maysta@miamioh.edu

MIA MI UNIVERSITY
Purpose

» Develop a tool that helps educators create meaningful discussion forums that enhance cognitive presence in online classrooms.
Miami University Regionals E-Learning

» Brief history
» Student population
» Course design process and QM
» New initiatives to support research
Student perceptions of online learning

» Expectations of individualized work
» Against group work
» Making friends in online classrooms?
» Discussion forums mechanical and prescribed

Forum for Frustration

“I think the only sense of community we had was there was a forum where we would just write each other if we have questions or things. And a lot of times somebody would get frustrated and state that they were frustrated, and then everyone else would say that they were frustrated. So we were all kind of bonded in our frustration.” – Madalyn
Problem

A common approach to discussion forums is the structured approach which involves a prompt, a response, and a reply. This can lead to students submitting forum posts which lack substance (Darabi et al. 2011).
The discussion forum design grid was created based on the Community of Inquiry (CoI) Framework. The framework includes three forms of presence: social, teaching, and cognitive (Garrison et al., 2000).
Discussion Forum Designs

From study on Cognitive Presence and forums:

1. Structured
2. Scaffolded
3. Forced Debate
4. Role Play

Darabi et al., 2011, p. 220
Discussion Forum Designs

» Structured
  » Example format: Prompt, response, and reply

» Scaffolded
  » Multiple phases or layers
  » Mentor/instructor helps students move through each phase
  » Follow-up comments and questions from mentor/instructor/peers
  » Multiple interactions between mentor/instructor/peers and students
  » Multiple posting deadlines

Darabi et al., 2011
Discussion Forum Designs

But it’s not just the design you use, it’s how you execute it.
Poor Forum Example

» A manager is faced with low employee moral in her department. What motivational theory would you suggest the manager apply and why?

» Read what others have posted, and…
  » Reply to at least two other students
  » Reply meaningfully to two other students
  » Reply to two other students with substantive comments
Discussion Forums for the Focus Course

» Course name: Issues and Innovation in Small Business

» Course included 14 discussion forums created using the discussion forum design grid

» At the end of the term, students were administered the CoI survey (measuring teaching, social, and cognitive presence) as well as items on the students’ discussion forum experiences
Forum designs used in focus course

» Elements of structured and scaffolded approaches to varying degrees.
  » Post - Reply (6)
  » Post - Investigate - Reply (6)
  » Post - Reply - Repost (1)
  » Debate: Post - Reply (1)
The Discussion Forum Design Grid
Community of Inquiry

Members projecting their “...personal characteristics into the community, thereby presenting themselves to the other participants as ‘real people’” (p. 89).

“...to support and enhance social and cognitive presence for the purpose of realizing educational outcomes” (p. 90).

Cognitive Presence

Cognitive Presence

- **Trigger**: Dilemma, problem
- **Exploration**: Research, lit review, group brainstorming
- **Integration**: Reflection, critical discourse
- **Resolution**: Solution, application, testing, reporting

(Garrison, 2011, p. 46-47)
Bloom’s Taxonomy

1. Remember
   - Recall facts and basic concepts
     - Define, duplicate, list, memorize, repeat, state

2. Understand
   - Explain ideas or concepts
     - Classify, describe, discuss, explain, identify, locate, recognize, report, select, translate

3. Apply
   - Use information in new situations
     - Execute, implement, solve, use, demonstrate, interpret, operate, schedule, sketch

4. Analyze
   - Draw connections among ideas
     - Differentiate, organize, relate, compare, contrast, distinguish, examine, experiment, question, test

5. Evaluate
   - Justify a stand or decision
     - Appraise, argue, defend, judge, select, support, value, critique, weigh

6. Create
   - Produce new or original work
     - Design, assemble, construct, conjecture, develop, formulate, author, investigate

https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/
## Discussion Forum Planning Grid

<table>
<thead>
<tr>
<th>Cognitive Presence</th>
<th>Description</th>
<th>Source</th>
<th>Question, activity, task, action…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trigger</td>
<td>Dilemma, problem</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exploration</td>
<td>Research, lit review, group brainstorming</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integration</td>
<td>Reflection, critical discourse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resolution</td>
<td>Solution, including application, testing, reporting</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Catalysts and Destroyers of Innovation Discussion (P-I-R)

<table>
<thead>
<tr>
<th>Cognitive Presence</th>
<th>Description</th>
<th>Source</th>
<th>Question, activity, task, action…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trigger</td>
<td>Dilemma, problem</td>
<td>Teacher</td>
<td>Industries or organizations that could use innovation</td>
</tr>
<tr>
<td>Exploration</td>
<td>Research, lit review, group brainstorming</td>
<td>Student</td>
<td>Name a an industry or organization that could use innovation. Describe why you think so…?</td>
</tr>
<tr>
<td>Integration</td>
<td>Reflection, critical discourse</td>
<td>Student</td>
<td>Why hasn’t innovation taken hold in this industry or organization (inhibitors or destroyers of innovation)?</td>
</tr>
<tr>
<td>Resolution</td>
<td>Solution, including application, testing, reporting</td>
<td>Student</td>
<td>Responding to two other students posts, address the possible solutions to the inhibitors or destroyers of innovation that are described. What can be done to spawn innovation? What would the authors of our innovation book say?</td>
</tr>
</tbody>
</table>

(Garrison, 2011, p. 46-47)
## Innovation and Opportunity Discussion (P-I-R)

<table>
<thead>
<tr>
<th>Cognitive Presence</th>
<th>Description (Garrison, 2011, p. 46-47)</th>
<th>Source</th>
<th>Question, activity, task, action...</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trigger</strong></td>
<td>Dilemma, problem</td>
<td>Teacher</td>
<td>Fostering innovation in your organization</td>
</tr>
<tr>
<td><strong>Exploration</strong></td>
<td>Research, lit review, group brainstorming</td>
<td>Student</td>
<td>View course videos and readings</td>
</tr>
</tbody>
</table>
| **Integration**    | Reflection, critical discourse          | Student| How can fostering and encouraging innovation in your organization lead to greater opportunities?  
What concerns or fears do you have about encouraging innovation among your employees? |
| **Resolution**     | Solution, including application, testing, reporting | Student| Reply to others on how you would address their concerns or fears. Base your reply on the course videos and readings. |
## Hiring Philosophy Discussion (P-R-P)

<table>
<thead>
<tr>
<th>Cognitive Presence</th>
<th>Description</th>
<th>Source</th>
<th>Question, activity, task, action...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trigger</td>
<td>Dilemma, problem</td>
<td>Teacher</td>
<td>Develop a hiring philosophy for your business</td>
</tr>
</tbody>
</table>
| Exploration        | Research, lit review, group brainstorming | Student | **Task 1:** Read the sample hiring philosophies  
**Task 2:** Read other students’ philosophies. Find at least one idea in someone else’s post that will improve your philosophy. |
| Integration        | Reflection, critical discourse | Teacher/Student | **Forum Post 1:** Post your philosophy. The philosophy should reflect the spirit of the culture you described from an earlier assignment.  
**Forum Post 2:** Reply to the student(s) from whom you borrowed an idea. Describe the idea you are borrowing and why it applies to your business and improves your philosophy. |
| Resolution         | Solution, including application, testing, reporting | Student | **Forum Post 3:** Post a revised philosophy that incorporates at least one idea from the other posted philosophies. |

(Garrison, 2011, p. 46-47)
Trigger
- Develop a hiring philosophy

Exploration
- 1) Read examples
- 2) Read others’ posted philosophies.

Integration
- 1) Post your philosophy
- 2) Find something else to include, and reply to the student(s) from whom you borrowed

Resolution
- Post revised philosophy
Participant Rankings: Learned the Most

- **Post-Reply:** Average Rank 9.2
- **Post-Investigate-Reply:** Average Rank 6.5
- **Post-Reply-Repost:** Average Rank 7.0
- **Debate Prompt: Post-Reply:** Average Rank 4.0

- n=9
### Number of reply posts

<table>
<thead>
<tr>
<th></th>
<th>P-R</th>
<th>P-I-R</th>
<th>P-R-RP</th>
<th>DP-P-R</th>
</tr>
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<tbody>
<tr>
<td>29</td>
<td>36</td>
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<td><strong>Average</strong></td>
<td><strong>23</strong></td>
<td><strong>35</strong></td>
<td><strong>34</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>
Post Length

» Post-Reply
  » Student Introductions: $M=51.2$, Range: 20 to 65
  » Defining Success and Failure: $M=61.3$, Range: 21 to 130
  » Key Performance Indicators: $M=55.5$, Range: 33 to 91
  » Lean Analytics: $M=82.3$, Range: 40 to 151
  » Marketing Plans: $M=76.3$, Range: 27 to 191
  » Report Analysis: $M=80.9$, Range: 54 to 207
Post Length

» Post-Investigate-Reply
  » Catalysts and destroyers discussion: M=109.7, Range: 42 to 179
  » Innovation and Opportunity discussion: M=109.1, Range: 41 to 228
  » Incubators: M=100.3, Range: 42 to 251
  » M&A Failure Analysis: M=86.5, Range: 39 to 199
  » Innovation Summary and Question: M=93.4, Range: 57 to 170
  » Interview Findings and analysis: M=90.5, Range: 59 to 140
Post Length

» Average Length P-R: 67.9 words
» Average Length P-I-R: 98.3 words
Quality of Posts

» Fewer “Good Point” posts
» More thoughtful and insightful posts
Community of Inquiry Results

The focus course
  » Teaching Presence: 4.87
  » Social Presence: 4.06
  » Cognitive Presence: 4.46
  » n=9

All other courses (past two years)
  » Teaching Presence: 4.59
  » Social Presence: 4.02
  » Cognitive Presence: 4.28
  » n=78
Conclusion

» Discussion forum tool has helped me think about the learning steps in the forum design process
» Think in terms of layers or stages
» Provide specific tasks and/or instructions
References


EMPLOYABILITY SKILLS WITH PURPOSE: SERVICE-LEARNING IN GRADUATE BUSINESS EDUCATION

PRESENTED AT:

BUSINESS EDUCATION RESEARCH CONFERENCE (BERC), CHICAGO, IL

Molly J. Wickam, Ph.D., M.B.A.
Bethel University
m-wickam@bethel.edu
April 11, 2017

Professor Andrew Furco, University of Minnesota, Dissertation Co-Advisor
Professor Alexandre Ardichvili, University of Minnesota, Dissertation Co-Advisor
Service-Learning Resources

The best (in my opinion) higher learning s-l resource:

- Google Group HE-SL (must be signed into a Google account)
  - email Marcus Penny at mpenny@nylc.org and ask to be added to the group

My Ph.D. dissertation can be found at:

- [http://conservancy.umn.edu/bitstream/handle/11299/177145/Wickam_umn_0130E_16607.pdf;sequence=1](http://conservancy.umn.edu/bitstream/handle/11299/177145/Wickam_umn_0130E_16607.pdf;sequence=1)
Purpose of the study

examine alignment between employability **skills** employers need and employability skills graduate business students gain through service-learning in business capstones
Why study service-learning in business education?

- Business education too focused on the corporate bottom line
  - MBAs...”critters with lopsided brains, icy hearts, and shrunken souls (Leavitt, 1989, p. 39).

- Academic and cognitive development outcomes
  - Improves higher order thinking skills (Sedlak et al., 2003)
  - Builds skills like business communication (Gale, Crews & North, 2007)

- Career outcomes
  - Altered career aspirations —50% of business majors at a Jesuit university believed s-l altered their career aspirations (Seider, Gillmor and Rabinowicz, 2011)

- S-L is a *high-impact practice* in higher ed. (Kuh, 2008)
- Skills gap (Segon & Booth, 2012).
Why study capstones?

• 40-50% of graduate business programs contain a capstone
• Lack of real-world experience in most capstones (Henscheid, 2000)
• Capstones are a high impact practice (Kuh, 2008)
What is Service-Learning?

• “a course or competency-based, credit-bearing educational experience
• in which students (a) participate in mutually identified service activities that benefit the community, and
• (b) reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of personal values and civic responsibility” (Bringle & Hatcher, 1996, p. 222).
What is Not Service-Learning?

- Volunteerism
- Internships
- Community Service

Distinctions among service programs (Furco, 1996)
Employability skills

Transferable skills that represent knowledge, skills and attitudes needed by the 21\(^{st}\) century workplace (Overtoom, 2000)

- Ability to assimilate new technology
- Ability to work in teams
- Accountability
- Analytical ability
- Computer problem-solving skills
- Computer word-processing skills
- Creativity and creative thinking
- Decision-making
- Ethical values
- Global awareness
- Interpersonal skills
- Responsibility
- Oral communication
- Project management
- Presentation skills
- Persuasive ability
- Punctuality
- Time management
- Written communication
Theoretical framework

- Constructivist theory (Bruner, 1966; Dewey, 1929; Piaget, 1952; Vygotsky, 1978)
- Experiential learning theory (Kolb, 1994)
- Andragogy (Lindeman, 1926; Knowles, 1984)
  - Adults need to know why they need to learn (Freire, 1970)
  - Instructors are facilitators (Dewey, 1938)
  - Learning through experiences (discussions, activities, simulations, cases, labs, real-world projects)
- Reflection (Schon, 1987)
  - Knowing in action; reflection in action; knowing in practice
<table>
<thead>
<tr>
<th>Research Question</th>
<th>Measure/Evaluation</th>
<th>Data Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RQ1:</strong> Are there differences in employability skills developed between MBA students who participate in capstones that include service-learning and comparable MBA students who participate in capstones that do not include service-learning?</td>
<td>Survey instrument modified from Tanyel et al. (1999)</td>
<td>Electronic questionnaire using Qualtrics survey tool to a purposeful sample</td>
</tr>
<tr>
<td><strong>Sub-RQ1:</strong> Are there differences among various demographic groups in the extent to how their employability skills were enhanced?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>RQ2:</strong> Which, if any, essential employability skills, as identified by employers, are enhanced by service-learning experiences in business capstones?</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>RQ3:</strong> Which aspects of service-learning experiences contribute to enhanced employability skills in graduate business students?</td>
<td>Semi-structured interviews</td>
<td>phone interviews</td>
</tr>
</tbody>
</table>
Design & Methodology

• Design: non-experimental, comparative, descriptive study
  • Group A=MBA alumni who completed a capstone with service-learning (38%)
  • Group B=MBA alumni who completed a capstone without service-learning (62%)

• Methodology was mixed methods, explanatory
  • Quantitative: survey research using an existing instrument (Tanyel et al., 1999)
  • Qualitative: semi-structured interviews using an Interview Protocol
Population & Sample

• Population
  • MBA alumni who completed a capstone
  • In 2011, 187,000 master’s degrees were in business (#1) (“Digest of Education Statistics,” 2012)
  • Employers are hiring increasing numbers of MBAs (“Corporate Recruiters Survey,” 2013)

• Sample: non-random, purposeful
  Criteria: recent alum of a capstone course in an MBA program
  Recruitment for survey:
    2 Google Groups
    6 LinkedIn Groups
    Direct contact with program leaders at two institutions
  Recruitment for interviews:
    The survey respondents who had service-learning in their capstone
Demographic Profile of Sample (n=79)

male (53.8%)

GPA between 3.4 and 4.0 (93.7%)

white (86%)

work full-time (94%)

managers (53%)

76% completed capstone between 2010-2014

57.5% obtained MBA from one of four institutions

52.5% had no prior s-l in graduate coursework
Data Analysis Plan

• Survey
  • Frequency distribution (numbers and percentages)
  • Means and standard deviations of each variable
  • T-tests for independent samples (p<.05)
  • Mann-Whitney U (p<.05)
  • Exploratory Factor Analysis
  • Spearman’s rho
  • ANCOVA

• Semi-structured interviews
  • Constant comparative method
  • content analysis (line by line open coding)
  • Similar topics clustered together to create categories
  • Categories organized into themes
    • Thick description used to explain the voice
Results: RQ1 and RQ2

- Top three skills enhanced by s-l, n=79:
  - Decision-making (6.71) (p=.212)
  - **Presentation (6.66) (p=.003)**
  - Ability to work in teams (6.65) (p=.087)

*Mann-Whitney-U, p<.05*
### Results: RQ1 & RQ2 (continued)

<table>
<thead>
<tr>
<th>Factor Number and Label</th>
<th>Number of Items</th>
<th>Variables</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1: Collaborative Learning</td>
<td>7</td>
<td>ability to work in teams, interpersonal, oral communications, persuasive ability, presentation, project management, responsibility</td>
<td>.939</td>
</tr>
<tr>
<td>Factor 2: Technological and Organizational Awareness</td>
<td>7</td>
<td>ability to assimilate new technology, analytical ability, computer problem solving, computer word processing, ethical values, global awareness, punctuality</td>
<td>.848</td>
</tr>
<tr>
<td>Factor 3: Timely Written Communications</td>
<td>3</td>
<td>accountability, time management, written communications</td>
<td>.899</td>
</tr>
<tr>
<td>Factor 4: Making Creative Decisions</td>
<td>2</td>
<td>creativity and creative thinking, decision-making</td>
<td>.749</td>
</tr>
</tbody>
</table>
Results: RQ1 & RQ2 (continued)
Are there differences between factors for students who did/did not have a s-l experience?

| Factors                          | Mean Rank | Mann-Whitney U | z    | p    |
|----------------------------------|-----------|----------------|
| Collaborative Learning           | 46.53     | 34.19          | 479.000 | -2.365 | .018 |
| Technological and Organizational Awareness | 45.78     | 35.79          | 528.500 | -1.883 | .060 |
| Timely Written Communications    | 45.28     | 36.77          | 576.500 | -1.613 | .107 |
| Making Creative Decisions        | 44.00     | 37.55          | 615.000 | -1.232 | .218 |
Results: Demographics

Does gender make a difference?

Gender (males, females)
- Analytical ability (p=0.036)
- Oral communication (p=0.014)

S-l enhances these skills for males more than it does for females

Does GPA make a difference? GPA (3.4-4.0 or 2.4-3.3)
- Analytical ability (p=0.019)
- Oral communication (p=0.021)
- Presentation (p=0.003)
- Project management (p=0.030)
- Responsibility (p=0.024)
- Time management (p=0.018)

S-l enhances these skills for higher GPAs
Summary of Quantitative Analysis

• **Presentation skills** are enhanced by service-learning

• **Collaborative Learning** is enhanced by service-learning

• Service-learning enhances analytical ability and oral communication more for males than for females

• Service-learning enhances analytical ability, oral communication, presentation, project management, responsibility, and time management more for students with higher GPAs
Demographic profile of participants

• 10 participants
• Represented three MBA programs
  • Faith-based, East coast private college
  • Faith-based, Midwestern private university
  • Research-based, West coast public university
• Four males, six females
• Majority white, non-Hispanic (60%)
• Ages 18-29 (40%) or 30-39 (40%)
• Work full-time (90%)
RQ3: Which aspects of service-learning experiences contributed to enhanced employability skills in graduate business students?

Theme 1: Structure and deliverables of capstone

- Summative nature of capstone

  P3: “It echoed very much for me the ability to pull the different skills we’re learning from the MBA program into one kind of grand finale course.”

- Client-based
- Service-learning-focused

  P10: “The service-learning experience was to apply all of the knowledge that we had acquired through the program, which is heavily based around managing money and your finances—other peoples’ finances. So…this incorporated how you can take that knowledge and use it for the benefit of a community…you know, it’s very easy to get wrapped up in the money and finance part of business management, so this was using the knowledge that we had acquired for the greater good.”
Theme 1: Structure and deliverables of capstone

Major deliverables were a written report and multiple oral presentations

- Written report was a business plan (60%)
- Presentations to client and class
- Oral presentations helped build other skills: quick thinking, confidence, flexibility

Professor’s interaction with students

- Strong feelings, mostly positive, about their instructors (80%)
  
  P2: “I think that, um, [name of university] has some of the best professors, I think. I may be biased. You know, I felt that the professors really care about the students, and, you know, they really want us to succeed.”
Theme 2: Opportunities to make decisions

P1: “Decision-making was a huge component for nearly every part of our project, from minor decisions to major ones, individual decisions, group decisions.”

Collaborative, process-oriented, and client-focused decision-making

P5: “Those decisions...they’re pretty crucial and so we had to do the best we could with the information we had...Those kinds of decisions made us a little nervous...knowing that he may take those decisions, based on our recommendations...”
Theme 3: Opportunities to build teamwork skills (Tuckman, 1965)

1. Team forming
   • Students usually formed their own teams
   • Had worked together with same students in other courses

2. Team storming
   • Conflict when a new team member was added to the group
   • Conflict about project workload

3. Team norming
   • P3: “...and what I also learned, is that you can try to be superman, and be the jack of all trades, and be great at everything, but you’re really only as strong as your team.”
   • Cohesiveness

4. Team performing
   • Team communication
   • Team accountability
   • Clear definition of roles, defined by teams
Theme 4: Opportunities to Build Presentation Skills

- Using presentation software required collaboration and creativity
- Multiple presentations
- Feedback
Finding #1

There *is alignment* in the collaborative learning skills needed by employers and those enhanced through service-learning in graduate business capstones.

1. Teamwork
   - Most important skill to employers (National Association of Colleges and Employers, 2014)
   - LaFasto and Larson’s (1989, 2001) research of 6,000 teams.

2. Interpersonal
2. Oral communications
3. Persuasive ability
4. Presentation
5. Project management
6. Responsibility
Finding #3

The instructor’s role in structuring and facilitating service-learning experiences in a client-based business capstone course is key to learning.

• Will projects be team or individual?
  1. self-selection
  2. random assignment
  3. instructor assignment

• Will the instructor or the students choose the teams?
• Will the instructor or the students find the client?
• What will be the deliverables of the project?
• How will those deliverables be presented and assessed?
Finding #3

Decision-making is enhanced as a result of service-learning.

Top three skills:
- Decision-making (6.71) (p=.212)
- Presentation (6.66) (p=.003)*
- Ability to work in teams (6.65) (p=.087)

Theme 2: Opportunities to make decisions

Collaborative decision-making
Process-oriented decision-making
Client-focused decision-making

Most important skills of job candidates:
- #1 Teamwork
- #2 Decision-making
- #3 Problem-solving
- #4 Oral communication ("National Association of Colleges," 2014)
Implications for Research in Business Ed.

• Conduct research about client-based capstones that include service-learning through the lens of Tuckman’s (1965) theory of small group development.

• Study employability skills related to giving presentations
  • the ability to think quickly
  • the ability to have flexibility during a presentation
  • the ability to adjust to an audience during a presentation

• Conduct Confirmatory Factor Analysis
Limitations

1. Results may not be generalizable
   - Non-experimental, non-random design
   - Participants were from three MBA programs
     - Two were Christian faith-based

2. Employability skills are described/defined differently

1. Not an exhaustive list of skills
   - leadership

4. Full-time vs. part-time MBA students
Recommendation: Facilitate feedback techniques

Feedback is a gift and the lack of feedback is a key reason why teams fail (LaFasto & Larson, 2001).

- Peer review feedback on papers, PowerPoints
  - Example: a business capstone course
    - Students complete a peer feedback form at the end of the project
      - **Attendance**: attended meetings, contributed equitably
      - **Leadership**: provided direction and/or was a helpful follower
      - **Preparation**: came to meetings prepared to solve the project requirements
      - **Collaboration**: flexibility, listening, problem-solving
      - **Effort and Attitude**: behavior towards team members; willingness to get the job done
Recommendation: Facilitate decision-making

Teach students how to make decisions that help them move forward with their projects.

- Vote with the “majority rules”
- Team leader breaks a tie
Recommendation: Facilitate conflict resolution skills

- conflict911.com/
Recommendation: Promote that collaborative learning is a proven outcome of service-learning
Recommendation: Facilitate teamwork

Include in curriculum:

Team-building activities

Define team roles

Set deadlines

Build relationships

(French & Bell, 1994)
References

For full references for citations given in this presentation, see the dissertation:

- http://conservancy.umn.edu/bitstream/handle/11299/177145/Wickam_umn_0130E_16607.pdf;sequence=1
Enhancing Online Students’ Learning Outcomes

It’s not all about the Content and the Delivery!

Jim Larsgaard
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Overview

• I teach an online Orientation course – stress writing

• Most of my online students [used to] fail to read my feedback

• As a result, many students didn’t learn some key writing concepts!

• Requesting, reminding, encouraging – nothing worked

   Until I conducted this research!
The Online Environment

• *Teaching Multiple Online Course Sections*
  – *Course Management System is D2L*
  – *Most students are active military*

• *Courses are 6-weeks (Termed Fast Track)*
  – *Courses are Comprised of 4 Modules*
  – *Each module includes*
    – *Case Study*
    – *Session Long Project*
    – *Discussion Board (Topic Specified in Module)*
The Online Environment (Cont.)

• Each Module’s Case & SLP Assignment
  – Requires the Student to Submit a Document
  – Allows the Instructor to:
    – Upload Graded (marked up) Assignments
    – Offer Feedback in a Feedback Cell
    – Offer Feedback within the Graded Document
The Online Environment (Cont.)

• **D2L Time-stamps**
  – Each Student’s Assignment Uploads
  – The Instructor’s Graded Assignment & Feedback Uploads
  – When each Student Reads his/her Feedback
Statement of the Problem

• A High Percentage of [this author’s] Online Students were not reading the feedback
  – Many students make similar mistakes assignment after assignment
Why Don’t Students Read the Feedback?

• Don’t they know where or how to read the feedback?

• Aren’t they motivated to read feedback?
  – This Research addresses the Motivation Problem
The Researcher’s Challenge

• **Identify Motivator(s) for Reading Feedback**
  – *What motivates your students?*
  – *Points!!*

• **Identify a System to Provide a Point Incentive for Students to Read Feedback**
The Bonus Points for Reading Feedback Solution!

• A List of Prepositions was Generated as Bonus Points Words
  – For each student, A Bonus Points Word was Identified in the Graded Uploaded Case Assignment (For each of the first 3 modules)!
  – Bonus points words were unique by student by assignment (Management plan coming up)
  – When Students e-mailed each Bonus Points Word to this researcher, they were given five Bonus Points

• Bonus Points Plan Saved in the D2L News Area
How were Students Informed about the Bonus Points Opportunity & its Location?

• Three Attempts to Inform:

  – Introductory e-mails (both personal and University e-mails) introduces the plan and explains plan location
  – Module 1 feedback in the D2L System
  – E-mail (both accounts to non-readers) Following Module 2
The Empirical Study

• The Course – Online College Orientation 4 CH
  – Writing Mechanics (e.g., grammar, punctuation, and APA formatting of citations and references) are an important aspect of this course.

• Two Groups – 5 Course Sections/Group
  – Control Group
    – 5 Course Sections
    – Control group n = 79
  – Treatment Group
    – 5 Course Sections
    – Treatment Group n = 44
## The Data!

<table>
<thead>
<tr>
<th>Bonus Points Available Y or N</th>
<th>Course</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>F</th>
<th>n</th>
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<tbody>
<tr>
<td>Y</td>
<td>Sept. 15 TUX 101 - 4</td>
<td>11</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>Y</td>
<td>Sept 15 TUX 101 - 1</td>
<td>7</td>
<td>1</td>
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<td>0</td>
<td>2</td>
<td>10</td>
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<tr>
<td>Y</td>
<td>Fall 15 TUX 101 - 8</td>
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<td>1</td>
<td>0</td>
<td>1</td>
<td>3</td>
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<tr>
<td>Y</td>
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<td>0</td>
<td>0</td>
<td>4</td>
<td>8</td>
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<tr>
<td>Y</td>
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<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td></td>
<td>29</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>9</td>
<td>44</td>
</tr>
</tbody>
</table>

| N                             | Spring 15 TUX 101-3 |  5 | 2 | 3 | 0 | 8 | 18 |
| N                             | Summer 15 TUX 101 - 10 |  1 | 9 | 2 | 0 | 5 | 17 |
| N                             | Fall 15 TUX 101 - 1  |  8 | 3 | 1 | 0 | 4 | 16 |
| N                             | Fall 15 TUX 101 - 12 |  5 | 3 | 1 | 1 | 4 | 14 |
| N                             | Winter 15 TUX 101 - 6 |  7 | 3 | 1 | 0 | 3 | 14 |
| **Totals**                    |                   | 26 | 20 | 8 | 1 | 24 | 79 |
Findings

• Providing a Bonus Points Motivator for Reading Feedback
  – [May have] **Increased the % of Students Who Earned an A**
  – From 32.91% to 65.91%
  – This Change is a 100.3% increase in Earned As
Findings (Cont.) Even More Important in this researcher’s opinion

• Providing a Bonus points Motivator for Reading Feedback
  – [May have] Decreased the Failure Rate
  – From 30.38% to 20.45%
  – This Reduction in Failures is a 33% Decrease!

Current Bonus Points Tracking System
Enhancing Online Students’ Learning Outcomes

It’s not all about the Content and the Delivery!

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HIGH SCHOOL TEACHERS’ PERCEPTIONS OF THEIR APPLICATION OF STUDENT-CENTERED LEARNING INSTRUCTIONAL STRATEGIES

Lindsay Rock and Elaine Adams
The University of Georgia
April 12, 2017
Business Education Research Conference
RATIONAL

- Researchers claimed a shift from teacher-centered learning to student-centered learning is needed
- Student-centered learning – not widespread
- Benefits
- Obstacles
PURPOSE

• Determine Georgia high school teachers’ perceptions of application of student-centered learning instructional strategies
• Gender
• Primary subject area
• Education level

• Teacher perception was measured using the Application of Student-Centered Learning Instructional Strategies Survey
RESEARCH QUESTIONS

1. What are the perceptions of Georgia high school teachers concerning their application of student-centered learning instructional strategies?

2. Is there a statistically significant difference in the perceptions of Georgia high school teachers concerning their application of student-centered learning instructional strategies based on gender?

3. Is there a statistically significant difference in the perceptions of Georgia high school teachers concerning their application of student-centered learning instructional strategies based on primary subject area?

4. Is there a statistically significant difference in the perceptions of Georgia high school teachers concerning their application of student-centered learning instructional strategies based on education level?

5. What is the correlation between teachers’ perception of their application of student-centered learning instructional strategies and perceived school administration support of these same strategies?

6. What is the correlation between teachers’ perception of their application of student-centered learning instructional strategies and perceived fellow teachers’ support of these same strategies?
DESIGN

- Survey research
- Often used in education
PARTICIPANTS

• High school teachers from Northeast Georgia Regional Educational Service Agency (RESA) were the convenience sample
• There were 46,487 high school teachers for the 2015-2016 school year
• 1,030 core and non-core teachers received the survey
• 470 valid responses; 45.6% response rate
INSTRUMENT

• Application of Student-Centered Learning Instructional Strategies Survey
  • 32 statements related to student-centered learning instructional strategies
    • 28 were scored using a 5-point Likert frequency scale
    • 4 were scored using a rating scale where 0 was least likely and 10 was most likely to occur

• Demographics section
  • Gender
  • Primary subject area
  • Education level
PROCEDURE

• IRB permission
• Coding
• Email with link for survey
  • Explanation of study
  • Consent document
DATA ANALYSIS

- SPSS (version 24)
- Descriptive statistics
- ANOVA
  - Gender
  - Primary subject area
  - Education level
- Correlation
Research Question 1: What are the perceptions of Georgia high school teachers concerning their application of student-centered learning instructional strategies?

Perception variable – score ranged from 1 to 5

Mean score was 3.36, indicating that teachers have a high perception of their application of student-centered learning instructional strategies

Statements 13, 14, 15, 16, 17, 24, and 27 – mean score of 2.73

- Statements were related to:
  - Student choices
  - Interdisciplinary activities
  - Learner autonomy
  - Investigation activities
Research Question 2: Is there a statistically significant difference in the perceptions of Georgia high school teachers concerning their application of student-centered learning instructional strategies based on gender?

- Gender and teacher perception
- Means were similar (3.29 male; 3.34 female)
- No statistically significant difference
- Different from the research
- Normally distributed data; homogeneity of variance assumptions were met
**FINDINGS CONTINUED**

- Research Question 3: *Is there a statistically significant difference in the perceptions of Georgia high school teachers concerning their application of student-centered learning instructional strategies based on primary subject area?*

- Primary Subject Area and teacher perception
  - Means not similar (3.11 core; 3.44 non-core)
  - Statistically significant
  - Homogeneity of variance assumptions met

- Normality – distributed normally, but non-core teacher data positively skewed
  - Higher frequency of use; supported by literature
FINDINGS CONTINUED

- Research Question 4: Is there a statistically significant difference in the perceptions of Georgia high school teachers concerning their application of student-centered learning instructional strategies based on education level?

- Education level and teacher perception
- Means were exactly the same 3.18 (undergraduate and graduate)
- No statistically significant difference
- Different from the research
- Normally distributed data; homogeneity of variance assumptions were met
• Research Question 5: What is the correlation between teachers’ perceptions of their application of student-centered learning instructional strategies and perceived school administration support of these same strategies?

• Pearson correlation

• Statistically significant positive relationship

• Practical significance was $d = -3.56$ (large effect)

• As teachers’ perceptions of school administration support of student-centered learning instructional strategies increase, teachers’ perceptions of application of student-centered learning instructional strategies also increase.
FINDINGS CONTINUED

- Research Question 6: What is the correlation between teachers’ perception of their application of student-centered learning instructional strategies and perceived fellow teachers’ support of these same strategies?
- Pearson correlation
- Statistically significant positive relationship
- Practical significance was $d = 0.53$ (medium effect)
- As teachers’ perceptions of fellow teachers’ support of student-centered learning instructional strategies increase, teachers’ perceptions of application of student-centered learning instructional strategies also increase.
CONCLUSIONS

- High school teachers perceived that they sometimes implemented student-centered learning instructional strategies
  - Consistent with literature

- Overall mean perception score of 3.36

- Not all teachers are using strategies related to:
  - Student choices
  - Interdisciplinary activities
  - Learner autonomy
  - Investigation activities
  - Inconsistent with literature
CONCLUSIONS CONTINUED

- No significant difference in perception based on gender
- Inconsistent with literature
- $d = -0.10$, small effect size
CONCLUSIONS CONTINUED

- Statistically significant difference in perceptions based on primary subject area
- Consistent with literature
- $d = -0.32$, small effect
CONCLUSIONS CONTINUED

• No statistically significant difference in perception based on education level
• Inconsistent with literature
• $d = -0.008$, small effect
CONCLUSIONS CONTINUED

• Statistically positive relationship between teachers’ perceptions of student-centered learning instructional strategies and teachers’ perception of school administration support of those same strategies

• Practical significance – large ($d = -3.56$)

• Consistent with literature
CONCLUSIONS CONTINUED

- Statistically positive relationship between teachers’ perceptions of student-centered learning instructional strategies and teachers’ perceptions of fellow teacher support of those same strategies.

- Practical significance – moderate ($d = 0.53$)

- Consistent with literature
DISCUSSION AND IMPLICATIONS

• Study adds to existing literature
• Gives a better understanding of high school teachers’ perceptions of application of this instructional strategy
• Most successful – knowledge, benefits, and understood roles of teachers and students
• Teacher education programs – provide training and preparation to use student-centered learning
• School administration – encourage and support use of student-centered learning
• Theory of Reasoned Action – supports the connection between beliefs, attitudes, and behaviors
DISCUSSIONS AND IMPLICATIONS CONTINUED

- Non-core teachers perceive they used the strategies more often
- Core teachers perceive they used it at times
- Consistent with literature
- Gender and education level had no influence on perception
  - Did not differ in classroom instruction
  - Inconsistent with literature
DISCUSSIONS AND IMPLICATIONS CONTINUED

• Positive correlations were found between:
  • Teachers’ perceptions of their application of student-centered learning instructional strategies and perceived school administration support of these same strategies
  • Teachers’ perceptions of their application of student-centered learning instructional strategies and perceived fellow teachers’ support of these same strategies

• Correlation was higher for administration support
• Administration – hires and evaluates teachers; might be why correlation is higher
RECOMMENDATIONS

• Research that compares specific subject areas should be performed

• A study to see the influence of gender and education level should be carried out with a sample representative of the whole state of Georgia or the nation to see if results are the same

• A qualitative study should be done to gain a deeper understanding of teachers’ perceptions
  • Why using or not using the strategies
  • Express what they need to implement strategies
  • Give opinions
Teacher education programs should provide courses and practical experiences, accompanied by guidance and feedback, where teachers of all subject areas can learn to use student-centered learning.

Teacher education programs should provide courses/instruction about the student-centered learning at all degree levels.

Provide valuable professional development about student-centered learning.

Administration and fellow teacher let their support and encouragement be heard.
QUESTIONS?

- Thank you!
INCREASING STUDENT ENGAGEMENT WITH AUGMENTED REALITY

Innovative Approach to Curriculum and Instruction

Ms. Cari Cline & Dr. Nancy Zeliff
Northwest Missouri State University

https://goo.gl/PDlglw
AR Example:
Sports

FIGURE 1: http://i.onionstatic.com/avclub/5979/82/original/640.jpg
AR Example: Pokemon Go

FIGURE 2: https://c1.staticflickr.com/9/8016/28170409310_3a36de4116_b.jpg
What is AUGMENTED REALITY (AR)?

- Combines virtual reality and the real world
- Interactive in real-time
- 3D display
- Uses an image to trigger the virtually overlayed content to "play" in the physical world
- QR Code on steroids

(Augment, 2015; Yuen, Yaoyuneyong, & Johnson, 2011, p 119)
AUGMENTED REALITY HISTORY

1960's-80's: Early Experimentation
Military and Academic Labs

1980's-90's: Basic Research
Tracking and Displays

1995-2005: Tools/Applications
Interaction, Usability, & Theory

2005-Present: Commercial Applications
Tracking and Displays

Figure 4: Adapted from "A Survey of Augmented Reality," by Mark Billinghurst, 2014, Retrieved from: http://www.slideshare.net/marknb00/a-survey-of-augmented-reality
Findings Yield High Satisfaction and Motivation

Students in the study were motivated because:

• AR caught their attention
• they had confidence in using the AR technology
• using AR brought them satisfaction

However, students rated relevance to the subject matter or the concept they were studying to be the lowest of the four measures.

(DiSerio, Ibanez, and Kloos 2013, p. 591)
PART 1: CAPTURE TRIGGER IMAGE

This is the image, object, or location that is tagged to "trigger" the complete aura to "play."

PART 2: SELECT THE OVERLAY/CONTENT

The overlay/content is applied on top of the image. What action will run once the image is played?

* Video
* Animation
* 3D

Figure 6: https://www.winxdvd.com/resource/new-fourteen/mp4.png
PART 3: COMPLETED AURA

Trigger Image + Overlay = Aura

Figure 7: Cline, 2017
PC/WEB APPLICATION - AURASMA STUDIO

Figure 8: Cline, 2015
MOBILE DEVELOPMENT - THE APP

Figure 9:
Middle School Students

• Yearbook Expansion in a Middle School
  ○ extend the yearbook content beyond print and the publishing deadline
  ○ add a multimedia component
  ○ enhance student learning when students published their own multimedia work
    (Harris & Patten, 2015, p223)

• Middle School Science (Anatomy 4D)
  ○ move beyond the basic level of identifying body parts and systems
  ○ increase their higher order thinking skills to the level of analyzing
  ○ students explored how each system related to the other
  ○ Kucuk, Kapakin, and Goktas (2016) published a study using the same app which resulted in higher achievement levels with reduced cognitive load and increased student engagement.
Undergraduate and Graduate Students

Created AR applications using Aurasma and Layar

Applications

• math tutorials
• personal finance content
• keyboarding drills

Reported uses

• Playstation 4
• school yearbooks
• interactive books
• posters
EXAMPLES: HIDDEN FIGURES

Mobile AR App:
- Showcases diverse role models
- Encourages inquiry through 150 geofenced locations around the U.S

Figure 10: https://www.ibm.com/thought-leadership/hidden-figures/images/logos/hidden_app.jpg
Augmented Reality Sandbox
Dr. Brett Chloupek, NWMSU

Increasing Student Engagement in Higher Education Geography Classes (Hornickel, 2017)

https://www.youtube.com/watch?v=vyfdH1SSFFY

Figure 11: Čline, 2016
Conclusions and Recommendations for AR Implementation

- Improvements in student achievement, motivation, and collaboration (Demski, 2013)
- Brings content to students in a different format (Joan, 2015)
- Viable way for 1:1 schools to implement personal devices (Demski, 2013)
- Kinesthetic learners benefit from the use of AR because of the hands-on nature of the application (Radu, 2014)

- Cognitive and sensory overload (Mayer, 2009; Radu, 2014; Wu, Lee, Change, & Liang, 2013)
- High achieving students have actually shown more advancements in student achievement using traditional methods (Radu, 2014)
REFERENCE LIST


REFERENCES


LEAN, MEAN, AND READY TO COMPLETE THE edTPA

Elizabeth M. Hodge Ph.D.
hodgee@ecu.edu
https://blog.ecu.edu/sites/elead/
“If you can’t explain it simply, You don’t understand it well enough.”

-Einstein
# Programmatic Change

## Program Review
- Gaps in Curriculum
- Curriculum Mapping
- Alignment
  - Business Education Teacher Education Standards
  - North Carolina Teaching Standards
- Streamline Core
  - 2123
  - 4323
  - 4400
  - 4324
  - 4325

## edTPA Supplemental Sources
- Video Grand Rounds
- Secondary ISLES Modules
- Micro-Teaching Experiences
- Scaffold Assignments throughout coursework
- Senior Seminars
- Online Modules
Research Questions

RQ 1: Is there a difference between pre-service teacher candidates’ observations skills and knowledge transfer from video observation to observations in the field when candidates are exposed to the VGR (incorporation of classroom videos for observation, structured observation protocol, in-class debriefing conversations) model?

RQ 2: In what ways do skills and knowledge transfer from VGR (incorporation of classroom videos for observation, structured observation protocol, debriefing conversations) to non-structured observation events?

RQ 3: In what ways do skills and knowledge transfer from IDL (incorporation of Secondary ISLES Modules, and, debriefing conversations) to preparation of edTPA Tasks?

RQ 4: How do opportunities to observe, reflect upon, and discuss instructional teaching strategies affect pre-service teacher candidates’ scores on the edTPA?
Video Grand Rounds

• Field experiences are critical components of teacher education programs.
• (VGR) is designed to engage you in mentored observations of pre-selected classroom video snippets.
• The guided observations and use of a structured observation protocol serve as a guide to more effectively identify and articulate what children and teachers know and are able to do in the classroom.
Video Grand Rounds

<table>
<thead>
<tr>
<th>Reflection</th>
<th>Final Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BITE</td>
</tr>
<tr>
<td>Classroom Management</td>
<td>31.8%</td>
</tr>
<tr>
<td>Student Teacher Interactions</td>
<td>22.7%</td>
</tr>
<tr>
<td>Students</td>
<td>9.10%</td>
</tr>
<tr>
<td>Teacher</td>
<td>36.4%</td>
</tr>
</tbody>
</table>

Pre-service Teacher Candidates who participated in VGR demonstrated significantly greater growth than their non-VGR classmates. These differences were most obvious in three areas:

1. the ability to focus on salient features of classroom interactions,
2. to identify the complexity of classroom interactions,
3. and to readily transfer observation skills from a video platform to an in-school platform.
Secondary ISLES Modules

ISLES is an online series of three modules developed as a result of the TQP grant. The modules focus on a common set of instructional strategies selected for secondary education.

- Students are first introduced to the strategies in ISLES 1 at the declarative level (what are the strategies?).
- Then learners work with the strategies at the procedural level (ISLES 2--how do you use strategies in lesson planning?).
- Followed by the (conditional level) in a lesson as a part of ISLES 3 during their final semesters.
Micro Teaching Experiences

Overview

"Be who you are and say what you feel, because those who mind don't matter, and those who matter don't mind." - Dr. Seuss

FINAL MEETING

INSTRUCTION
- WHAT HAVE YOU OBSERVED IN THE CLASSROOM THAT YOU CAN RELATE TO?
- HOW WOULD YOU APPLY THESE SKILLS TO YOUR OWN INSTRUCTION?
- WHAT INSTRUCTIONAL PRACTICE/STRATEGY DO YOU GRAVITATE TO WHEN TEACHING AND WHY?
- WHAT SUPPORTS OR RESOURCES DO YOU OFTEN USE TO IMPROVE YOUR TEACHING?
- QUESTIONS – HOW CAN I HELP YOU BE THE BEST TEACHER YOU CAN BE?

SENIOR II STUDENTS
- JANUARY 9, 2016 MANDATORY MEETING, 10:30AM GREENVILLE HILTON.
- SENIOR II – INTERNSHIP REQUIREMENTS
- EDTPA
- QUESTIONS
Senior Seminars – Online Modules

Senior Year Experience

- The second semester (Senior II) is a full semester of teaching, with the clinical teacher providing constant feedback to the intern about the teaching and learning process. In addition, the intern receives support from the clinical teacher and the university supervisor. They develop a portfolio/electronic evidence to document their development as a classroom teacher.

- In conjunction with the completion of progress reports by the university supervisor in collaboration with the clinical teacher, education students will complete the edTPA Task a performance-based assessment. edTPA is designed to examine candidates in demonstrating their understanding of teaching student learning in authentic ways.
  - develop knowledge of subject matter, content standards, and subject-specific pedagogy
  - develop and apply knowledge of varied students’ needs
  - consider research and theory about how students learn

As you begin your Senior II experience, you should prepare a teaching plan to discuss with your clinical teacher and university supervisor.

Please select the best response to complete the question.

True
False
Senior Seminars – Online Modules

edTPA Task 2
Business Education Student Guide

This student guide has been created to help you navigate the tasks in the edTPA (Teacher Performance Assessment) handbook.

Return to the Handbook and reread the following sections:
- Task 2: Instructing and Engaging Students in Learning (pages 18 - 20)
- Task 2: Rubrics (pages 21 - 25)
- Task 2: Business Education Artifacts and Commentary Specifications (page 38)

<table>
<thead>
<tr>
<th>Step from edTPA Implementation Planning Guide</th>
<th>Notes/Resources</th>
</tr>
</thead>
</table>

Rubrics are used to score the edTPA. What rating is considered to be proficient and needed to receive your teaching license?

[Checkbox options for ratings 2, 3, 4, 5]

Please select the best response to complete the question.

[OK button]
Pre-service Teacher Candidates who participated in IDL demonstrated greater growth than their IDL classmates. These differences were most obvious in three areas:

1. the greater level of complexity in their descriptions of teaching instructions.
2. The data from the IDLs illustrate that pre-service candidates were more likely to comment on essential aspects of educational settings (student/teacher interactions and teachers) and appropriately utilize and apply specific vocabulary from the modules in their edTPA commentary,
3. and the ability of pre-service candidates to reflect at a deeper level in each of the five categories as it relates to achieving student outcomes.

<table>
<thead>
<tr>
<th>Independent Learning Module</th>
<th>IDL Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom Management</td>
<td>19%</td>
<td>18%</td>
</tr>
<tr>
<td>Student Teacher Interactions</td>
<td>10%</td>
<td>12%</td>
</tr>
<tr>
<td>Students</td>
<td>14%</td>
<td>13%</td>
</tr>
<tr>
<td>Teacher</td>
<td>3%</td>
<td>7%</td>
</tr>
<tr>
<td>Teaching Strategies</td>
<td>36%</td>
<td>31%</td>
</tr>
</tbody>
</table>
edTPA scores over the past five years

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012-2013</td>
<td>40</td>
<td>42</td>
<td>49</td>
<td>60</td>
<td>48</td>
<td>46</td>
<td>53</td>
<td>50</td>
<td>55</td>
</tr>
<tr>
<td>2013-2014</td>
<td>61</td>
<td>49</td>
<td>44</td>
<td></td>
<td>48</td>
<td>46</td>
<td>53</td>
<td>50</td>
<td>55</td>
</tr>
<tr>
<td>2014-2015</td>
<td>46</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2015-2016</td>
<td>30</td>
<td>36</td>
<td>45</td>
<td>44</td>
<td>45</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2016-2017</td>
<td>49</td>
<td>46</td>
<td>46</td>
<td>44</td>
<td>49</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Local v. Pearson Evaluator

Average edTPA Score by Local Evaluator

Average edTPA Score by Pearson Evaluator
Read the handbook carefully and answer each prompt thoroughly when writing commentary.

There is also an outstanding support guide “Making Good Choices” that assists in making key decisions in what artifacts to include and what to avoid.

The edTPA will only benefit our students because it makes business education candidates focus on effective pedagogy in addition to the detailed and technical content knowledge required to teach business education courses.

https://www.edtpa.com/Content/Docs/edTPAMGC.pdf
My biggest fear was actually not necessarily completing it, but actually juggling between teaching and doing all the planning as well as teaching and assessment prompt.

That and of course worrying if I went into enough detail and was concise enough.
Any student who is about to complete the edTPA needs to stay organized.

I kept a folder for each task. I also had a folder for material I decided not to use. I did not want to get rid of anything important.

I also made sure I stayed ahead of the game by constantly checking over the requirements. This allowed me to make sure everything was complete.

BUSINESS EDUCATION STUDENT – SCOTT HADDOCK
I believe the edTPA is a valuable process because it has helped me to plan my lessons more thoroughly.

It also has helped me to understand my students that are from various diverse backgrounds that have a need to learn through different teaching strategies.

edTPA is a great learning experience that will place most teacher education majors ahead of those that may come through lateral entry programs.

Although there is extensive work to be done, it is well worth it in the end. It has made my student teaching much easier, which has prepared me for my teaching career.
Although the implementation of edTPA across 17 teacher preparation programs was a daunting task, the results have provided us with rich and useful data.

Continuous data analysis directs us in the improvement of our curricula, including the development and refinement of course-embedded signature assessments.

DIRECTOR OF ASSESSMENT – DR. ELLEN DOBSON
Check-In

1. Reflect on the presentation
2. Take two minutes to journal independently about two elements you learned from the session and any questions that arose.
3. Turn to your neighbor and share for four minutes.
4. Share out – As a group we will share reflection and questions.
Resources

- edTPA AACTE Resources: [http://edtpa.aacte.org/resources](http://edtpa.aacte.org/resources)
- edTPA: Understanding Academic Language
- Ranney Academic Language
PERCEPTIONS OF COLLEGE/SCHOOL OF BUSINESS FACULTY INVOLVING THE CONTENT AND SCOPE OF A BUSINESS COMMUNICATIONS CLASS AND SELF-EFFICACY TO EVALUATE BUSINESS COMMUNICATIONS SKILLS OF STUDENTS

Tamra S. Davis
Virginia Hemby-Grubb
Background

- Lack of identity for Business Communication Courses
- 2017 US News Top 10 undergraduate programs require 1 or more business communication courses
Writing Across the Curriculum

■ But our school wants to infuse writing into all classes
■ Anyone can teach writing . . . Right?
Literature says . . . No

- Writing is
  - Instructor specific
  - Academic in nature

- Faculty are
  - Not trained to teach business writing
  - Are not willing to take the necessary time to review, evaluate, and provide feedback to improve writing
Our Research Questions

- What are the faculty perceptions of what is taught in a business communication course?
- How do faculty rate their personal self-efficacy to evaluate written work?
Current State of the Study

- It is a work in progress
Methodology

- Survey Research using a mix of ranking and short answer questions
- Sent to AACSB/NABTE Institutions first
  - Plans to continue the study by expanding to additional AACSB institutions
Survey Information

- 1149 surveys sent via e-mail to 7 institutions
- 31 invalid or refused e-mail
- 5 e-mails were returned with a refusal to participate
- 1112 potential respondents
- 6 responses indicated that they were not housed in a College or School of Business
- 1 answered no on the informed consent page
- 110 surveys were returned—9.9% response rate
- 104 total valid responses
Acknowledgement

- The researchers acknowledge that the low response rate introduces response bias into the results.
- The findings of this pilot study cannot be generalized beyond the sample.
DEMOGRAPHICS
Did you complete a Business Communication course as part of your undergraduate degree?
Additional Demographics

- 88 schools or colleges offered a dedicated business communication class
- 81 were housed in the college or school of business
  - 5 in the College/School of Education
  - 1 in the English Department
■ 68 respondents indicated that business communication is required for the discipline where they teach
■ 19 indicated that business communication is an elective
■ 90 indicated that a business communication class should be required
What did the respondents think is taught in a business communication class?

- Majority of the answers related to
  - Presentations
  - Letters
  - Memos
  - Reports
  - Formatting
  - Grammar
  - Job related communications such as resumes
Other responses included

- Social media
- E-mail
- Cultural communications
- Types of business writing (good news, bad news, persuasive messages)
- PowerPoint
- LinkedIn
Other responses included

- Communication Theory
- Law
- Writing styles
- I don’t know
Faculty who thought Bcomm should not be required . . .

- Because it is taught by Business Education “folk” who have never been in a business environment
- It is infused into other courses to free up an elective
- Writing can be learned anywhere
- Other courses are more important
- It’s only a formatting class and a “waste of time”
Faculty who though Bcomm should be required . . .

- Students do not know how to communicate
- To help the students perform better in the upper-division classes
- Employers want students to take business communication
- It is different from English classes
- Forces students to practice
What faculty want in a business communications class . . .

- Formatting
- Writing for the situation (good news, bad news, persuasive news)
- Grammar
- Presentations (not PowerPoint)
- Knowing your audience
- Summarizing
- Creating business-related materials
- Global communications
What employers want from graduates

- Listening/Speaking
- Writing
- Critical Thinking
- Networking
- Confidence
- Negotiation
- Emotional Intelligence
Most common employer complaint

- Poor writing skills and communication skills
- Graduates need too much supervision
- Lack of critical thinking
- Lack of professionalism
Faculty self-efficacy to grade

- 92% indicated that they were extremely or moderately comfortable grading writing (n=66)
- 86% were extremely or moderately comfortable grading grammar (n=62)
- 82% extremely or moderately comfortable grading mechanics (n = 59)
FACULTY WERE ASKED TO CHOOSE THE BEST ANSWER TO A SERIES OF QUESTIONS THAT WOULD BE FOUND ON A TYPICAL BUSINESS COMMUNICATION EXAM
Which of the following sentences is correct in terms of grammar and mechanics?

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>%</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The company posted their new mission statement online.</td>
<td>11.43%</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>Either Laurie McDonough or Lorraine Love will present their research findings at the conference.</td>
<td>24.29%</td>
<td>17</td>
</tr>
<tr>
<td>3</td>
<td>Neither her dog nor her cat has had its annual shots.</td>
<td>64.29%</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100%</td>
<td>70</td>
</tr>
</tbody>
</table>
Which of the following sentences is correct in terms of grammar and mechanics?

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>%</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Only one-fourth of the apartment complex was ready for occupancy.</td>
<td>78.79%</td>
<td>52</td>
</tr>
<tr>
<td>2</td>
<td>Being as you are using Google Docs, you are probably pleased with its real-time collaboration and editing functions.</td>
<td>4.55%</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>He acts as if he was the only employee who had to work overtime.</td>
<td>16.67%</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100%</td>
<td>66</td>
</tr>
</tbody>
</table>
Which of the following sentences is correct in terms of grammar and mechanics?

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>%</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Evernote CEO Phil Libin thinks he is doing good in the face of competitive challenges.</td>
<td>4.48%</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>You will sure be surprised to learn that Warren Buffett doesn't invest in technology stocks.</td>
<td>5.97%</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>She wanted to debate the question further.</td>
<td>89.55%</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td><strong>67</strong></td>
</tr>
</tbody>
</table>
Which of the following sentences is correct in terms of grammar and mechanics?

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>%</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>One of the main reasons customers leave unbought items in online shopping carts is that they find shipping costs to be too expensive.</td>
<td>5.97%</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Ursula Burns, CEO of Xerox, spoke with reports and myself about what it is like to be the first African-American woman to head a major U.S. corporation.</td>
<td>1.49%</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Overhead expenses will be divided equally among the six departments.</td>
<td>92.54%</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100%</td>
<td>67</td>
</tr>
</tbody>
</table>
Which of the following sentences is correct in terms of grammar and mechanics?

<table>
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<tr>
<th>#</th>
<th>Answer</th>
<th>%</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>We will make the salary increase retroactive from January 1.</td>
<td>22.73%</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>Employees reached their decision independent of the influence of union organizers.</td>
<td>9.09%</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>Liliana will take her vacation sometime in July.</td>
<td>68.18%</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>100%</td>
<td>66</td>
</tr>
</tbody>
</table>
Which of the following sentences is correct in terms of grammar and mechanics?

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>%</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>As predicted Alibaba had the largest global IPO in history.</td>
<td>14.93%</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>An article, that features 100 best places to work, is now available online.</td>
<td>5.97%</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Procter and Gamble, which made a fortune with Ivory soap, discovered the formula by accident.</td>
<td>79.10%</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100%</td>
<td>67</td>
</tr>
</tbody>
</table>
### Which opening sentence is the most appropriate for a bad news message?

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>%</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>How can you consider asking for our company to fund and construct an exercise facility for employees?</td>
<td>1.49%</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>The Blue Ice skis you stocked this past season are skillfully crafted and made from the most innovative materials available.</td>
<td>65.67%</td>
<td>44</td>
</tr>
<tr>
<td>3</td>
<td>Sara French, an account auditor in your firm, is not working out well on our audit.</td>
<td>32.84%</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>100%</td>
<td>67</td>
</tr>
</tbody>
</table>
Which opening sentence is the most appropriate for a good news or routine message?

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>%</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Our organization recently purchased 10 laptop computers from your company for use by our customer service personnel.</td>
<td>22.73%</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>A policy allowing employees to adopt a flexible working schedule has been approved by Simmons Hospitality Group and will be effective January 1.</td>
<td>65.15%</td>
<td>43</td>
</tr>
<tr>
<td>3</td>
<td>Our company is doing a periodic review of computer service providers to ensure that we are contracted with the company who provides the best quality service for the most competitive price.</td>
<td>12.12%</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td><strong>66</strong></td>
</tr>
</tbody>
</table>
Which is the most appropriate opening sentence for a persuasive message?

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>%</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>We have all the capabilities of a full-service communication consultant, including strategy assessment and program planning, implementation, and assessment.</td>
<td>28.79%</td>
<td>19</td>
</tr>
<tr>
<td>2</td>
<td>We just reviewed the initial architectural design and drawings for the design of our building facade and find them totally unacceptable.</td>
<td>3.03%</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Do you ever imagine being able to see the alarm clock when you wake each morning?</td>
<td>68.18%</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100%</td>
<td>66</td>
</tr>
</tbody>
</table>
Which is the most appropriate subject line for an e-mail?

<table>
<thead>
<tr>
<th>#</th>
<th>Answer</th>
<th>%</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Enhanced delivery service</td>
<td>80.88%</td>
<td>55</td>
</tr>
<tr>
<td>2</td>
<td>Terms</td>
<td>7.35%</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>Issues</td>
<td>11.76%</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>100%</td>
<td>68</td>
</tr>
</tbody>
</table>
Preliminary Findings

■ There is a mismatch in the perceived self-efficacy and the actual competence of faculty to grade written work

■ How can this mismatch be addressed by schools and colleges of business?
Preliminary Findings

- The wide range of topics that business faculty think is taught in a business communication class
Next Steps

■ Refine the survey
  – *Too broad*
  – *Too long*

■ Potentially conduct focus-group study of select faculty in Colleges and Schools of Business

■ Your thoughts?
Reinvigorating Business Education: From Pre-School to College

Dr. Marcel Robles
Corporate Communication and Technology
School of Business
marcel.robles@eku.edu

Eastern Kentucky University
Introduction

• Literature Review
  – Evolution of business education
  – Current status of the discipline

• Primary Research
  – Business education professors (n=12)
  – Perspectives of reality of field today vs. ideals of business education programs, curriculum, and instruction
Issue Facing Business Education

• Too often teaching is viewed as routine function and not focus of professional development (Nibert, 2011)
• If students understand expectations in workplace, they more successful in career
Effective Teaching Habits

• Effective teachers motivate students and keep them engaged.
• Teacher effectiveness can be determined by success of students (Eilon, 1970).
• Teachers must be willing to evaluate themselves to see how they can improve teaching style to be more effective and help students be more successful (Ryan, 2001).
Teacher-Centered Approach to Learning

• Although PowerPoint and lecture are most popular tools used in presentations and in classroom settings, may be beneficial for teachers to use alternative instructional methods to communicate more effectively and comprehend the material (Burke & James, 2008)
Student-Centered Approach to Learning

• Comprehension of information technology will continue to increase likelihood of students hired into desired career field.

• Ability of students to understand technology and have higher entrepreneurial intentions allows them to become more effective as leaders (Hejazinia, 2015).
Problem-Based Learning

• Theory and practice of promoting individual and collective programs through projects (DeFillippi, 2001).
• Gives students opportunities to work on authentic, real-world projects and enhance collaboration, presentation, and communication skills (Cho & Brown, 2014).
• Role of students changes from being passive learners to becoming actively involved in authentic projects to solve problems.
Problem-Based Learning Style

• P-B learning allows students to be more effective leaders, better decision-makers, and successful conflict managers.

• Tucker, Sojka, Barone, and McCarthy (2000) showed the importance of EI in a business environment.

• When teachers allow students to see how different personalities work together, it allows them to develop an awareness of personality types with which they interact.
Soft Skills and Hard Skills

• Competencies can be divided into two broad categories, hard and soft skills (Robles, 2012).
• Hard skills: knowledge, practice, aptitude, and technical skills.
• Soft skills do not depend highly on acquired knowledge.
  – Interpersonal skills such as communication
  – Personal attributes, such as personality and likeability
Oral Communication Skills

• One of most important skills in today’s work environment from perspective of recruiters (Brink & Costigan, 2014).
• Can be differentiated in presenting, listening, and conversing.
  – Presenting and listening based on low interactivity
  – Conversing characterized as highly interactive
Soft Skills

• Extreme importance of effective written communication (Parent, Nielson-Dube, Stowe, Schwartz, Sendall, & Cain, 2011).

• Not only communicate effectively with others within organization for better team cohesiveness, but also communicate well externally to enable potential partnerships.
Soft Skills

• Lear, Hodge, and Schulz (2014) elaborated on critical communication skills of listening, nonverbal, written, and oral communication.
• Help students improve these skills by learning more about importance of each type of communication, ranging from writing research papers to interviewing employers to giving presentations.
Soft Skills

• Importance of soft skills plays a key role in work environment (Maes, Weldy, & Icenogle, 1997; Robles, 2012).
  – Professionalism
  – Attitude
  – Teamwork
  – Integrity
  – Interpersonal skills
Soft Skills

- Soft skills are increasingly relevant in the workplace.
- Education system is often blamed for little emphasis on soft skills development (Jackson, 2014).
- For edge over competitors, job candidates must refine soft skills.
- Employers see soft skills as important job qualifications (Bolli & Renold, 2015; Hewitt, 2008).
Technology in the Classroom

• Students have instant internet access.
• Students often do not know how to search for data that is both relevant and accurate.
• Accurate, peer-reviewed, relevant information exists, but other sources of irrelevant information can drown out more legitimate sources that students should be seeking.
Technology in the Classroom

- Technology is becoming more universal.
- Incorporated effectively, technology use will keep students more engaged.
- Teaching, cognitive, and social presence are critical for effective instructional approach in technology-driven courses (Hodge, Phillips-Wagoner, Swope, Williams, & Garner, 2014).
Recommendation: Classroom Communication

- Effective role models in both communication and research
- Acting the ways they teach
- Importance of communication instructor to behave and be perceived as good communicator, including good nonverbal communication as well as effective communication behaviors (Ruppert & Green, 2012)
Recommendations: Curriculum Updates

• While hard skills play important role, today’s workplace demands more soft skills, including research, than technical skills.
• Students should understand that theoretical knowledge of business subjects is not enough.
• Business schools should incorporate feedback from employer’s recruiters and alumni to continue updating business courses.
Questions please?

Thank you!
Reject the Tech?  
Students’ Views on Technology for Instruction and Collaboration

Dr. Carol Wright & Dr. Ashley Hall
Stephen F. Austin State University
Nacogdoches, Texas

2017 Business Education Research Conference
Making Course Material Relevant

- Common theme: infuse technology into the classroom

- Active learning
  - Instructor is a facilitator of knowledge (Florman, 2014)
  - Student moves from passive learner to active learner

- Not all students are willing to become active in the learning process
Technology in the Classroom

- Technology does not replace sound pedagogy

- Its role is to enhance student learning

- “Technology no longer has the buzz that it used to have. Several years ago if you sat a student in front of a computer you would get instant engagement. This is no longer the case” (Reading, n.d.)

- Technology should be viewed as just one tool that educators can use

- Meets students where they are – Gen Z has never lived in a time without smartphones
Using technology in the classroom can prepare students for the workforce.

Comfortable with different technologies.

As they enter the workforce, these Generation Z workers will be:
- Researching on the Internet
- Highly proficient at promoting their companies through social media
- Independently learning new software (Castellano, 2016)
Purpose of the Study

- Investigate student perceptions of the use of technology both inside and outside the classroom
- Better understand their views on using technology for educational purposes
- Gain a deeper insight into the collaborative technology tools used at both the high school and college levels and students’ views on those tools.
- Overwhelmed by the abundance and variety of technology that is used in different classes?
- Is more technology always viewed by the students as being better?
Tamim, Bernard, Borokhovski, Abrami, and Schmid (2011) conducted a second-order meta-analysis looking at the differing effectiveness of learning with and without technology over the last 40 years.

This study found that “the average student in a classroom where technology is used will perform 12 percentile points higher than the average student in the traditional setting that does not use technology to enhance the learning process” (p. 17).

Technology alone will not increase learning.
Technology needs to be clearly tied to learning goals and the instructor’s teaching style (Svinicki & McKeachie, 2014)

Instructors must remember that “learning is a cognitive process for achieving knowledge, and technology is an enabler of the learning process” (Aparicio, Bacao, & Oliveira, 2016, p. 292)
Educator Considerations

- Lack of training for teachers and lack of time for teachers to implement lessons using technology were found to be barriers among primary school teachers (Hsu, 2016)

- Professional development is needed to ensure the technology is used effectively (Gebre, Saroyan, & Bracewell, 2014)
  - Learning the technology
  - Developing instructional practices
  - Providing increased opportunities for active engagement
  - Learning from the student perspective
Methodology

- Convenience sample of undergraduate students
- Electronic version of the IRB-approved survey created in Qualtrics
- Piloted in Fall 2015
- Data collection in Spring 2016 and Fall 2016
Data Collection

- Face-to-face and online classes
- 279 students completed the survey
- Diverse mix of students at different levels in their undergraduate educational career
Age of Respondents

- 18-22 Years Old: 73%
- 23-26 Years Old: 14%
- 31+ years Old: 10%
- 27-30 Years Old: 3%

18-22 Years Old: 73%
“Do you like it when instructors use technology in the class?”

- Both inside and outside of class time (48%)
- Only during class time (34%)
- Only outside of class time (9%)
- Prefer to learn course material through traditional methods (9%)
“Does utilizing technology tools to collaborate in the classroom provide more engagement?”

- The majority said yes (71%)
- Only 2.5% said no
- 26.5% said it depended on the tool used for collaboration
Using Technology for Collaboration

- The majority (65.6%) have used technology to collaborate both personally and professionally.
- 21.5% have only collaborated **personally**.
- 9.3% have only collaborated **professionally**.
- 3.6% have not collaborated via technology at all.
Collaboration at Various Educational Levels

Have you collaborated through technology in

<table>
<thead>
<tr>
<th>School Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>College</td>
<td>87.1%</td>
</tr>
<tr>
<td>High school</td>
<td>56.3%</td>
</tr>
<tr>
<td>Middle school</td>
<td>17.2%</td>
</tr>
<tr>
<td>Elementary school</td>
<td>5%</td>
</tr>
<tr>
<td>No technological collaboration experience</td>
<td>4.3%</td>
</tr>
</tbody>
</table>
# Learning about Online Collaboration Tools

<table>
<thead>
<tr>
<th>How students learned to use online collaboration tools</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher’s use of technology in class</td>
<td>79.6%</td>
</tr>
<tr>
<td>Friends or acquaintances</td>
<td>70.3%</td>
</tr>
<tr>
<td>Discovered on their own</td>
<td>52%</td>
</tr>
<tr>
<td>Job</td>
<td>31.9%</td>
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</table>
## Collaborative Tools Used in Education

<table>
<thead>
<tr>
<th>Tool</th>
<th>High School</th>
<th>College</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wikispaces</td>
<td>3.2%</td>
<td>4.7%</td>
</tr>
<tr>
<td>Todaysmeet</td>
<td>0.7%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Email</td>
<td>78.9%</td>
<td>90.7%</td>
</tr>
<tr>
<td>Google Docs</td>
<td>41.6%</td>
<td>68.1%</td>
</tr>
<tr>
<td>Google Slides</td>
<td>20.1%</td>
<td>29.4%</td>
</tr>
<tr>
<td>Voxer</td>
<td>2.2%</td>
<td>2.5%</td>
</tr>
<tr>
<td>GroupMe</td>
<td>20.8%</td>
<td>67.7%</td>
</tr>
<tr>
<td>Google Classroom</td>
<td>9.7%</td>
<td>10.0%</td>
</tr>
<tr>
<td>Text messaging</td>
<td>74.2%</td>
<td>84.2%</td>
</tr>
</tbody>
</table>
A technology tool they would like to use in their classes

- The most popular responses were:
  - Google Docs
  - Email
  - GroupMe
  - The university’s learning management system
  - Kahoot! quizzes
  - PowerPoint slides
  - Skype
  - Online discussion boards
Conclusions

- Most students (91%) like to use technology in some form, but many do believe that technology is not always used correctly.
- Technology can be distracting to the learning environment if not used well.
- Many students are experienced with collaborative technology; however, they seem to still use more asynchronous modes for online collaboration.
Conclusions

- Open ended questions: There were a few comments about understanding the value of using technology to make learning more active and engaging, but the majority of comments focused on a few tools that were widely used (PowerPoint, interactive quizzes, and the university’s learning management system), and not innovative.

- It seems that students and instructors become comfortable with tools that are proven to work and are easy to use, then continue to use these.

- This idea is not necessarily negative, but it does show that people are “creatures of habit” and are less likely to try new, unproven techniques.
Conclusions

- The overabundance of technology did not seem to intimidate students, which could be attributed to the fact that many of the same tools were being used in many different classes and students had become accustomed to these “old” tools.
Key Takeaways

- While a minority, there were students who reported not liking it when technology is used.
- Student responses differed based on the technology in question.
- Tools embedded within the university’s learning management system were often mentioned (i.e., email and discussion boards, as well as the LMS as a whole). This is telling, as it indicates that not all departments or instructors use the technological resources that are readily available.
Implications for Teaching

- Teachers should be effectively trained to use technology before trying it in the classroom, and this training should have the teachers using the technology from the student perspective.
- Teachers should also be comfortable with the program used and understand when the tool is helpful, and when it could be distracting.
- As shown by student comments, the “newest” technologies do not always have to be used. However, the overuse of the same tool could cause boredom.
Implications for Teaching

- Instructors and administrators can better understand how students perceive the technology and how it should be used to enhance the learning experience, not just as a one-size-fits-all solution.

- In turn, this information can be used to provide guidance in making critical pedagogical decisions at both the secondary and post-secondary levels.
Questions?

Comments?
REFERENCES

<table>
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<tr>
<th>SC</th>
<th>Student-Centered</th>
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<tbody>
<tr>
<td>OL</td>
<td>Organic Learning</td>
</tr>
</tbody>
</table>

Dr. Albert Catarro Ed.D.
William Tennent High School
Warminster, Pa.
“I believe this is a problem we should all be interested in; we are producing a generation of students that are very highly structured, but entering an increasingly ambiguous world - the world of Ebola and ISIS and climate change and data security breaches”

Sarah Stein Greenberg
Executive Director
Stanford University School of Design
What if?
Why Not?
Here’s How...
The future belongs to those who believe in the beauty of their dreams.

Eleanor Roosevelt
Centennial School District

Inspiring Students

Building Intellect

Forging Partnerships

A Diverse Learning Community Where Students Succeed Through Academics, Athletics and the Arts
William Tennent High School
Inspiring students, building intellect,
Forging partnerships, a diverse
Learning community where students succeed
Through academics, athletics, and the arts
<table>
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<th>SC</th>
<th>Student-Centered</th>
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<td>Organic Learning</td>
</tr>
</tbody>
</table>
Organic Learning

- Authentic, skills-based educational paradigm that is not scripted, pre-programmed or packaged.
- Built on a foundation of partnerships.
- Outcomes are unique, and student-driven.
- Process is dynamic and creative.
CSD Partnerships in Action
Guidelines for Partnerships

1. Begin an open and frank discussion about values, goals and needs
2. Respect the culture and values of both partners
3. Support the core mission of all the partners
4. Enhance the academic, social and physical well being of students
5. Maintain an open, honest dialogue
CSD / WTHS Partnership / Varieties

- Curriculum Enhancement
- Classroom Presentations
- Career Awareness and Development
- Financial Literacy
- College / University - Dual Enrollment
- Transition Services - Special Education
- In-Sourcing - Bringing experiences into the school
- Alternative Funding Sources - Shop from Home
Our First Formal Partnership 2002

Warminster Hospital - reached out to us.

Came to me because of my Cooperative Education Certification

10 students per semester in block scheduling

Rotated through multiple departments in the hospital

Schedule change killed the program - but opened the door.
No Child Left Behind: The Answer to Preparing Students for Careers, or the Demise of Career and Technical Education

Albert Catarro
Dissertation
Educational Leadership
Temple University
Dissertation Chair: Professor Steven Jay Gross
Purpose of the Study

• Have NCLB Mandates impacted the Pennsylvania CTE centers researched?

• Connect the data with existing Career related theories and research
Methodology

• Qualitative Case Study methods
• Interviews with CTE Staff
  School administrators, teachers, cooperative education coordinators, and counselors.
• Examination of archival records
  Attendance data, budgets, board minutes, programs of studies
Data Analysis

Constant comparative method. To connect the responses from interviews to the archival records to determine impacts at the two CTE centers.
Career Development Theory

- Donald Super’s Theory of Self-Concept
  Two primary components

1. Career development is a lifelong process
2. Self-concept is shaped in each phase of life.
   Development stages experienced by all individuals begin with the growth stage by age **14** the development of attitudes, interests, and behaviors that relate to self-concept. (Zunker, 1990)
Super – Self Concept Theory

Super’s five life and career development stages

- **Stage 1: Growth**  Age 0–14 Development of self-concept, attitudes, needs and general world of work
- **Stage 2: Exploration**  Age 15–24 “Trying out” through classes, work experience, hobbies. tentative choice and skill development
- **Stage 3: Establishment**  Age 25–44 Entry-level skill building and stabilization through work experience
- **Stage 4: Maintenance**  Age 45–64 Adjustment process to improve position
- **Stage 5: Decline**  Age 65+ Reduced output, prepare for retirement

*Downloaded from www.careers.govt.nz, Careers New Zealand, 2012*
Linda Gottfredson

Theory of Circumscription and Compromise

Four development processes: age-related growth in cognitive ability (cognitive growth), increasingly self-directed development of self (self-creation), progressive elimination of least favored vocational alternatives (circumscription), and recognition of and accommodation to external constraints on vocational choice (compromise). (2002, p. 1)
Linda Gottfredson  
Theory of Circumscription and Compromise

Centers on how young people come to recognize and deal with the vocational choices that society provides. Outline for career guidance and counseling that facilitates growth by reducing risk during the school years. The system can also be used to diagnose and remEDIATE vocational problems in adolescence and aid adults who wish to revisit their career choices. (Gottfredson, 2005)
Impact Summary – Some Variation CTE 1 - CTE 2

- Decreased Enrollment as NCLB set in
- Increased Academic and Testing Focus
- Technical Budgets Cut for Academics
- Population Changes – Increase of Special Education Students
- Staff Changes – More Academic and Special Ed. Support
- Morale Issues – Technical Teachers Resenting the Shift of resources
- Program Changes – Overall and Specific Programs
- Curriculum Changes – Overall and Program Specific
- Staff Development Shift to Academic Standards and Test Prep
- Facility Changes – Addition of Test Prep Areas
- Public Opinion – From Negative AYP news – CTE 1
Program Changes – CTE 1
Full-time – Grades 9-12

• The most program changes. 9th grade from career exploratory to a comprehensive academy with increased academics.

*Incoming freshman in the Academy will be placed on collaborative teams, which will focus on developing their personal and academic skills. As a learning community, the goals of the Academy are to promote interpersonal skills, organization, and time management. 2011–2012 program of studies*
Program Changes CTE 2
compiled from a review of the program of studies from 2002–2011

<table>
<thead>
<tr>
<th>Added Programs</th>
<th>Eliminated Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental occupations</td>
<td>Telecommunications technology</td>
</tr>
<tr>
<td>Building and facilities occupations</td>
<td>Marketing and management</td>
</tr>
<tr>
<td>Practical environmental landscaping</td>
<td>Oracle training and programming</td>
</tr>
<tr>
<td></td>
<td>Electronics communications technology</td>
</tr>
<tr>
<td></td>
<td>Precision machining technology</td>
</tr>
</tbody>
</table>
In-Sourced Partnerships
Insourcing
Cowhey Family ShopRite

Creation of the In-school Career Lab - 3 funding sources

Family and Consumer Science Classes - high school and two middle schools

Paid performances for Madrigal Singers at the store

Creation of the SR Snack Shack - as part of the school store - In development

Shop from Home - waive all fees and donate 15% of the gross to CEF

CEF shares 20% with Home and Schools - last week over $ 400.
In-school market offers a taste of the real world

By Kristin E. Holmes, Inquirer Staff Writer
POSTED: December 23, 2014

Students at William Tennent High School didn’t know what it takes to run a supermarket - until one opened on campus.

Inside the Warminster school, a one-room ShopRite offers the snacks, drinks, and laundry detergent students and staff can buy at a bigger version of the supermarket a mile away.

But this ShopRite - designed in the chain’s signature red, yellow, and black - is about more than the customer. The...
Starting from Scratch
Leveraging Partnerships
Coffee Cove - FCS and SPED
Cost Analysis
Affiliations - Grants

Funding reduces No

[Logos for Foundations Community Partnership, Bucks County Workforce Development Board, and Learn and Serve]
MANUFACTURING DAY
Partnerships - Community Based Experiences

Transition Services for Special Needs Students
District Provides **Job Coaching** and **Transportation**

- Paid Positions – Cooperative Education,
- Internships, Volunteer, Shadowing, Service Learning, - Combination
- Follow Cooperative Education Guidelines - Supported Employment
- Training Plan and Agreements - Articulation agreement
- Formal Partnerships - and run continuously
- Individual Placements - Student or District developed
- CSD - placements - schools and administration building
Norman Raab Foundation
Philanthropy Today
Centennial Education Foundation
centennialX
innovating education through design
Our Mission

To innovate the traditional educational paradigm by guiding students and teachers through the process of developing new ideas and products that solve “real-world” problems while bringing genuine value to our immediate and extended communities.

Securing, promoting and growing authentic and intellectually challenging partnerships which test eclectic student populations and afford opportunities for students and teachers to learn from and work alongside industry leaders and entrepreneurs.
Ignacio Jayo - Anatomy Genetics – Director
Steve Beal – Science/Social Media
Rena Friedant – Art/Design Teacher
Al Catarro – Business Partnership Coordinator
Summer
2015
The Lilly - Tennent Challenge

- Lilly Clinical Innovation is doing a closed challenge with Tennent to educate students about clinical research so they can help overcome challenges regarding patient awareness and participation.

- Final student output will be showcased at Stanford University’s Medicine X Conference in September.
What were students expected to do?

- The solution required a pitch deck and crisp presentation of the solutions including:
  - *detailed description of how the solution works*
  - *process map/service model*
  - *market analysis*
  - *revenue models*
  - *prototype content (if applicable)*
Galen

The Tessera Project
Little Pictures, Big Stories
Solvers - William Barker, Meghan Izak, Julia Romanyszyn - showed us a way to humanize research participation to generate an emotional connection among volunteers and patients at large who have a stake in seeing better treatments become a reality.
Ocutank – *InfoMation*

You Don’t Need Consent to Inform

Solvers -Jocelyn George, Caitlin Hubmaster, John Starr- showcased their multimedia approach to help *improve the understanding of trial participation* in a meaningful, timely way.
Design Thinking
Regular Read outs - Feedback
Presentations and Workshops

Ignite! stage at Medicine X       Roni Zeiger - Smart Patients
D. School Stanford
What Did We Learn

• Students need more Business Skills !!!!!!
• Business Curriculum is the Glue
• Students in a Standards Based Box
• Difficult to fit all the pieces together
• Clash of cultures – Start-up vs School District
• Entrepreneurship foundation of Innovation
Summer 2016
2016 Challenge

“The challenge was to design a mini-science curriculum, aimed at educating elementary aged children about specific diseases and the mechanisms of action of specific Lilly molecules under development to treat those diseases.”
CentennialX 2016

- Incubator
- Challenge Model
  - Focus: clinical trials
- Student teams - 2 schools - designated Project Managers
  - Student digital team
- Paid internship
- Strict Student Selection Process
- Deadlines, readouts ...
Market Size

- 37.9 Million Students in 3rd through 12th grade
- 172 Thousand diagnoses of blood cancer in 2016
- 80 Thousand Elementary and Secondary schools
Let the students do the talking
“When we were introduced to the challenges, I found it frustrating that we didn’t really have a criteria.”

“I am not a very creative person and usually like to have guidelines to go off of so this experience will really help me grow as a student.”

Caitlin
“This program contrasted with the traditional school projects I was familiar with because I was not aiming for an A. Instead, I was aiming to change society and have a positive effect on the world”

Jocelyn
Lastly, it truly means a lot to have been able to make a difference, even if it means just helping one person.

Becca

I have said this from the start of the program and I will say it now: this opportunity goes far beyond a line on a resume, I was exposed to real-world issues and had the chance to make a difference.

Ryan
“The program helped me develop a more confident and professional attitude, but more importantly, it helped me develop my ability to problem solve.”

“The lessons and experiences I’ve taken from the project are those that will permanently remain with me, and largely set my ahead of my peers in many competitive environments.”

Will
Speaking at Stanford was one-of-a-kind. I’ve always had performance anxiety, but the experience I gained from preparing for such a presentation has altered the way I feel drastically. I thank you for helping give this opportunity, which has helped me tackle one of my biggest fears.

Becca
It was amazing to be able to speak with industry professionals and learn about their experiences. They taught me that innovation doesn’t require the likes of Steve Jobs or Bill Gates making world-shattering inventions. Regular individuals making small innovations can still have a big impact.

Ryan
This entire program that was brought to our school with your help has truly changed my life for the better. It challenged me in ways I never thought I would be challenged.

Jamie
Leah and I now joke that this experience has ruined us; we now know that it is possible to learn in an independent environment that allows creativity and collaboration to run free, an environment where everyone is highly motivated and pushes each other to do their very best. Now that I know what education can be, anything less just can’t compare.

Cayla
Education is only truly great if the student thinks it is
Moving forward
CentennialX Incubator

**STUDENTS**
- Develop ideas
- Work collaboratively
- Design prototypes
- Pitch products

**TEACHERS**
- Develop partnerships
- Mentor and guide students
- Professionally develop visiting teachers

**PARTNERS**
- Mentor students and teachers
- Fund teams
- Provide challenges
- Act as judges

**PROFESSIONAL DEVELOPMENT**
- Design thinking for teachers
- Transform teaching practices across districts

**CentennialX Conference**
- Student pitch their ideas
- Industry speakers
- Hacking and Innovating education

**CentennialX Accelerator**
- Previously incubated ideas are accelerated towards a final marketable product

HOW WE DO IT
Technology, Presence, and Learning in Online Business Courses

Thomas Mays
maysta@miamioh.edu

MIA MI UNIVERSITY
Purpose

» Learn more about student success and experiences in online courses

» Study the relationships among variables representing presence, course access technologies, student satisfaction, perceived learning, and LMS analytics.
Brief history

» Online Learning at the Miami University Regional Campuses

» Growth: Department of 2 to a department of 10
Course design approach

» Multiple points of contact
  » Announcements
  » Rich feedback including the use of rubrics
  » Discussion forums
» Interactive course resources
» QM review
Community of Inquiry

Members projecting their “...personal characteristics into the community, thereby presenting themselves to the other participants as ‘real people’” (p. 89).

Constructing meaning.

Trigger – Exploration – Integration – Resolution

“...to support and enhance social and cognitive presence for the purpose of realizing educational outcomes” (p. 90).

Col framework in use

These forms of presence have been found to correlate with a number of academic success factors (Akyol & Garrison, 2008; Baker, 2010; Boston et al., 2014; Dunlap & Lowenthal, 2014; Richardson & Swan, 2003; and Tu & McLissac, 2010)
Research Question

» What are the relationships among
  » Community of Inquiry presence measures
  » student satisfaction
  » perceived learning
  » course access technologies
  » LMS analytics?
Data Collection

- Instrument 1, beginning of semester
  - How will you access the course
  - Your level of technology expertise

- Instrument 2, end of semester
  - How did you access the course
  - Community of Inquiry presence survey
  - Perceived learning and course satisfaction

- LMS Analytics (page views and number of participations)
Sample

» Students (107) from six technology-oriented online business courses
» Completed both surveys, n=67
» Regional Campus students
Descriptive statistics

» Survey respondents included 18 males and 49 females.
» Mean age was 30.9 (SD=11.7, Range=19-59, n=67).
» Experienced with completing online courses (M=8.7, SD=4.16)
Descriptive statistics

» Own a
  » PC (Desktop or laptop): 72%
  » Mac (Desktop or laptop): 27%
  » Tablet: 54%
  » Smartphone: 87%

» Use Internet for
  » Social media: 75%
  » Online banking: 70%
  » Watch videos or listen to music: 67%
  » Number of connected devices in home: $M=6.7$, Range 1 to 16
Community of Inquiry Scores

- Teaching Presence: 4.6 out of 5
- Social Presence: 4.0 out of 5
- Cognitive Presence: 4.3 out of 5
## Correlations

<table>
<thead>
<tr>
<th>Col Presence</th>
<th>r</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching &amp; Social</td>
<td>0.530</td>
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</tr>
<tr>
<td>Teaching &amp; Cognitive</td>
<td>0.767</td>
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<tr>
<td>Cognitive &amp; Social</td>
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</table>

![Venn Diagram showing the relationships between Social, Cognitive, and Teaching dimensions]
## Correlations

<table>
<thead>
<tr>
<th>Perceived Learning</th>
<th>r</th>
<th>p</th>
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<td>Improved Technical Skills</td>
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Correlations

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<tbody>
<tr>
<td>Perceived Learning</td>
<td>0.637</td>
<td>0.000</td>
</tr>
<tr>
<td>Improved Technical Skills</td>
<td>0.398</td>
<td>0.000</td>
</tr>
<tr>
<td>Teaching Presence</td>
<td>0.506</td>
<td>0.000</td>
</tr>
<tr>
<td>Social Presence</td>
<td>0.362</td>
<td>0.000</td>
</tr>
<tr>
<td>Cognitive Presence</td>
<td>0.520</td>
<td>0.000</td>
</tr>
</tbody>
</table>
## Correlations

<table>
<thead>
<tr>
<th>Course Analytics</th>
<th>r</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Page views and Teaching</td>
<td>0.269</td>
<td>0.027</td>
</tr>
<tr>
<td>Page views and Satisfaction</td>
<td>0.250</td>
<td>0.037</td>
</tr>
<tr>
<td>Page views and Imp. Tech. Skills</td>
<td>0.367</td>
<td>0.002</td>
</tr>
<tr>
<td>Page views and Perceived Learning</td>
<td>0.260</td>
<td>0.033</td>
</tr>
<tr>
<td>Page views and use of a desktop</td>
<td>0.301</td>
<td>0.013</td>
</tr>
<tr>
<td>Submissions and computer expertise</td>
<td>0.376</td>
<td>0.002</td>
</tr>
<tr>
<td>Participations and page views</td>
<td>0.418</td>
<td>0.000</td>
</tr>
</tbody>
</table>
Accessing the course

- **Planned to use:**
  - One device type: 42%
  - Two device types: 46%
  - Three device types: 6%
  - Four device types: 6%

- **Reported using:**
  - One device type: 42%
  - Two device types: 31%
  - Three device types: 22%
  - Four device types: 4%
How did you access this course?

<table>
<thead>
<tr>
<th>Device</th>
<th>How do you plan to access the course?</th>
<th>How did you access the course?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desktop</td>
<td>37.3%</td>
<td>38.8%</td>
</tr>
<tr>
<td>Laptop</td>
<td>89.6%</td>
<td>89.6%</td>
</tr>
<tr>
<td>Smartphone</td>
<td>37.3%</td>
<td>46.3%</td>
</tr>
<tr>
<td>Tablet</td>
<td>11.9%</td>
<td>14.9%</td>
</tr>
</tbody>
</table>
Summary

» Evidence of presence
» Correlations between presence and course satisfaction, perceived learning
» Page views and use of a desktop
» Course access devices – smartphone and tablet
Future work

- Instructors and course designers should focus on course and learning resource design, specifically with multiple device platforms.
- User (student and instructor) dedication or focus on a course related activity based on device used to access the course.
Future work

» Develop explore methods of measuring student success in online courses across all disciplines.
  » Regional E-Learning Fellowship Program
  » Expanding to include other institutions
References


» Tu, C. H., & McIsaac, M. S. (2002). An examination of social presence to increase interaction in online classes. American Journal of Distance Education, 16(2), 131-150.
The Implementation of Keyboarding Instruction at the Elementary and Middle School Levels

Dr. Carol Parker
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Business Education Research Conference
Chicago, Illinois
April 12, 2017
Session Objective

- **Section 1: Review of Literature**
  - Previous studies are highlighted to emphasize the best practices for implementing keyboarding instruction at the elementary and middle school levels.

- **Section 2: Doctoral Dissertation Overview**
  - The purpose of the study was to determine if there was a difference in the scores of the Tennessee Comprehensive Assessment Program (TCAP) writing assessment of students who had a formal keyboarding course compared to those who did not.

- **Section 3: Session Conclusion**
Review of Literature

- Early Implementation of Keyboarding Skills
- Essential Instruction Time
- The Role of Business Educators in Elementary Keyboarding
- Impact on Secondary and Post-Secondary Education
Early Implementation of Keyboarding Skills

• Children are growing up in a digital world in which education has been transformed with the increased use of computers and the Internet.
• Learning to type is no longer viewed as vocational learning.
• Keyboarding is a life skill as well as a literacy skill.
Early Implementation of Keyboarding Skills

• It is beneficial for future computer use to begin “keyboarding awareness” as early as kindergarten or when students are first introduced to computers at school.

• At the elementary level, the NBEA found that students must learn to use computers properly, as well as, learn the proper keyboarding technique.

• Students should be allowed to practice these skills in the same manner that they will be tested.
Early Implementation of Keyboarding Skills

• It is necessary to teach students proper keyboarding skills before poor habits can be developed.
• Students can develop habits such as hunt and peck at a very early age if they do not receive proper keyboarding instruction.
• These bad habits are very hard to break and will affect keyboarding skills in the future.
• Students who hunt and peck keys lose their train of thought which significantly impacts the effectiveness of their writing.
Early Implementation of Keyboarding Skills

- The first typewriting study in 1929 showed that elementary age children are capable of keying well and correctly.
- The same study also found that typewriting skills helped learning in Language Arts with reading, writing, and spelling.
- According to *A Guide for School Administrators, Technology Coordinators, and Curriculum Leaders: Planning for Technology* entry level for *keyboarding* should be third grade.
Early Implementation of Keyboarding Skills

- Many studies have proven that benefits for children who learn the touch method of keyboarding include,
  - Improvement in language arts, reading, spelling, and writing ability
  - Improvement in efficiency in using the computer as a writing, editing, and computing tool
  - Improvement in creative thought
Essential Instruction Time

- Elementary age children need at least 30 hours of instruction in order to use the correct finger position and achieve scores around 20 to 25 words a minute.
- It has been suggested that elementary students need 4 to 6 weeks of daily instruction.
- Practice sessions should be short but frequent.
- Additional time is required to learn word processing skills.
Hours of Instruction and Speed Expectations

- 15-18 hours - 10-15 words per minute
- 30-35 hours - 25-30 words per minute
- 45-60 hours - 30-40 words per minute
Typing Goals

According to Crews and Erthal in the *Elementary/Middle School Keyboarding Strategies Guide*:

- 3rd Grade: 8-10 words per minute
- 4th Grade: 10-20 words per minute
- 5th Grade: 20-25 words per minute
- 6th Grade: 25-30 words per minute
- 7th Grade: 35 wpm with 95% accuracy
- 8th Grade: 40 wpm with 95% accuracy
The Role of Business Educators in Elementary Keyboarding

- The Policies Commission for Business and Economic Education has stated:
  - “We believe that business educators should take the lead in using, teaching, and integrating computer-input technologies into the curriculum.”
The Role of Business Educators in Elementary Keyboarding

• The National Standards for Business Education states that business teachers incorporate technology and career awareness into the curriculum by working with lower level teachers.

• Business teachers can take this opportunity to market their programs to future students during very influential years.
The Role of Business Educators in Elementary Keyboarding

- While certified business teachers are the best option for teaching keyboarding, they must have an understanding of methodology for teaching younger students.
- Elementary level keyboarding may be best taught as a partnership between upper grade level business teachers and elementary school teachers.
The Role of Business Educators in Elementary Keyboarding

- There is also the option of changing certification for business teachers to kindergarten through twelfth grade in all states.
- This way, specialist in the field would have the opportunity to reach learners at a young and crucial age.
Impact on Secondary and Post-Secondary Education

- It is important to teach the touch method of typing before students are required to use word processing programs.
- As teachers begin to have students work on word processing programs, students who do not have keyboarding skills waste class time by looking for keys when they should be entering information.
Impact on Secondary and Post-Secondary Education

- Following initial instruction students should be allowed to complete assignments using word processing programs.
- This will help with reinforcement of typing skills as well as increase output.
Impact on Secondary and Post-Secondary Education

- In her study, Lisa Mary Peterson states,
  - “Forming correct techniques early is important for efficiency and productivity later on in life. Good keyboarding skills result in shortened input time and thus increased productivity”.
- Teaching young students about different input technologies will give them a foundation of what they will learn and use extensively in the future.
- Employers expect a more advanced level of computer literacy when looking for potential employees.
Impact on Secondary and Post-Secondary Education

- Early implementation of keyboarding in the curriculum allows more time for document formatting and computer applications.
  - Microsoft Word
  - Microsoft PowerPoint
  - Microsoft Excel
  - Microsoft Publisher
Impact on Secondary and Post-Secondary Education

• Students at all levels of education should be encouraged to learn computer programming and coding.
  ▫ Computer science drives innovation throughout the US economy, but it remains marginalized throughout K-12 education.
  ▫ There are currently 523,222 open computing jobs nationwide.
  ▫ Last year, only 42,969 computer science students graduated into the workforce.
Future of Standardized Testing

- Direct Quote for TNReady Web Site:
  - “We know that in college, technical schools, and in most jobs, communication is done electronically – it is the way of our world. We must prepare students for their future and that will require comfort with technology”.
DIFFERENCES IN MIDDLE SCHOOL TCAP WRITING ASSESSMENT SCORES BASED ON KEYBOARDING SKILL

- Doctoral Dissertation
- Dr. Carol Parker
Statement of Problem

• Students in Tennessee’s elementary and middle schools were required to demonstrate keyboarding skills as required by the State Standards and on annual computerized standardized tests (Tennessee Comprehensive Assessment Program TCAP writing assessment).

• School administrators should be hesitant to fully implement keyboarding courses due to limited research in this area.
Purpose of Study

• The purpose of this research was to determine if students who have had a formal keyboarding course perform better on the computerized TCAP writing assessment.

• More specifically, was there a difference in the TCAP writing assessment scores for each of the 4 traits: development, focus and organization, language and conventions of students who had a formal keyboarding course compared to those who did not?
Significance of Study

• By determining if having a formal keyboarding course makes a difference on computerized TCAP writing assessments scores, educational leaders will be able to make decisions about school curriculum.

• Results can aid the Department of Education in future mandates regarding the use of computers and keyboarding instruction for each grade level of education.

• Teachers have results that can assist in preparing students for future standardized test.
Howard Garner’s Multiple Intelligences Theory described eight types of intelligences. Technology enhances each of Howard Garner’s Eight Multiple Intelligences. Bodily kinesthetic intelligence relates directly to computer use. Bodily-Kinesthetic - An ability to use one’s own body to create products or solve problems. Learning with the aid of technology is an interactive, hands-on process.
Conceptual Framework

- Low Keyboarding Skill
  - Use of Cognitive Resources
    - Focused Attention on Motor Activity
      - Lower Test Scores
  - Students
- High Keyboarding Skill
  - Cognitive Automaticity
    - Increased Higher-order Thinking
    - Increased Test Scores
• Vincent Connelly states,
  ▫ “an increase in the amount demanded by one component, such as transcription (handwriting or typing), will mean fewer cognitive resources are available for the other components”.

• Children who do not develop in these skills may be limited in the quality of the work they can produce due to having fewer cognitive resources accessible to work effectively on the writing task.

• It is necessary for children to become fluent in keyboarding to develop writing skill using a word processor just as it is necessary for children to learn how to handwrite before using paper and pencil for the same tasks.
• Megan Trapasso explains that if the physical demand of writing is high then there will be less cognitive capacity available to focus on the quality of writing.
• She identified a study which indicated that students who received typing instruction reduced the cognitive demand which allowed more attention to be focused on the quality of text when writing.
• Additionally, the level of fluency at which a student can get words on a computer screen affects the quality of what they write. It also impacts how fast a student can keep up with their thoughts.
Research Questions

1. Is there a difference in the **Development** trait scores on **Essay 1** for students who were enrolled in a formal keyboarding course compared to those who were not?
2. Is there a difference in the **Focus and Organization** trait scores on **Essay 1** for students who were enrolled in a formal keyboarding course compared to those who were not?
3. Is there a difference in the **Language** trait scores on **Essay 1** for students who were enrolled in a formal keyboarding course compared to those who were not?
4. Is there a difference in the **Conventions** trait scores on **Essay 1** for students who were enrolled in a formal keyboarding course compared to those who were not?
Research Questions

5. Is there a difference in the Development trait scores on Essay 2 for students who were enrolled in a formal keyboarding course compared to those who were not?

6. Is there a difference in the Focus and Organization trait scores on Essay 2 for students who were enrolled in a formal keyboarding course compared to those who were not?

7. Is there a difference in the Language trait scores on Essay 2 for students who were enrolled in a formal keyboarding course compared to those who were not?

8. Is there a difference in the Conventions trait scores on Essay 2 for students who were enrolled in a formal keyboarding course compared to those who were not?
Research Design

- A quantitative research design was utilized for this study.
- A causal-comparative ex post facto research method was used since the research intended to establish a cause-effect relationship between data that was collected after the fact.
- TCAP writing assessment scores from the 2014 – 2015 school year were compared to determine if there were differences in scores of students who had a formal nine week keyboarding course versus students who did not have a keyboarding course.
Research Design

• The dependent variables in this study were the 2014 – 2015 TCAP writing assessment scores for each of the 4 traits: development, focus and organization, language and conventions of all students in one middle school.

• The independent variable was formal keyboarding instruction which is scheduled at this middle school as a 9 week exploratory course.
The TCAP writing assessment was required for all Tennessee students in grades 3 - 11 in February of 2015.

Students in grades 6, 7 and 8 had 2 separate writing prompts to read and respond to with 2 independent constructed response essays.

The allotted test time was 2 and a half hours with 2 hours of assessment time and a 30 minute break.

The test was administered online using a program called Measurement Incorporated Secure Testing (MIST).
Instrumentation

- Evaluators used 2 separate rubrics which were developed by a committee of teachers to score student essays independently.
- One rubric was for an argumentative essay and the other was for an informational/explanatory essay.
- The scoring rubric for each essay included 4 traits: development, focus/organization, language and conventions.
- Each of the 4 traits was scored individually on a four-point scale with 4 being the highest.
Data Collection

- Approval was granted by Tennessee State University Institutional Review Board (IRB).
- The Assistant Superintendent for Curriculum and Instruction of the county granted permission to conduct this study.
- The Principal of the selected middle school granted approval to obtain data.
- Student names were removed from data and participants were assigned numbers.
Data Analysis

• This study utilizes non-parametric statistical tests.
• The dependent variable and independent variables cannot be measured or ordered which makes the data categorical (nominal).
• The data groups are unpaired and unmatched for all research questions.
• The Chi-square Pearson’s test were used for $H_{01}$ through $H_{08}$.
Hypotheses

- $H_{o1}$: There is no statistically significant difference in the development trait scores on Essay 1 for students who were enrolled in a formal keyboarding course and those who were not.
- $H_{o2}$: There is no statistically significant difference in the focus and organization trait scores on Essay 1 for students who were enrolled in a formal keyboarding course and those who were not.
- $H_{o3}$: There is no statistically significant difference in the language trait scores on Essay 1 for students who were enrolled in a formal keyboarding course and those who were not.
- $H_{o4}$: There is no statistically significant difference in the conventions trait scores on Essay 1 for students who were enrolled in a formal keyboarding course and those who were not.
Hypotheses

- $H_{05}$: There is no statistically significant difference in the development trait scores on Essay 2 for students who were enrolled in a formal keyboarding course and those who were not.
- $H_{06}$: There is no statistically significant difference in the focus and organization trait scores on Essay 2 for students who were enrolled in a formal keyboarding course and those who were not.
- $H_{07}$: There is no statistically significant difference in the language trait scores on Essay 2 for students who were enrolled in a formal keyboarding course and those who were not.
- $H_{08}$: There is no statistically significant difference in the conventions trait scores on Essay 2 for students who were enrolled in a formal keyboarding course and those who were not.
# Participants for Essay 1

<table>
<thead>
<tr>
<th>Grade Levels</th>
<th>Course</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>6th Grade</td>
<td>Had Keyboarding</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Did not have Keyboarding</td>
<td>145</td>
</tr>
<tr>
<td></td>
<td>6th Grade Total</td>
<td>205</td>
</tr>
<tr>
<td>7th Grade</td>
<td>Had Keyboarding</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td>Did not have Keyboarding</td>
<td>204</td>
</tr>
<tr>
<td></td>
<td>7th Grade Total</td>
<td>327</td>
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<tr>
<td>8th Grade</td>
<td>Had Keyboarding</td>
<td>141</td>
</tr>
<tr>
<td></td>
<td>Did not have Keyboarding</td>
<td>243</td>
</tr>
<tr>
<td></td>
<td>8th Grade Total</td>
<td>384</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>Had Keyboarding</td>
<td>324</td>
</tr>
<tr>
<td></td>
<td>Did not have Keyboarding</td>
<td>592</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>916</td>
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</table>
## Participants for Essay 2

<table>
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<tr>
<th>Grade Levels</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>6th Grade</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Had Keyboarding</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>Did not have Keyboarding</td>
<td>145</td>
</tr>
<tr>
<td></td>
<td>6th Grade Total</td>
<td>206</td>
</tr>
<tr>
<td><strong>7th Grade</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Had Keyboarding</td>
<td>119</td>
</tr>
<tr>
<td></td>
<td>Did not have Keyboarding</td>
<td>201</td>
</tr>
<tr>
<td></td>
<td>7th Grade Total</td>
<td>320</td>
</tr>
<tr>
<td><strong>8th Grade</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Had Keyboarding</td>
<td>139</td>
</tr>
<tr>
<td></td>
<td>Did not have Keyboarding</td>
<td>241</td>
</tr>
<tr>
<td></td>
<td>8th Grade Total</td>
<td>380</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Had Keyboarding</td>
<td>319</td>
</tr>
<tr>
<td></td>
<td>Did not have Keyboarding</td>
<td>587</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>906</td>
</tr>
</tbody>
</table>
Null Hypotheses Testing

• Testing data was collected as an Adobe .pdf file. That file was converted into a Microsoft Excel spreadsheet then transferred to Statistical Package for the Social Sciences (SPSS) version 22.

• Data was analyzed in SPSS using the Chi-Square Pearson’s test for all research questions.

• The test value for alpha ($\infty$) is at the .05 level of significance for each null hypothesis.
Findings: Research Question 1

- $H_{o1}$: There is no statistically significant difference in the development trait scores on Essay 1 for students who were enrolled in a formal keyboarding course and those who were not.

- The $p$ value is greater than $> .05$ for each grade level ($6^{th} = .321$, $7^{th} = .362$, $8^{th} = .290$) and the total of all grades (total = .290) therefore the null hypothesis is accepted.

- Students who had keyboarding did not perform better statistically on this trait of the TCAP writing assessment than those who did not.
Summary of Findings

• Each of the 8 null hypotheses were accepted based on the results of the Chi-Square test at the .05 level of significance.
• There is no statistically significant difference in the TCAP writing assessment scores for each of the 4 traits: development, focus and organization, language and conventions for Essay 1 or Essay 2 of students who had a formal keyboarding course compared to those who did not.
Summary of Findings

• The pass rate is the percent of students who scored a 1, 2, 3 or 4 on the specific trait with 1 being the lowest possible score and 4 being the highest possible score.

• The pass rate percentage is important to this research by showing that the percentage of participants who scored a 4 is higher or equal in every grade level for students who had keyboarding.

• The total percentage of participants who scored a 4 is also higher for students who had keyboarding.
Dissertation Conclusion

- While the research shows that the percentage of students who had keyboarding scored more fours, which is the highest possible score, the $p$ value for each grade level of every null hypothesis was below the .05 level of significance. Therefore, there is no dependency proven by this study.

- Students who had a formal keyboarding course did not perform higher statistically on any of the 4 traits of the TCAP writing assessment than those who did not have keyboarding.
• The percentages of students who had keyboarding versus those who did not were drastically different.

• Only 35% of the participants had the formal keyboarding course and 65% did not.

• This large difference in enrollment numbers is a likely factor in the flawed premise that students who type well perform better on the computerized TCAP writing assessment.
Dissertation Conclusion

• Additionally, all students from the school population performed poorly overall on the assessment no matter of keyboarding or no keyboarding.
• This suggests poor writing skills in which case keyboarding or no keyboarding may not have made a sufficient difference.
Recommendations for Further Research

• It is recommended that a more suitable form of assessment be obtained for future keyboarding studies. This writing assessment had no actual pass/fail score. The TCAP writing assessment may not have been an ideal form of assessment to determine if a formal keyboarding course makes a difference on computerized test scores.

• A second recommendation for future research is to increase the number of participants who were enrolled in a formal keyboarding course.
Recommendations for Practice

• Based on the findings of this research, school leaders need to determine why students are performing poorly on the TCAP writing assessment.

• School leaders should research writing practices, test alignment to standards being taught and teacher understanding of the assessment rubrics.

• Options for administering the assessment either by computer or paper and pencil should be available to students.

• Additionally, students need to be allowed to practice writing in the format that they will test.
Session Conclusion

- The United States has varied requirements for developing keyboarding skills depending on the state, school district, and even school.
- Implementation of keyboarding and computer curriculum in many elementary and middle schools is viewed as a work-in-progress.
Session Conclusion

• It is up to educational leaders to decide whether or not to integrate keyboarding into other classes and at what level to develop that into the school’s culture.

• Constraints such as time, scheduling, funding, methods and impact on grades are factors that administrators must maneuver when deciding whether to implement a formal keyboarding program.
Session Conclusion

• Cooperation is necessary from all school personnel involved to determine to what extent computer and keyboarding programs need to be implemented in order to meet 21st-century educational demands.

• As Dooling (2000) noted, “If we want children to learn technology, they’ve got to use technology”.

“Everybody in this country should learn how to program a computer...because it teaches you how to think.”

-Steve Jobs

“Technology is just a tool. In terms of getting the kids working together and motivating them, the teacher is the most important.”

-Bill Gates
Are you Faster Than a Fifth Grader?

http://www.youtube.com/watch?v=PIvTTsOC-lo
References


References

References


References


Undergraduate Business Students Perceptions of Teaching Presence in Online Business Courses

Lacey Finley
Ph.D. Graduate
Kansas State University
Background

• Online Learning Growth in Higher Education
• Online Degree and Program Growth at Four-Year Institutions
• Four-Year Institutions and Online Learning Opportunities
• Online Course Technology
  • Learning Management Systems (LMS)
  • Blackboard
• Teaching Online
  • Interaction through Learning Management Systems
Background

• Growth of online education
• Business student population
  • Largest portion of online undergraduate enrollment (Clinefelter & Aslanian, 2014)
• No research found on specific instructor attributes/practices of Teaching Presence from the perspective of online undergraduate Business students
• Lack of understanding in regard to what Business students perceive as good teaching in the online learning environment
  • Particularly in the area of Teaching Presence and the Teaching Presence Components
    • Design and Organization
    • Discourse Facilitation
    • Direct Instruction
Purpose

- Explore how undergraduate Business students perceive Teaching Presence in online Business courses
- Investigate what components of Teaching Presence undergraduate Business students find most valuable
- Understand how exemplary Teaching Presence is demonstrated
Theoretical Framework

Teaching Presence within the Community of Inquiry Model
- Social Presence
- Cognitive Presence
- Teaching Presence

Intersect to develop the educational experience

Adapted from Anderson, Rourke, Garrison, and Archer (2001)
Theoretical Framework

Teaching Presence:

• Virtual “visibility” of the instructor as perceived by students (Baker, 2012; Arbaugh & Hwang, 2006)

• “The design, facilitation and direction of cognitive and social processes for the purpose of realizing personally meaningful and educationally worthwhile learning outcomes” (Anderson et al., 2001, p. 5).

Teaching Presence Model

<table>
<thead>
<tr>
<th>Design &amp; Organization</th>
<th>Discourse Facilitation</th>
<th>Direct Instruction</th>
</tr>
</thead>
</table>
### Teaching Presence Model

#### Design & Organization
- Setting curriculum
- Establishing time parameters
- Utilizing medium effectively
- Establishing netiquette
- Designing methods

#### Direct Instruction
- Present content/questions
- Focus the discussion on specific issues
- Confirm understanding
- Diagnose misconceptions
- Inject knowledge from diverse sources

#### Discourse Facilitation
- Identifying areas of agreement/disagreement
- Reinforce student contributions
- Setting climate for learning
- Drawing in participants, prompting discussion
- Assessing the efficacy of the process
- Seeking to reach consensus

(Adapted from Anderson et al., 2001)
1. How do undergraduate Business students perceive Teaching Presence in online courses?

2. What Teaching Presence components (design and organization, discourse facilitation and direct instruction) do undergraduate Business students find valuable in online courses?

3. How do exemplary undergraduate Business course faculty demonstrate Teaching Presence in online instruction?
Design

Case Study

• Capture student voices through in-depth interviews
• Provide a meaningful understanding of the nature and attributes of Teaching Presence through student-nominated faculty interviews, observations, and documentation
Data Collection

Data gathered from multiple sources:
• Semi-structured interviews
  • Interview protocols were used for student & faculty interviews
  • Based certain interview questions on the Teaching Presence Scale

Documents
• Course Content
• Course Materials
• Teaching Evaluations (Student Survey Responses)

Observation
• Discussion posts
• Announcements
• Recordings
Research Setting

University:
• Four-year university in the Midwest
  • 4284 full-time students
  • 1518 part-time students
• 58 percent females and 42 percent males
• 15 online degree options
• Fall 2014 - 2,344 students enrolled in at least one online course
Research Setting

Business Department:
- Faculty:
  - 25 Full-Time Faculty
  - 21 Adjunct Faculty
  - 32 Faculty members teach at least one online course each semester
- Bachelor of Science in Business Administration (BSBA)
  - The study focused on students pursuing a BSBA
  - Approximately 24% of the total student population was pursuing a BSBA degree
- Blackboard Learn - LMS
Research Setting

Business Department:

- About 40% of students take at least one online course per semester:
  - 70 Freshman
  - 64 Sophomores
  - 105 Juniors
  - 125 Seniors

<table>
<thead>
<tr>
<th>Total School of Business Student Population</th>
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<tr>
<td><strong>Total Enrollment</strong></td>
</tr>
<tr>
<td><strong>Freshman</strong></td>
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<tr>
<td><strong>Sophomore</strong></td>
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<tr>
<td><strong>Junior</strong></td>
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<tr>
<td><strong>Senior</strong></td>
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</tbody>
</table>
Participants

Business Students:
- Twenty Business students
  - Enrolled in at least one online Business course during the Fall 2015 semester
    - For-credit three-hour course
  - Pursuing a Bachelor of Science in Business Administration
  - Both male and female students
  - All academic levels – proportional sampling
    - 3 Freshman
    - 3 Sophomores
    - 6 Juniors
    - 8 Seniors
Participants

**Business Faculty:**
- Student Nomination of Exemplary Online Undergraduate Business Faculty
- Faculty most often nominated by students as demonstrating effective methods of Teaching Presence
- Researcher identified three most-named faculty
- Conducted in-depth interviews with student-nominated exemplary faculty
  - Faculty M (Instructor 1)
  - Faculty Y (Instructor 2)
  - Faculty G (Instructor 3)
Data Analysis

Coding:
• NVivo 10 Software
• Interviews coded by question within NVivo
  • Meticulously focused on the purpose of the study, paying special attention to tying all information back to the research questions
• Themes and categories were broken into “Nodes”
  • Matching comments were coded by Node
• Pattern Coding
• Documents and Observations were organized as “Memos” in NVivo
Data Analysis

Patterns and Themes:

Research Question 1
Teaching Presence Components
Design & Organization - Discourse Facilitation
- Direct Instruction

Research Question 2
Teaching Presence Components
Design & Organization - Discourse Facilitation
- Direct Instruction

Research Question 3
Teaching Presence Components
Design & Organization - Discourse Facilitation
- Direct Instruction
Trustworthiness

- Dependability
- Credibility
- Transferability
- Confirmability
Results

**Question 1:**
How do undergraduate Business students perceive Teaching Presence in online courses?

- 101 Total Units
- 3 Themes
- 12 Categories

**Question 2:**
What Teaching Presence components do undergraduate Business students find valuable in online courses?

- 245 total units
- 3 Themes
- 16 Categories

**Question 3:**
How do exemplary undergraduate online Business course faculty demonstrate Teaching Presence in online instruction?

- 81 total units
- 3 Themes
- 12 Categories

- Teaching Presence components were used as the themes
  - (Design and Organization, Discourse Facilitation, and Direct Instruction)
- Teaching Presence Model component elements (sub-components) were used as categories
Conclusions

Q1: How do undergraduate Business students perceive Teaching Presence in online courses?

• Direct Instruction
  • Confirm Understanding
    • Students needed to know that their instructor was present and available
    • Instructor reassurance through interaction influenced student perceptions of Teaching Presence
    • Instructor-driven communication prompted Teaching Presence
    • Students valued specific assignment feedback
Conclusions

Q1: How do undergraduate Business students perceive Teaching Presence in online courses?

• Discourse Facilitation
  • Drawing in Participants, Prompting Discussion
    • Teaching Presence was apparent through instructor participation in course discussions
    • Extra support and guidance was provided by instructors in discussion forums

• Design and Organization
  • Designing Methods
    • Student perceptions of Teaching Presence were influenced by the level of detail and effectiveness of communication provided by online Business course instructors
    • Online video lectures personalized the instruction process and created presence
Conclusions

Q2: What Teaching Presence components do undergraduate Business students find valuable in online courses?

• Design and Organization
  • Designing Methods
    • Students needed specific learning activity requirement information
    • Video lectures were a valued aspect of “Design and Organization”
    • Clear expectations stated at the course outset were valued by students

• Design and Organization
  • Establishing Time Parameters
    • A full course schedule was desired on the first day of the course
    • Instructor reminders and announcements further established time parameters
Conclusions

Q2: What Teaching Presence components do undergraduate Business students find valuable in online courses?

• Discourse Facilitation
  • Setting Climate for Learning
    • Students valued facilitation through instructor encouragement and prompting of exploration

• Direct Instruction
  • Confirm Understanding
    • Students wanted a “lifeline” in the form of instructor reassurance
    • Feedback fostered student understanding
Q3: How do exemplary undergraduate online Business course faculty demonstrate Teaching Presence in online instruction?

- **Design and Organization**
  - Establishing Time Parameters
    - Exemplary instructors communicated time parameter information frequently and early
  - Utilizing the Medium Effectively
    - Teaching Presence can be demonstrated through effective use of the medium

- **Direct Instruction**
  - Confirming Understanding
    - Instructors that demonstrated a high level of Teaching Presence provided very specific feedback
Conclusions

Q3: How do exemplary undergraduate online Business course faculty demonstrate Teaching Presence in online instruction?

- Discourse Facilitation
  - Assessing the Efficacy of the Process
    - Presenting information in an effective manner assisted students with task management
  - Drawing in Participants, Prompting Discussion
    - Exemplary course instructors understood that some students needed specific directives in order to actively participate
    - Instructors that demonstrated a high level of teaching presence were thoughtful about discussion development in an effort to prompt engagement
    - Instructors that demonstrated a high level of Teaching Presence were deliberate about their own engagement in course discussions
Recommendations

Teaching Presence Model Online Business Course Guidelines: Design and Organization

• Provide clear learning activity instructions and consistent arrangement
• Prepare integrated video lectures
• Include a clear, detailed course calendar on the first day of the course
Recommendations

Teaching Presence Model Online Business Course Guidelines: Discourse Facilitation

- Actively facilitate online course discussions
- Provide students with well-crafted discussion questions
- Incorporate a supplementary discussion forum to address questions, provide guidance
- Include specific directives regarding how to participate in discussions
Recommendations

Teaching Presence Model Online Business Course Guidelines:

Direct Instruction

• Provide responsive, multifaceted approach to instructor-student interaction
• Actively prompt student-instructor interaction
• Identify and address student comprehension struggles
• Provide feedback that guides student understanding and enables students to move forward in a successful manner
Recommendations

Future Studies:
- Examine how online students in different academic disciplines perceive Teaching Presence
- Conduct a qualitative study at a different research location
- Design a study focusing on how technology can increase Teaching Presence
- Conduct a longitudinal study of student’s perceptions of Teaching Presence from the beginning of their program to the end
- Examine how instructor attributes influence Teaching Presence
Limitations

- The researcher had taken and taught several online courses, including courses during the Fall 2015 semester. There may have been potential for researcher bias in the interpretation of findings.

- The researcher was a faculty member at the research location. Student and faculty participants may have been inclined to answer in an overly positive way, rather than speaking frankly during the interview process.
Delimitations

• This study examined faculty and students at a single Midwest university in a mid-size city. Research findings may have limited transferability to institutions in different settings.

• Student taking Business courses online during the Fall 2015 semester were selected to participate. The selected students did not represent the entire university population.

• The researcher constructed the interview protocol on the concept of Teaching Presence and its three components in order to learn more about their individual importance within the model and their application to the population of this study.
Questions

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References


Using Digital Storytelling to Incorporate Critical Thinking into the Online College Classroom

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Using Digital Storytelling to Incorporate Critical Thinking into the Online College Classroom

• Is there a need for critical thinking?
  – Critical thinking is a “crucial capability” for business students

• Aren’t textbooks enough?
  – business textbooks “only weakly support the development of students’ capacity for critical thinking” (Errington & Bubna-Litic, 2015: 774)

Using Digital Storytelling to Incorporate Critical Thinking into the Online College Classroom

• Call to action:
  – Infuse critical thinking activities into the business classroom at all levels (high school – graduate school)
Using Digital Storytelling to Incorporate Critical Thinking into the Online College Classroom

• Our response:
  – Incorporate Nosich’s “SEE-I” technique into our own classes
SEE-I

• What is a SEE-I???
  – State
  – Elaborate (Explain)
  – Example (Exemplify)
  – Illustrate

SEE-I

State – state the definition—Provide a one-sentence definition of the concept you’ve selected. Do NOT use the textbook, a dictionary, or the Internet.

• Explain/Elaborate —Given the definition above, try to explain in your own words what your concept means in light of what you have found. Try to state it as succinctly but simply as you can, but be thorough. Focus on understanding and not on length.

• Example/Exemplify —Now that you have provided a definition, give a concrete example of your concept. This can be a hypothetical situation or something you have witnessed at your job/organization. Again, be succinct, simple, and thorough.

• Illustration—Find a picture....or take a picture....that illustrates your concept. The illustration can be obvious or it can be a little more abstract. Just be sure you provide a rationale to why the picture you use illustrates the concept you have selected.
Microsoft Sway

- Why Sway over PowerPoint?
  - Sway focuses on content over design
  - Sway is housed in the cloud
  - PowerPoint currently has a poor cloud implementation
  - More intuitive for some
Microsoft Sway

• Check out some Sways

• Substitutes include Prezi and Google Slides

• Sway is free as in free doughnuts
The Initial Evidence

• N=21 – Online MBA Class – Spring 2017

• Average age = 33
  – Minimum = 24; Maximum = 51

• 52% Male
The Initial Evidence

• “The assignment helped me better understand theories/concepts in our class.”
  – 81% responded agree or strongly agree

• “It was a creative, fun assignment that really made me think critically.”
  – 100% responded agree or strongly agree

• “The assignment was more helpful in applying course material than case study assignments”
  – 52% responded agree or strongly agree

• “The assignment was more helpful in understanding course material than online lecture videos”
  – 52% responded agree or strongly agree
Open Responses:

• “I am a hands-on learner and doing the presentation helped me apply my understanding of the concept.”
  – 40, Female

• “The assignment itself is a great idea...refreshing to do something different”
  – 43, Male

• “I learned to think about something as simple as definition and have to express it in different ways, which enhanced my overall understanding.”
  – 25, Female

• “The assignment was meaningful to me and it helped me look at things from another perspective.”
  – 26, Female
The Initial Evidence

• Interesting findings:

• Technology Readiness*
  – Significant difference (p<.05) between Males/Females
  – Males reported being more technologically ready than Females

• SEE-I vs. Case Study
  – Significant difference (p<.05) between Males/Females
  – Males were more likely to report that the SEE-I was more helpful than a case study than Females


Sample item: *I prefer to use the most advanced technology available*
Conclusion

• Good for cloud computing students
• MUST HAVE access to a computer to create or edit
• Good for content focused students (designers need not apply)
• Plays well with Bing and a handful of apps
• Excellent for critical thinking
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