

GALILEO, University System of Georgia

## GALILEO Open Learning Materials

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Business Administration, Management, and  
Economics Grants Collections

Business Administration, Management, and  
Economics

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Fall 2018

### Fundamentals of Computer Applications for Business (GHC)

David Bridges

*Georgia Highlands College*, [dbridges@highlands.edu](mailto:dbridges@highlands.edu)

Katie Bridges

*Georgia State University*, [kbridges@gsu.edu](mailto:kbridges@gsu.edu)

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#### Recommended Citation

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David Bridges and Katie Bridges

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# Fundamentals of Computer Applications

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## Grants Collection

Affordable Learning Georgia Grants Collections are intended to provide faculty with the frameworks to quickly implement or revise the same materials as a Textbook Transformation Grants team, along with the aims and lessons learned from project teams during the implementation process.

Each collection contains the following materials:

- Linked Syllabus
  - The syllabus should provide the framework for both direct implementation of the grant team's selected and created materials and the adaptation/transformation of these materials.
- Initial Proposal
  - The initial proposal describes the grant project's aims in detail.
- Final Report
  - The final report describes the outcomes of the project and any lessons learned.



Unless otherwise indicated, all Grants Collection materials are licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).

# Initial Proposal

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## Application Details

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### Manage Application: Textbook Transformation Grants: Round Ten

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**Award Cycle:** Round 10

**Internal Submission Deadline:** Friday, September 29, 2017

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**Application Title:** 343

**Application ID:** 001880

**Submitter First Name:** David

**Submitter Last Name:** Bridges

**Submitter Title:** Instructor of Business

**Submitter Email Address:** dbridges@highlands.edu

**Submitter Phone Number:** 678-689-9542

**Submitter Campus Role:** Proposal Investigator (Primary or additional)

**Applicant First Name:** Katie

**Applicant Last Name:** Bridges

**Co-Applicant Name(s):** --

**Applicant Email Address:** kbridges@highlands.edu

**Applicant Phone Number:** 678-872-8083

**Primary Appointment Title:** Instructional Designer

**Institution Name(s):** Georgia Highlands College

**Submission Date:** Monday, October 2, 2017

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**Proposal Title:** 343

**Proposal Category:** No-Cost-to-Students Learning Materials

**Are you using an OpenStax textbook?:** No

**Final Semester of Instruction:** Fall 2018

**Team Members (Name, Title, Department, Institutions if different, and email address for each):**

David Bridges, Part Time Business Faculty GHC, dbridges@highlands.edu

Katie Bridges, Instructional Designer, kbridges@highlands.edu

**Sponsor, (Name, Title, Department, Institution):**

Dr. Alan Nichols, Associate Professor of Philosophy, Social Science, Business and Education  
Dean, Georgia Highlands College

**Course Names, Course Numbers and Semesters Offered:**

BUSA 2205: Fundamentals of Computer Applications

A course designed to assure a basic level of computer applications literacy: to include  
spreadsheet, database, LAN, e-mail and Internet uses as well as word-processing skills.

This course is offered every semester as a face-to-face, hybrid and fully online class.

<b>List the original course materials for students (including title, whether optional or required, &amp; cost for each item):</b>	MS Office Excel 2016: Complete (SIMNET SIMBK Access Code)Author: NordellAccess Code ISBN: 9781259895296Purchase only valid for single semester.Cost \$ 85.75
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<b>Average Number of Students per Course Section:</b>	26
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<b>Number of Course Sections Affected by Implementation in Academic Year:</b>	12
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**Average Number of Course Sections Per Semester:**

Fall 2017: 5 sections (128 total students, average 26 per section)

Summer 2017: 1 section, 23 students

Spring 2017: 6 sections (155 total students, average 26 per section)

<b>Total Number of Students Affected by Implementation in Academic Year:</b>	312
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<b>Requested Amount of Funding:</b>	\$10,800
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<b>Original per Student Cost:</b>	\$ 85.75
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<b>Post-Proposal Projected Student Cost:</b>	\$ 0.00
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<b>Projected Per Student Savings:</b>	\$ 85.75
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**Projected Total Annual \$ 26,754**  
**Student Savings:**

**Project Goals:**

We intend to provide free, high quality learning materials for Georgia Highlands College students who take Fundamentals of Computer Applications (BUSA 2205) by adopting Open Educational Resource materials and switching from the current purchased textbook/software combination. By adopting Open Educational Resources (OER) materials, students will have immediate access to the textbook on the first day of class. We expect to see a decrease in the withdrawal rates of our students with the transformation to the OER. While it is important to note that this project proposal is designed to meet the criteria of the "Top 100 Undergraduate Courses", it also bears mentioning that there has been no other proposal accepted for "Fundamentals of Computer Applications". We hope to contribute to the growing body of resources for this course.

As the price of textbooks and software increase, the options for our students to attain this package, SimNET, for a reasonable amount of time decreases. Renting, sharing, borrowing, or checking out textbooks from libraries, is not an option for this course. The current format for the course is that approximately 40% of the work done in the course is through SimNET. The largest service areas for GHC include Bartow, Cobb, and Floyd County. The median incomes for these areas are \$22,595, \$33,778, and \$21,218, respectively. In Floyd County, 19.6% of families live below the poverty line. Oftentimes, this means that our students are faced with the decision to either purchase books for school or the pay the bills that sustain their households. Adopting an OER, helps create access to better futures and an exit from poverty for our students. Because of this transformation, the estimated collective savings for students in these 5-6 sections is \$26,754.00 each academic year.

Adopting OER materials increases preparedness of adjunct instructors. Oftentimes, instructors have to be hired with very late in the summer and they are not given adequate time to acclimate to both the LMS and SimNET. This lack of access and training can negatively affect student success. The creation of master course in the LMS ensures that instructors will have all of the resources necessary to teach and support student success.

To evaluate and assess the effectiveness of this conversion we will measure students' perceptions and experiences with OER materials as well as the course success rates with OER materials compared against previous courses not using OER materials.

**Statement of Transformation:**

Fundamentals of Computer Applications (BUSA 2205) connects the Microsoft Excel application and how it applies to information competency, emerging technology and technology purchasing for personal and commercial use. This course is part of the pathway for the Associates of Science and Bachelors of Business degrees. In March 2016, Georgia Highlands College announced the addition of the Bachelors of Business Administration. This

program includes concentrations in healthcare management and logistics and supply chain management. The enrollment for BUSA 2205 for the 2016-2017 academic year increased by 15% from the 2015-2016 academic year. Since Fall 2017 was the first semester of the BBA program, it can only be expected that the demand for the course will continue to increase.

In this class, students complete a majority of their assignments in SimNET. SimNET is an interactive textbook that allows students to read the content of the lesson, see an example, try an example and then complete an assignment. The drawback is that if the student does not follow the steps exactly the way SimNET did them in the example, and then the answer is graded as incorrect. SimNET also has some compatibility issues with Mac hardware and operating systems. As with all MS Office applications, there is more than one way to complete most tasks. SimNET is very strong in instructing students how to complete the task but it is weak in the problem solving and critical thinking elements that will benefit the student when they are applying their knowledge in the real world.

The plan is to use David Bourgeios' book *Information Systems for Business and Beyond*. This text is a free eBook from Saylor.org and the same text that is used by the eCore class Electronic Technology in the Educational Environment. This content will fulfill three of the seven Student Learning Outcomes in the class. In addition to the Bourgeios' book, the transformation will integrate the Microsoft Office Excel Certification content to connect the book and MS Excel. Bringing the two elements together allows for better retention and aligns with the TILT framework.

In alignment with the TILT framework, this transformation will allow for the creation of module assignments and content quizzes that reinforce the course Student Learning Outcomes. Students will learn at the beginning of the course that all assignments are designed with the goal of mastering course content. The mastery of the content ensures students can carry out these processes in a business setting.

### **Transformation Action Plan:**

The transformation action plan will be accomplished in three phases before the course is delivered in Spring 2018, pre-planning, planning and course redesign

#### **Pre-Planning**

In the pre-planning phase, the Subject Matter Expert (SME) will research and evaluate multiple options for no cost textbook options. In addition, the SME will look to the MS Office training site to gather information from the Excel Expert Certification to provide this as an option for students who wish to pursue this certification. Whichever textbook option is chosen it will be crucial that the transformation addresses frequent concerns from faculty. Those concerns include:

Consistent grading mechanism



Building problems “from scratch” is frustrating

Closing the loop, ensuring students understand their mistakes and what is required to fix them

An element of the pre-planning phase will include research the best methods for assessing students on computer applications.

## **Planning**

In the planning phase, the SME will work with the instructional designer to develop the master course ensuring it meets all quality and accessibility criteria. Activities, assessments, content, videos and other supplementary materials will be collected and created in the LMS. This phase of the project will be completed before the spring semester starts on January 8, 2018.

## **Course Redesign**

A variety of proven fundamental methodologies tied to teaching and learning will be employed in the course. First will be the metacognitive process outlined by Dr. Saundra McGuire in *Teaching Students How to Learn*. Although these methodologies are predominately used in developmental or academic success course, they should prove to be useful for this content and application course format. Second will be the implementation of the TILT method. TILT stands for Transparency in Learning and Teaching. The focus of this method created by Mary-Ann Winkelmes is to promote student success through teaching with a transparent framework. In addition to TILT, Universal Design for Learning principles will be integrated in the redesign ensuring the course is fully accessible to all students and learning styles. Lastly, the redesign will look to Benedict Carry’s *How We Learn* to enhance the pedagogical elements of the course since it will be taught in three different modalities.

In addition to the creation of the master course, a LibGuide will be created to allow the redesign of the course and all of the resources compiled to be shared out in accordance with Creative Commons licensing.

**Quantitative & Qualitative Measures:** Assessment of this course is going to take place on a multitude of levels. The assessment measures will be both qualitative and quantitative. At the beginning of the semester, a technology survey will be required to gauge the skill level of the students enrolled in the course. "Studies have concluded that how students experience their campus environment impacts both learning and developmental outcome" (MSU Office of Inclusion and Intercultural Initiatives, 2017). Since this course has a prominent technology component, it is essential to understand the students' technology background. Additional qualitative measures will be carried out via survey that occurs two times during the semester, at the midpoint and the end of the semester. The survey will use a satisfaction scale levels will be Satisfied (5), Somewhat Satisfied (4), Neutral (3), Somewhat Dissatisfied (2), and Dissatisfied (1). The course will be evaluated quantitatively by comparing DWF rates of the OER course to courses not using the OER. There may be a need to use data from previous semesters for this measurement. The other way that the course will be evaluated quantitatively is comparing overall course grade, percentage of content visited by the student and the pass rates associated with the Student Learning Outcomes for the course. In order to obtain this data the OER content will be aligned with the Student Learning Outcomes (SLO), course objectives and assignments in the course. Each SLO and course objectives will be considered "passed" when students achieve a grade of 70 or greater on the assignments in the course. Using the Competency Tool in the Learning Management will allow for continuous calculation. The desired outcome is that the difference between the students' final grades and pass rate of the SLOs will be no more than a 10% difference. Lastly, the course will include a pre-test and post test assessing the understanding of how the technology skills included in the course support the Student Learning Outcomes and course objectives.

**Timeline:**

Time	Milestone
October 2017	Assess OER Options
November-December 2017	Attend Kick-Off Meeting Locate and build supplemental materials Redesign course in D2L master course Building assessment tools
January 2018	Delivery of course, modality TBD
April 2018	Data collection from students regarding experience and effectiveness of assessment tools
May-July 2018	Based off of data collection make modifications to course prior to Fall 2018
August 2018	Delivery of course, modality TBD
November 2018	Data collection from students regarding experience and effectiveness of assessment tools
December 2018	Submit final report

### **Budget:**

David Bridges, M.S. Human Resources

Instructor of Record/SME/Principle Investigator \$5,000.00

Katie Bridges, M.Ed.

Instructional Designer \$5,000.00

Travel to Kick-off Meeting \$ 800.00

Total \$10,800.00

### **Sustainability Plan:**

Once the redesign of the course is complete, a master course with activities, assessments, supplementary materials for the text and grading rubrics will be made available to any GHC faculty member, full or part time, that wishes to use this platform for the course. As technology changes it will also allow for ease of updating the material since a new edition of a textbook will not be necessary. Having a foundational course for the AS and BBA program available for students with a no cost textbook has the potential of increasing enrollment in the course. The master course will be available to faculty at other USG institutions via Brightspace platform

and a LibGuide. The course materials will be maintained by Dave Bridges, instructor, and Katie Bridges, instructional designer.

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# GEORGIA HIGHLANDS



## COLLEGE

FLOYD CAMPUS  
3175 Cedartown Highway  
Rome, GA 30161

VICE PRESIDENT  
FOR ACADEMIC AFFAIRS

9.25.17

Dear ALG Grants Committee Members:

I am pleased to write this letter in support of this Business Administration team, as they seek grant funding to incorporate free and open texts and other instructional materials for BUSN 2205 Fundamentals of Computer Applications. There are numerous reasons of efficiency, pedagogy, and instructional transformation which compel me to support this initiative.

First, this instructor/instructional designer team of collegiate educators will engage in a thoughtful process that will broadly affect the student body at Georgia Highlands College. We expect to affect over 300 students per year through redesign of these courses, a significant number of students needing to complete the business pathway. Already this course's enrollment is up 15% year-over-year 2015-16 and 2016-17. With the addition of two Bachelor of Business Administration degrees launching in fall 2017, we expect this course's enrollment to increase even more.

Second, money saved through this plan's implementation would provide opportunity for both economy and learning. Case in point, with textbook costs rising at an unheard of rate, our students could be saving over \$26,000 per year, by replacing the current text, at \$85 per unit, with open educational resources that will be freely available to all students. Without doubt, this affects our students' foundational learning, tenacity, and ability to thrive in this class.

Finally, this Affordable Learning Georgia grant will serve as a catalyst for enhanced teaching and learning. It will serve as a springboard for innovation on the part of faculty who work to make those materials more creative, applied, and relevant in today's computer applications classroom. It will send the message that GHC faculty members care about their students, economically, socially and intellectually. It will urge students to persist and to complete in a discipline that too often is a stumbling block to college completion.

I wholeheartedly endorse this ALG Transformation Grant application from these forward-thinking, action-oriented educators. Their plan is noteworthy and laudable. Please allow them to continue their essential work through the approval of the grant.

Sincerely,

Renna Watterson, Ed.D.

[highlands.edu](http://highlands.edu)

Affirmative Action / Equal Employment and Educational Opportunity Institution

CARTERSVILLE CAMPUS  
678-872-8000

DOUGLASVILLE SITE  
678-872-4200

FLOYD CAMPUS  
706-802-5000

MARIETTA SITE  
678-872-8501

PAULDING SITE  
678-946-1100



# GEORGIA HIGHLANDS COLLEGE



9/26/2017

To whom it may concern:

I write this letter as Dean of Social Sciences, Business, and Education at Georgia Highlands College in support of Mr. David Bridges' proposal for an Affordable Learning Georgia Textbook Transformation Grant in Round Nine for implementation beginning Summer Semester 2017; running through Spring Semester 2018.

Mr. Bridges is proposing to replace the standard textbook in his BUSA 2205 (Fundamentals of Computer Applications) course with an OER text as well as a Microsoft Excel Certification content. This will result in a savings for students of nearly \$220 per student per course. We currently offer 5 sections of BUSA 2205 per semester, so this project has the potential to benefit 150 students per semester and approximately 350 students per academic year (including summer). I believe that this is an especially worthy undertaking here at Georgia Highlands, where many of our students depend on financial aid not only to meet the costs of their education but their living expenses as well. I would expect that adopting OER materials will help Georgia Highlands in the areas of retention, a USG initiative, and course completion, a long-standing USG goal. Currently, many students do not purchase expensive texts for courses and their performance suffers. By adopting the high-quality OER text, a significant barrier to student performance and completion will be removed.

Mr. Bridges has a well-developed plan for shifting to the OER text. I fully support this shift, and have encouraged other faculty in my Division to shift to OER, where available, for their courses. As an institution, Georgia Highlands strives to be at the forefront of the University System of Georgia's plans to make college affordable through lowering the cost of textbooks through Use of OERs as well as seeking out low-cost texts. I believe Mr. Bridges is worthy of financial support as he works towards these ends and I strongly support his application for grant funding.

Best,

Dr. Alan Nichols  
Dean, Division of Social Sciences, Business, and Education  
Georgia Highlands College  
3175 Cedartown Highway  
Rome GA, 30161  
706-368-7615  
anichols@highlands.edu

## Affordable Learning Georgia Textbook Transformation Grants

### Round Ten

For Implementations beginning Spring Semester 2018

Running Through Fall Semester 2018

### Proposal Form and Narrative

- The proposal form and narrative .docx file is for offline drafting and review. Submitters must use the InfoReady Review online form for proposal submission.
- **Note: The only way to submit the proposal is through the online form in Georgia Tech's InfoReady Review at:**  
<https://gatech.infoready4.com/#competitionDetail/1757803>
- If you are copying and pasting into InfoReady Review from this form, first convert the file to **plain text** and copy/paste from the plain text file.
  - o In Word, go to File > Save As... > and change the file format to "Plain Text (.txt)."
  - o Copy and paste from the .txt file.
  - o Be sure to save both copies in case you are asked to resubmit.
- Microsoft Word Document formatting pasted into InfoReady Review will render the reviewer copy unreadable. **If you paste Word-formatted tables into InfoReady Review, you may be asked to resubmit your application if time permits.**
- Italicized text is provided for your assistance; please do not keep the italicized text in your submitted proposal. Proposals that do not follow the instructions may be returned.

Submitter Name	David Bridges
Submitter Title	Part Time Business Faculty Member
Submitter Email	<a href="mailto:dbridges@highlands.edu">dbridges@highlands.edu</a>

<b>Submitter Phone Number</b>	678-689-9542
<b>Submitter Campus Role</b>	Proposal Investigator
<b>Applicant Name</b>	Katie Bridges
<b>Applicant Email</b>	<a href="mailto:kbridges@highlands.edu">kbridges@highlands.edu</a>
<b>Applicant Phone Number</b>	678-872-8083
<b>Primary Appointment Title</b>	Instructional Designer
<b>Institution Name(s)</b>	Georgia Highlands College
<b>Team Members</b>	<p><b>David Bridges,</b> Part Time Faculty GHC,  <a href="mailto:dbridges@highlands.edu">dbridges@highlands.edu</a></p> <p><b>Katie Bridges,</b> Instructional Designer,  <a href="mailto:kbridges@highlands.edu">kbridges@highlands.edu</a></p>
<b>Sponsor, Title, Department, Institution</b>	Dr. Alan Nichols, Associate Professor of Philosophy, SSBE Dean, Georgia Highlands College
<b>Proposal Title</b>	
<b>Course Names, Course Numbers and Semesters Offered</b>	<p>BUSA 2205: Fundamentals of Computer Applications</p> <p>A course designed to assure a basic level of computer applications literacy: to include spreadsheet, database, LAN, e-mail and Internet uses as well as word-processing skills.</p> <p>This course is offered every semester as a face-to-face, hybrid and fully online class.</p>



<b>Final Semester of Instruction</b>	Fall 2018				
<b>Average Number of Students Per Course Section</b>	26	<b>Number of Course Sections Affected by Implementation in Academic Year</b>	12	<b>Total Number of Students Affected by Implementation in Academic Year</b>	312
<b>Average Number of Course Sections Per Semester</b>	Fall 2017: 5 sections (128 total students, average 26 per section) Summer 2017: 1 section, 23 students Spring 2017: 6 sections (155 total students, average 26 per section)				
<b>Award Category (pick one)</b>	<input checked="" type="checkbox"/> No-or-Low-Cost-to-Students Learning Materials <input type="checkbox"/> Specific Core Curriculum Courses				
<b>Are you planning on using an OpenStax textbook?</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
<b>List the original course materials for students (including title, whether optional or required, &amp; cost for each item)</b>	MS Office Excel 2016: Complete (SIMNET SIMBK Access Code)  Author: Nordell  Access Code ISBN: 9781259895296  Only purchase option for the access code is new.  \$ 85.75				
<b>Requested Amount of Funding</b>	\$ 10,800				
<b>Original Per Student Cost</b>	\$ 85.75				

<b>Post-Proposal Projected Per Student Cost</b>	\$ 0
<b>Projected Per Student Savings</b>	\$ 85.75
<b>Projected Total Annual Student Savings</b>	\$ 26,754.00

## NARRATIVE

## 1.1 PROJECT GOALS

We intend to provide free, high quality learning materials for Georgia Highlands College students who take BUSA 2205 by adopting Open Educational Resource materials and switching from the current purchased textbook/software combination. By adopting Open Educational Resources (OER) materials, students will have immediate access to the textbook on the first day of class. We expect to see a decrease in the withdrawal rates of our students with the transformation to the OER. While it is important to note that this project proposal is designed to meet the criteria of the “Top 100 Undergraduate Courses”, it also bears mentioning that there has been no other proposal accepted for “Fundamentals of Computer Applications”. We hope to contribute to the growing body of resources for this course.

As the price of textbooks and software increase, the options for our students to attain this package, SimNET, for a reasonable amount of time decreases. Renting, sharing, borrowing, or checking out textbooks from libraries, is not an option for this course. The current format for the course is that approximately 40% of the work done in the course is through SimNET. The largest service areas for GHC include Bartow, Cobb, and Floyd County. The median incomes for these areas are \$22,595, \$33,778, and \$21,218, respectively. In Floyd County, 19.6% of families live below the poverty line. Oftentimes, this means that our students are faced with the decision to either purchase books for school or the pay the bills that sustain their households. Adopting an OER, helps create access to better futures and an exit from poverty for our students. Because of this transformation, the estimated collective savings for students in these 5-6 sections is \$26,754.00 each academic year.

Adopting OER materials increases preparedness of adjunct instructors. Oftentimes, instructors have to be hired with very late in the summer and they are not given adequate time to acclimate to both the LMS and SimNET. This lack of access and training can negatively affect student success. The creation of master course in the LMS ensures that instructors will have all of the resources necessary to teach and support student success.

To evaluate and assess the effectiveness of this conversion we will measure students' perceptions and experiences with OER materials as well as the course success rates with OER materials compared against previous courses not using OER materials.

## 1.2 STATEMENT OF TRANSFORMATION

Fundamentals of Computer Applications (BUSA 2205) connects the Microsoft Excel application and how it applies to information competency, emerging technology and technology purchasing for personal and commercial use. This course is part of the pathway for the Associates of Science and Bachelors of Business degrees. In March 2016, Georgia Highlands College announced the addition of the Bachelors of Business Administration. This program includes concentrations in healthcare management and logistics and supply chain management. The enrollment for BUSA 2205 for the 2016-2017 academic year increased by 15% from the 2015-2016 academic year. Since Fall 2017 was the first semester of the BBA program, it can only be expected that the demand for the course will continue to increase.

In this class, students complete a majority of their assignments in SimNET. SimNET is an interactive textbook that allows students to read the content of the lesson, see an example, try an example and then complete an assignment. The drawback is that if the student does not follow the steps exactly the way SimNET did them in the example, and then the answer is graded as incorrect. SimNET also has some compatibility issues with Mac hardware and operating systems. As with all MS Office applications, there is more than one way to complete most tasks. SimNET is very strong in instructing students how to complete the task but it is weak in the problem solving and critical thinking elements that will benefit the student when they are applying their knowledge in the real world.

The plan is to use David Bourgeios' book *Information Systems for Business and Beyond*. This text is a free eBook from Saylor.org and the same text that is used by the eCore class Electronic Technology in the Educational Environment. This content will fulfill three of the seven Student Learning Outcomes in the class. In addition to the Bourgeios' book, the transformation will integrate the Microsoft Office Excel Certification content to connect the book and MS Excel. Bringing the two elements together allows for better retention and aligns with the TILT framework.

In alignment with the TILT framework, this transformation will allow for the creation of module assignments and content quizzes that reinforce the course Student Learning Outcomes. Students will learn at the beginning of the course that all assignments are designed with the goal of mastering course content. The mastery of the content ensures students can carry out these processes in a business setting.

### 1.3 TRANSFORMATION ACTION PLAN

The transformation action plan will be accomplished in three phases before the course is delivered in Spring 2018, pre-planning, planning and course redesign

#### ***Pre-Planning***

In the pre-planning phase, the Subject Matter Expert (SME) will research and evaluate multiple options for no cost textbook options. In addition, the SME will look to the MS Office training site to gather information from the Excel Expert Certification to provide this as an option for students who wish to pursue this certification. Whichever textbook option is chosen it will be crucial that the transformation addresses frequent concerns from faculty. Those concerns include:

- Consistent grading mechanism
- Building problems “from scratch” is frustrating
- Closing the loop, ensuring students understand their mistakes and what is required to fix them

An element of the pre-planning phase will include research the best methods for assessing students on computer applications.

#### ***Planning***

In the planning phase, the SME will work with the instructional designer to develop the master course ensuring it meets all quality and accessibility criteria. Activities, assessments, content, videos and other supplementary materials will be collected and created in the LMS. This phase of the project will be completed before the spring semester starts on January 8, 2018.

#### ***Course Redesign***

A variety of proven fundamental methodologies tied to teaching and learning will be employed in the course. First will be the metacognitive process outlined by Dr. Sandra McGuire in *Teaching Students How to Learn*. Although these methodologies are predominately used in developmental or academic success course, they should prove to be useful for this content and application course format. Second will be the implementation of the TILT method. TILT stands for Transparency in Learning and Teaching. The focus of this method created by Mary-Ann Winkelmes is to promote student success through teaching with a transparent framework. In addition to TILT, Universal Design for Learning principles will be integrated in the redesign ensuring the course is fully accessible to all students and learning styles. Lastly, the redesign will look to Benedict Carry's *How We Learn* to enhance the pedagogical elements of the course since it will be taught in three different modalities.

In addition to the creation of the master course, a LibGuide will be created to allow the redesign of the course and all of the resources compiled to be shared out in accordance with Creative Commons licensing.

## 1.4 QUANTITATIVE AND QUALITATIVE MEASURES

Assessment of this course is going to take place on a multitude of levels. The assessment measures will be both qualitative and quantitative. At the beginning of the semester, a technology survey will be required to gauge the skill level of the students enrolled in the course. “Studies have concluded that how students experience their campus environment impacts both learning and developmental outcome” (MSU Office of Inclusion and Intercultural Initiatives, 2017). Since this course has a prominent technology component, it is essential to understand the students’ technology background.

Additional qualitative measures will be carried out via survey that occurs two times during the semester, at the midpoint and the end of the semester. The survey will use a satisfaction scale levels will be Satisfied (5), Somewhat Satisfied (4), Neutral (3), Somewhat Dissatisfied (2), and Dissatisfied (1).

The course will be evaluated quantitatively by comparing DWF rates of the OER course to courses not using the OER. There may be a need to use data from previous semesters for this measurement. The other way that the course will be evaluated quantitatively is comparing overall course grade, percentage of content visited by the student and the pass rates associated with the Student Learning Outcomes for the course. In order to obtain this data the OER content will be aligned with the Student Learning Outcomes (SLO), course objectives and assignments in the course. Each SLO and course objectives will be considered “passed” when students achieve a grade of 70 or greater on the assignments in the course. Using the Competency Tool in the Learning Management will allow for continuous calculation. The desired outcome is that the difference between the students’ final grades and pass rate of the SLOs will be no more than a 10% difference.

Lastly, the course will include a pre-test and posttest assessing the understanding of how the technology skills included in the course support the Student Learning Outcomes and course objectives.



## 1.5 TIMELINE

Time	Milestone
October 2017	Assess OER Options
November-December 2017	Attend Kick-Off Meeting Locate and build supplemental materials Redesign course in D2L master course Building assessment tools
January 2018	Delivery of course, modality TBD
April 2018	Data collection from students regarding experience and effectiveness of assessment tools
May-July 2018	Based off of data collection make modifications to course prior to Fall 2018
August 2018	Delivery of course, modality TBD
November 2018	Data collection from students regarding experience and effectiveness of assessment tools
December 2018	Submit final report

## 1.6 BUDGET

David Bridges, M.S. Human Resources Instructor of Record/SME/Principle Investigator	\$5,000.00
Katie Bridges, M.Ed. Instructional Designer	\$5,000.00
<u>Travel to Kick-off Meeting</u>	<u>\$ 800.00</u>
Total	\$10,800.00

## 1.7 SUSTAINABILITY PLAN

Once the redesign of the course is complete, a master course with activities, assessments, supplementary materials for the text and grading rubrics will be made available to any GHC faculty member, full or part time, that wishes to use this platform for the course. As technology changes it will also allow for ease of updating the material since a new edition of a textbook will not be necessary. Having a foundational course for the AS and BBA program available for students with a no cost textbook has the potential of increasing enrollment in the course. The master course will be available to faculty at other USG institutions via Brightspace platform and a LibGuide. The course materials will be maintained by Dave Bridges, instructor, and Katie Bridges, instructional designer.

## 1.8 REFERENCES & ATTACHMENTS

- Carey, B. (2015). *How we learn: The surprising truth about when, where and why it happens*. Random House.
- McGuire, S. (2015). *Teach students how to learn: Strategies you can incorporate into any course to improve student metacognition, study skills, and motivation*. Stylus.
- MSU Office of Inclusion and Intercultural Initiatives. (2017). Purpose of climate survey. Retrieved September 17, 2017, from Michigan State University College of Music website: <http://music.msu.edu/diversity/purpose-of-climate-surveys>
- Population estimates. (2016). Retrieved September 17, 2017, from <http://www.census.gov/quickfacts/table/PST045215/00>
- University of Nevada, Las Vegas (UNLV). (2017). Transparency in learning and teaching in higher education. Retrieved September 17, 2017, from UNLV Office of Executive Vice President and Provost website: <https://www.unlv.edu/provost/teachingandlearning>

# Syllabus

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Fundamentals of Computer Applications (BUSA 2205)  
Fall 2018, CRN 80794

Mr. Dave Bridges, MS HR, MBA, Instructor

[dbridges@highlands.edu](mailto:dbridges@highlands.edu)

Phone: 678-689-9542

Office Hours: virtual 7 p.m. to 9 p.m.  
Tuesday, Thursday

Meeting Days & Times	Satisfactory Progress Date	Last Day to Withdraw with "W"
Wednesday 12:30-1:45pm	October 1, 2018	October 22, 2018

**Business Administration 2205: Fundamentals of Computer Applications, 3 credit hours**

**Prerequisite:** Satisfactory placement scores, ENGL 0989 and MATH 0987 or ENGL 0989 and MATH 0989

A course designed to assure a basic level of computer applications literacy; to include Spread sheet, database, LAN, e-mail and Internet uses as well as word-processing skills.

**Textbook and Technology Requirements**

- David Bourgeios' book [\*Information Systems for Business and Beyond\*](#).
- Storage Mechanism (preferably a Thumb Drive or Cloud Account which you have through the college)

**Course Student Learning Outcomes**

Upon completion of this course students will be able to:

1. Gain an understanding of information competency, the Information Processing Cycle, Basic Components of the Personal Computer, and Technology used in the Workplace.
2. Demonstrate the ability to Create and Edit Workbooks and Charts which utilize Functions and Formulas.
3. Understand and applying the fundamental database concepts to spreadsheet development such as Importing, Creating Tables, Sorting and Filtering, and using Conditional Formatting.
4. Use advanced spreadsheet concepts such as Working with Multiple Worksheets and Workbooks, applying Advanced Functions, Setting Validation, and Protecting Workbooks.
5. Develop an understanding and exposure to new and emerging technologies
6. Gain the ability to serve as an informed purchaser of technology (personal, commercial)
7. Prepare a capstone project which applies concepts and principles of course to a unique series of problems.

## Assessments

**Knowledge Quizzes:** This course is divided into units and each unit is divided into modules. In D2L each module has a presentation that includes questions about the presentation. Students have 3 attempts at each question, and a minimum total score of 60% is required. These questions are due on Sundays by 11:30 p.m. These presentations and questions are crucial to the completion of the Applications Assignments.

**Application Assignments:** These assignments will be given and completed in class each Monday, they are due at the end of class. These assignments are designed to reinforce the material covered in the module presentations. Additionally these assignments will prepare students for example and the capstone project. These assignments will be submitted using D2L Assignment Submission Folders.

**Exams:** Each exam will be made of two parts. Part I will be completed using the D2L Quiz Tool. This part is comprised of multiple choice, matching, ordering, etc. questions over the material presented in each module presentation. Part II will be completed using MS Excel. This part will take concepts and problems highlighted in Knowledge Quizzes and Applications Assignments and elevating them demonstrating student's ability to create and synthesize information using Excel. Part II will be submitted in D2L Assignment Submission Folder.

**Capstone Projects:** Each student will be given a set of information that they must analyze (using Excel), present (using PowerPoint) and describe (using Word). Successful completion of all Knowledge Quizzes and Applications Assignments will be crucial when completing the capstone project. Three (3) files will be submitted using the D2L Assignment Submission Folder.

## Grading

Assessment	Points per Assessment	Total Number of Assessments	Total Points
Exams	75	3	225
Application Assignments	25	11	275
Knowledge Quizzes	25	4	100
Discussion Postings	25	4	100
Capstone	300	1	300
Syllabus Quiz Tech Questionnaire Mac vs. Windows Quiz	10	3	30 (bonus)

*Total Points Possible: 1000*

## Final Grade Calculation

Letter Grade	Total Points Earned
A	900-1000
B	800-899
C	700-799
D	600-699
F	0-599

## Early Grades Statement:

"GHC offers a variety of part-of-term classes to allow our students to have flexible schedules. However, there are only three Semesters each year; Spring, Summer and Fall. It is only at the end of each Semester that grades are rolled to academic history and available on the official transcript. After each part-of-term, as soon as Instructors have entered grades, they may be viewed online by logging into the [SCORE](#). Transcripts may also be request at any time by logging into the [SCORE](#). Prior to the end of term, should a student need an early grade letter sent to another institution they may complete the [request form](#) and submit it to the Registrar's Office for processing. Please contact the Registrar's Office at [registrar@highlands.edu](mailto:registrar@highlands.edu) if you need any assistance."

## Make-up/Late Work

Assignments that are turned in after the due date will have points deducted. Specific details on how the points will be deducted are outlined below.

Assignment	Due day and time	Points deducted
Exams	See tentative schedule	<b>Not Accepted Late</b>
Applications Assignments	Tuesdays at 11:30 p.m.	10% per day
Knowledge Quizzes	Tuesdays at 11:30 p.m.	10% per day
Capstone Projects	December 17, at 11:30 p.m.	<b>Not Accepted Late</b>
Syllabus Quiz Technology Questionnaire Mac vs. Windows Quiz	August 29, at 11:30 p.m.	<b>Not Accepted Late</b>

Make up work will only be accepted under the following conditions:

- Student will email the instructor no later than the day the assignment is due notifying them that the assignment will not be turned in that day. I do not want to know the why, just let me know it will be late.
- Students will then receive a 2 day extension on the assignment due date

## Attendance/Extended Absence

Since this is a hybrid class so attendance is determined differently than a face to face class. By completing the in-class and online assignments in the course, students will have successfully attended the class. See below for details of what activities are considered attendance and nonattendance.

Attendance Activities	Nonattendance Activities
Following the schedule of due dates	Logging into learning management system
Participating in discussion postings	Emailing classmates
Completing content quizzes by due date	Reading course material and/or watching videos
Submitting Challenge Essays and Going Further Assignments by due date	Participating in academic counseling or advising

*Taken from US Department of Education Program Integrity Issues Final Rule, October 2010*



"Students, who have circumstances that prevent them from continuing to attend classes over an extended period of time, sometimes request that the faculty member permit them to submit work in absentia to receive credit to complete the course. If the concurrent absences will constitute more than 15% of the class sessions for the term, then written permission from the Academic Dean is required before any course assignments can be completed while missing class. The student must be in good academic standing in the course to make the request. All approved coursework must be completed by the end of the semester in which the course was begun."

## Netiquette

Netiquette is the practice of etiquette in an online environment. The following list of netiquette rules are based on Virginia Shea's book [\*Netiquette\*](#).

- Remember you are communicating with humans. Follow the "Golden Rule", always.
- Be ethical in all of your behaviors. Just because it's an online class doesn't mean that you do not have to follow common courtesy rules.
- This is an online class, a place of education not your Facebook or Twitter page. Use the appropriate language and grammar.
- Be respectful of your classmate's time and bandwidth. Keep postings and other communications to the point, no rambling. Do not post large files that can require excessive download time.
- Use Reply All sparingly. If the comment does not reply to the whole group, then do not send it to the whole group.
- Pay attention to the comments and information you send and post. Re-read what you have written to make sure it makes sense, contains no spelling or grammar issues. Making postings from your cell phone is not a good idea.
- Absolutely no profane language or bullying.
- If you have something to offer in a discussion, don't be afraid to share it in a polite and professional way.

## Early Warning Program:

Georgia Highlands College requires that all faculty members report their students' progress throughout the course of the semester as part of the institution-wide Early Warning Program (EWP). The objective of the program is to support academic success by reviewing early indicators of satisfactory student progress. In accordance with EWP, faculty members provide the Registrar's Office with academic reports of each student enrolled in their course(s) at checkpoints staggered throughout the semester. The following success factors are reported at their corresponding checkpoint:

**Week 2:** Notification of Non-attendance, **August 30, 2018**

**Week 6:** Satisfactory or Unsatisfactory Progress, **October 1, 2018**

## Course Withdraw

**Withdrawal Date: October 22**, is the last day to withdraw with a "W." It is your responsibility, as a student, to follow the GHC withdraw procedure and do so by the midterm date. Students who abandon the course or do not properly withdraw by **October 22, 2018**, are subject to a grade of **F** or **F\$**.

## Incomplete and Unearned F

A grade of incomplete indicates that a student who is performing satisfactory work is unable to meet the full course requirements for non-academic reasons beyond the student's control. An **"I"**

**must be removed within two semesters of residence, or one calendar year, whichever is shorter, or it will automatically become an F.** An "I" grade is not given in Learning Support courses. Arrangements for the removal of an "I" should be made with the instructor during the semester immediately succeeding the semester in which the "I" was awarded. Students do not reregister for a class in which an "I" has been given.

**F\$ – This symbol is for an unearned F**, which indicates that the student stopped attending class and did not fill out appropriate paperwork to withdraw. Additionally it means the student did not complete at least 60% of their coursework. This grade is computed in the grade point average as an F. **Access the [GHC Student Handbook and other student resources](#) here.**

### **Tobacco-Free Campus:**

Georgia Highlands College prohibits the use of tobacco products on any property owned, leased, or controlled by GHC. All faculty, staff, students, visitors, vendors, contractors, and all others are prohibited from using any tobacco products (i.e., cigarettes, eCigarettes, cigars, smokeless tobacco, snuff, chewing tobacco, etc.) while on GHC property.

### **Student Conduct and Academic Integrity Policies**

Policies on student conduct and academic integrity are in the College's "Student Rights & Responsibilities" found in the Student Handbook.

### **Disability Statement:**

"If any student in the class feels that he or she needs accommodation due to a disability, please feel free to discuss this with the instructor early in the term. Georgia Highlands College has resources available for students with certain disabilities. Accommodations may be made (such as providing materials in alternative formats, assuring physical access to classrooms or being sensitive to interaction difficulties that may be posed by communication and/or learning disabilities) through Student Support Services on all campuses. For more information please contact: Cartersville 678-872-8004; Douglasville and Floyd 706-368-7536; Marietta 678-915-5021; Paulding 678-946-1029."

### **Financial Aid Statement:**

"This message applies only to students receiving financial aid: Federal regulations state that if a student did not attend classes and received failing grades, then the grades were not earned and financial aid needs to be reduced accordingly. Please be advised that any student receiving a 0.00 GPA will be required to prove that the 0.00 GPA was earned by attending classes or completing requirements for each class. Students who have earned at least one passing grade for the semester will not be affected by this regulation. If a student has properly withdrawn from all classes, the student's financial aid should be adjusted from the time they signed the withdrawal form."

### **Testing Center**

Georgia Highlands College has five testing locations in Northwest Georgia. Testing is by appointment only. Please visit [Testing Center website](#) for more information and to schedule testing. Students who are eligible for special accommodations when testing should contact the Disabilities Support Services specialist at their campus to arrange a special accommodations testing appointment.

### **D2L Brightspace**

D2L is an online learning management system that can host supplemental material (syllabi and

lecture notes) and coursework (class discussions, assignments, and quizzes) for your classes at GHC.

D2L and GHC email will require you to use your GHC email/network credentials.

To enter D2L, select the "MYGHC Login for Students" button [the resulting screen looks like the email sign in]

- Enter your email address: studentusername@student.highlands.edu
- Use your email (network) password

Forgot Your Password:

Retrieve your GHC email address, StudentID or PIN on the GHC SCORE Login Page, if you have forgotten them. Submit your password reset request to [rt@highlands.edu](mailto:rt@highlands.edu), and we will help you as quickly as possible.

### GHC IT Help Desk

The IT department is available via phone during staff office hours:

**Monday – Thursday:** 8:00am - 5:30pm

**Friday:** 8:00am - noon.

Floyd and Heritage Hall: (706) 295-6775

Cartersville: (678) 872-8086

Submit a Request Ticket to [rt@highlands.edu](mailto:rt@highlands.edu)

Due to the limited staff at other GHC campuses, students attending the Marietta, Paulding, and Douglasville sites are encouraged to call one of the numbers above for the fastest response time.

### Tutoring Services at GHC

#### GHC Tutorial Center

The purpose of the Georgia Highlands College Tutorial Center is to help students to improve their academic skills and succeed in their chosen college curriculum. The staff of the Tutorial Center is dedicated to helping students acquire the skills to become independent learners and enhancing the education received by students in the classroom. Tutors do not grade papers or in any way substitute for classroom instruction and course instructors provide the standard for grading.

The Tutorial Center provides tutorial services to all GHC students:

- Face-to-face tutoring in math, English, reading, and some sciences is available to all currently enrolled students.
  - Tutoring hours are offered on the Rome, Cartersville, Marietta, Paulding, and Douglasville sites.
  - No appointment is necessary. Drop by one of our centers during the hours posted [here](#) and see a tutor today.

#### Brainfuse Tutoring Services for Online Classes

Online tutoring through Brainfuse is available to students enrolled in any online class.

- [Log In](#)
- [Instructions for creating an account](#)
- Hours and availability of Brainfuse tutors are posted once you sign in.
- To learn more about Brainfuse, click [here](#).

## Tentative Schedule

The schedule below can be used to track due dates for all assignments during this course. Additionally these pages can be printed and grades can be tracked. This schedule is subject to change during the semester. It is the student's responsibility to look for updates via Announcements, Calendar and/or Email.

### Intro to BUSA 2205: August 20-29, 2018

<i>Assignment</i>	<i>Due Date</i>	<i>Grade</i>
Syllabus Quiz	August 29	/10*
Windows vs. Mac Quiz	August 29	/10*
Technology Questionnaire	August 29	/10*

### Unit 1, Module 1—Technology in the Workplace: August 29—September 4, 2018

<i>Assignment</i>	<i>Due Date</i>	<i>Grade</i>
Knowledge Quizzes	September 4	/25
Applications Assignments	September 4	/25

**Attending/Non-Attending Reported August 30 50**

### Unit 2, Module 1—Intro to Excel and Using Spreadsheets: September 5-11, 2018

<i>Assignment</i>	<i>Due Date</i>	<i>Grade</i>
Applications Assignments	September 11	/25

### Unit 2, Module 2—Excel Basics I: September 12-18, 2018

<i>Assignment</i>	<i>Due Date</i>	<i>Grade</i>
Applications Assignments	September 18	/25

### Unit 2, Module 3—Excel Basics II: September 19-25, 2018

<i>Assignment</i>	<i>Due Date</i>	<i>Grade</i>
Applications Assignments	September 25	/25

### Unit 2, Module 4—Formulas I: September 26—October 2, 2018

<i>Assignment</i>	<i>Due Date</i>	<i>Grade</i>
Applications Assignments	October 2	/25

**Satisfactory/Unsatisfactory Reporting October 1 150 points possible**

### Unit 2, Module 5—Formulas II and Charts: October 3-9, 2018

<i>Assignment</i>	<i>Due Date</i>	<i>Grade</i>
Knowledge Quiz	October 9	/25
Applications Assignments	October 9	/25

**Test 1: Unit 1 and Unit 2 October 9 /75**

### Unit 3, Module 1—Spreadsheets as Databases I: October 10-16, 2018

<i>Assignment</i>	<i>Due Date</i>	<i>Grade</i>
Applications Assignments	October 16	/25

**Unit 3, Module 2—Spreadsheets as Databases II: October 17-23, 2018**

<i>Assignment</i>	<i>Due Date</i>	<i>Grade</i>
Applications Assignments	October 23	/25
<b>Last Day to Withdraw</b>	<b>March 12</b>	<b>325 points possible</b>

**Unit 3, Module 3—Spreadsheets as Databases III: October 24-30, 2018**

<i>Assignment</i>	<i>Due Date</i>	<i>Grade</i>
Knowledge Quizzes	October 30	/25
Applications Assignments	October 30	/25
<b>Test 2: ALL Unit 3</b>	<b>October 30</b>	<b>/75</b>

**Unit 4, Module 1—Advanced Spreadsheet Concepts I: October 31—November 6, 2018**

<i>Assignment</i>	<i>Due Date</i>	<i>Grade</i>
Applications Assignments	November 6	/25

**Unit 4, Module 2—Advanced Spreadsheet Concepts II: November 7-13, 2018**

<i>Assignment</i>	<i>Due Date</i>	<i>Grade</i>
Knowledge Quizzes	November 13	/25
Applications Assignments	November 13	/25
<b>Test 3: ALL Unit 4</b>	<b>November 13</b>	<b>/75</b>

**Capstone: November 14—December 10, 2018**

<i>Assignment</i>	<i>Due Date</i>	<i>Grade</i>
Work on Capstone in class		
<b>Capstone Due</b>	<b>December 17</b>	<b>/300</b>

# Final Report

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# Affordable Learning Georgia Textbook Transformation Grants

## Final Report

*To submit your Final Report, go to the Final Report submission page on the ALG website:*

*[http://affordablelearninggeorgia.org/site/final\\_report\\_submission](http://affordablelearninggeorgia.org/site/final_report_submission)*

*Final report submission requires four files:*

- *This completed narrative document*
- *Syllabus or syllabi*
  - *(if multiple files, compress into one .zip folder)*
- *Qualitative/Quantitative Measures data files*
  - *(if multiple files, compress into one .zip folder)*
- *Photo of your team or a class of your students w/ at least one team member, minimum resolution 800x600px*
  - *(nearly all smartphones take photos larger than this size by default)*

*Follow the instructions on the webpage for uploading your documents. Based on receipt of this report, ALG will process the final payment for your grant. ALG will follow up in the future with post-project grantee surveys and may also request your participation in a publication, presentation, or other event.*

## General Information

**Date:** December 20, 2018

**Grant Round:**10

**Grant Number:** 343

**Institution Name(s):** Georgia Highlands College

**Project Lead:** David Bridges, instructor, [dbridges@highlands.edu](mailto:dbridges@highlands.edu)

**Team Members (Name, Title, Department, Institutions if different, and email address for each):** Katie Bridges, instructional designer, [kbridges@highlands.edu](mailto:kbridges@highlands.edu)

**Course Name(s) and Course Numbers:** BUSA 2205, Fundamentals of Computer Applications

**Semester Project Began:** Fall 2017

**Final Semester of Implementation:** Fall 2018

**Total Number of Students Affected During Project:** 75 in the OER sections

## 1. Narrative

Prior to the transformation BUSA 2205 was taught using a SimNET, an online textbook and courseware application. The greatest difficulty existed in the instructor's inability to see what the student was doing wrong and to help them correct the error. Additionally, SimNET was very order specific meaning if the instructions were to bold text then change to 12 point, SimNET would count it incorrect to change the font size then bold. While there are many functions within MS Excel where order matters, this is an instance where it does not and the students are penalized. This is quite possibly the biggest contributing factor to the high DFW rate the instructor saw in Fall 2017.

After extensive work during the Fall 2017 semester, the pilot of the OER for BUSA 2205 was taught Spring 2018. The course was taught in a hybrid format and was partially flipped. The course was designed for student to demonstrate knowledge by way of Knowledge Quizzes outside of class. Using the question statistics provided by D2L Quiz Tool the instructor was able to identify areas of weakness. These areas then became the first topic of discussion in the face to face class. The remainder of class time was used for students to complete Application Assignments. These assignments were due at the end of class and designed to have students apply the knowledge they had acquired. This flow was very successful and students found the hands on time beneficial especially with the instructor in the room. The exams were structured in a similar way, where students had to complete a knowledge portion and then demonstrate their knowledge in an application assignment.

To move students up through Bloom's Taxonomy, the course was designed to include a Capstone Project. Students were given a raw set of data and a list of processes they must complete. After completing the steps in the Excel file, students were to create a narrative outlining what they would say when explaining the data and graphs created. If a picture could be drawn of the movement of the course it would look like Figure 1.



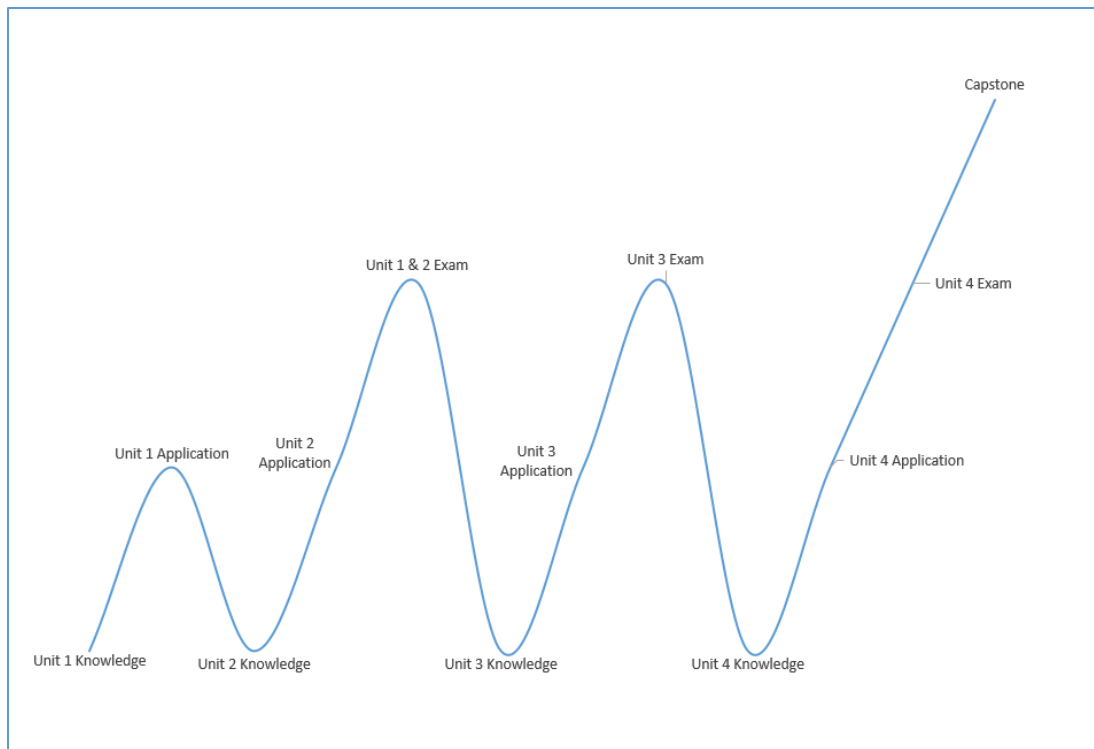


Figure 1: The graphical representation above simulates the movement through Bloom's Taxonomy students experience in the transformation: Knowledge, Application, Evaluation, Creation.

After the pilot in Spring 2018, the instructor realized it was important to determine if the transformation worked in a fully online course. In Summer 2018, the course was taught as a fully online course. To supplement the students, videos were created of the instructor reviewing the content in the PowerPoints. This allowed for live examples to be demonstrated and students to watch or re-watch the information as needed. The Summer 2018 session also required the course be taught in 8 weeks as opposed to 16 weeks. Adjustments were made to the layout and structure of the course to accommodate the reduced timeline.

A byproduct of the fully online pilot was the creation of videos. These videos were made available to students in the final semester of the transformation, Fall 2018. Students remarked having the videos was helpful and provided a great way to revisit material they found difficult. As the Spring 2019 semester is on the horizon, the videos will remain in the course.

## CHALLENGES

The greatest challenge was to build a substantial set of data examples that represent scenarios students might see in the business world. Through extensive research a data repository was located. The United States General Services Administration's office of

Technology Transformation Service website was found. This website contains over 300,000 different data sets encompassing a wide variety of categories.

## **INSTRUCTION IMPACTS**

The transformation reduced the amount of time spent troubleshooting SimNET. Students were frequently experiencing problems with SimNET. The biggest problem students faced was the incompatibility with the Mac OS. Having to devote less time to troubleshooting affords an opportunity to create more examples and videos.

## **STUDENT IMPACT**

Looking beyond the grades of the course, the attitude and morale of the students in the transformed courses was much higher than prior to the transformation. Where students seemed to spend a majority of their time navigating the idiosyncrasies of SimNET in Fall 2017, the students in Spring 2018 spent their time learning the material. All of the content and activities were in D2L, a system all students were familiar with dramatically decreasing the tension and stress of the students. An additional barrier that seemed to exist for students was the lack of reliable internet connection. In the pre-transformation format of the course, student would have to spend time outside of class, often at home, working on the SimNET activities. In rural NW there are options for home internet but reliability is an issue. This is a barrier. The transformation reduced the barrier. The content of the course was provided in the form of a downloadable, free textbook and PowerPoint presentations. Students only needed access to the internet outside of class to complete the Knowledge Quizzes. No longer did they need the reliable internet to review material and complete assignments.

## **HINDSIGHT**

Seeing the impact, the videos had on student success, in hindsight having them available for the students in the first semester would have been beneficial. In future revisions, mainly as a result of updates to MS Excel, videos will be created from the beginning.

## **2. Quotes**

### **Fall 2018**

*I personally think that the PowerPoints that we use in this class are sufficient. The PowerPoints go into great detail, and explain everything in depth. They are not hard to understand. I do not think that a textbook would be required to do well in this class.*

*I am one that uses their text book when I don't know how to do something and it tends to be easier to find something in a book then having to look through slides on a PowerPoint.*

### **Summer 2018**

*I like the idea of having no-cost textbook. I was nervous when I decided to take an online class for the Summer because I thought i would have to order a textbook and I didn't know if i would have it in for my first assignment. I love not having a textbook. I wish all my classes did this.*

*I like having a textbook because I think it is easier to flip through the pages to do research, but it is never a deal breaker for a course. Having a text book that you can search sometimes can make it easier to complete assignments, rather than searching through multiple pages of the content tab of D2L to find what you are searching for.*

### **Spring 2018**

*I personally do not mind not having a textbook for this course. I believe that a student can learn the same material through PowerPoints, reading other resources online, or doing hands-on activities.*

*Doesn't really bother me, but could be an advantage to less fortunate students or those who don't benefit from books*

## **3. Quantitative and Qualitative Measures**

### **3a. Uniform Measurements Questions**

*The following are uniform questions asked to all grant teams. Please answer these to the best of your knowledge.*

#### **Student Opinion of Materials**

**Was the overall student opinion about the materials used in the course positive, neutral, or negative?**

Total number of students affected in this project: 75

- Positive: 82 % of 39 number of respondents
- Neutral: 13 % of 39 number of respondents
- Negative: 5 % of 39 number of respondents

#### **Student Learning Outcomes and Grades**

**Was the overall comparative impact on student performance in terms of learning outcomes and grades in the semester(s) of implementation over previous semesters positive, neutral, or negative?**

*Student outcomes should be described in detail in Section 3b.*

Choose One:

- ☒ Positive: Higher performance outcomes measured over previous semester(s)
- ☐ Neutral: Same performance outcomes over previous semester(s)
- ☐ Negative: Lower performance outcomes over previous semester(s)

#### **Student Drop/Fail/Withdraw (DFW) Rates**

**Was the overall comparative impact on Drop/Fail/Withdraw (DFW) rates in the semester(s) of implementation over previous semesters positive, neutral, or negative?**

#### **Drop/Fail/Withdraw Rate:**

*Depending on what you and your institution can measure, this may also be known as a drop/failure rate or a withdraw/failure rate.*

18.67% of students, out of a total 75 students affected, dropped/failed/withdrew from the course in the final semester of implementation.

Choose One:

- ☒ Positive: This is a lower percentage of students with D/F/W than previous semester(s)
- ☐ Neutral: This is the same percentage of students with D/F/W than previous semester(s)
- ☐ Negative: This is a higher percentage of students with D/F/W than previous semester(s)

### **3b. Measures Narrative**

When evaluating the OER transformation there were three specific things examined: DFWI comparison of OER/non-OER and OER/pre-OER; GPA comparison of OER/non-OER and OER/pre-OER; and student satisfaction. The DFWI and GPA comparison will be evaluated quantitatively, whereas, the student satisfaction is evaluated qualitatively.

The DFWI comparison of OER/non-OER and OER/pre-OER revealed the results to not be statistically significant. Nevertheless, the data does show a change as occurred. Figure 2 compares the DFWI percentage of the OER and non-OER courses from Spring 2018 to Fall 2018. What should be noticed is the sample size of each population. The sample size of the non-OER population is 313 and the sample size of the OER population is 75. Comparing the DFWI rates for these samples is misleading as the non-OER population is more than 4 times the size of the OER population. Only 1.09% separates the two DFWI rates, therefore, expanding the OER transformation to other sections would change the DFWI rates. As an aside, the non-OER sections used a different textbook in Fall 2018. During Summer 2018, SimNET was replaced by Cengage for all non-OER sections. This change in text may have affected the DFWI results for the non-OER sections.

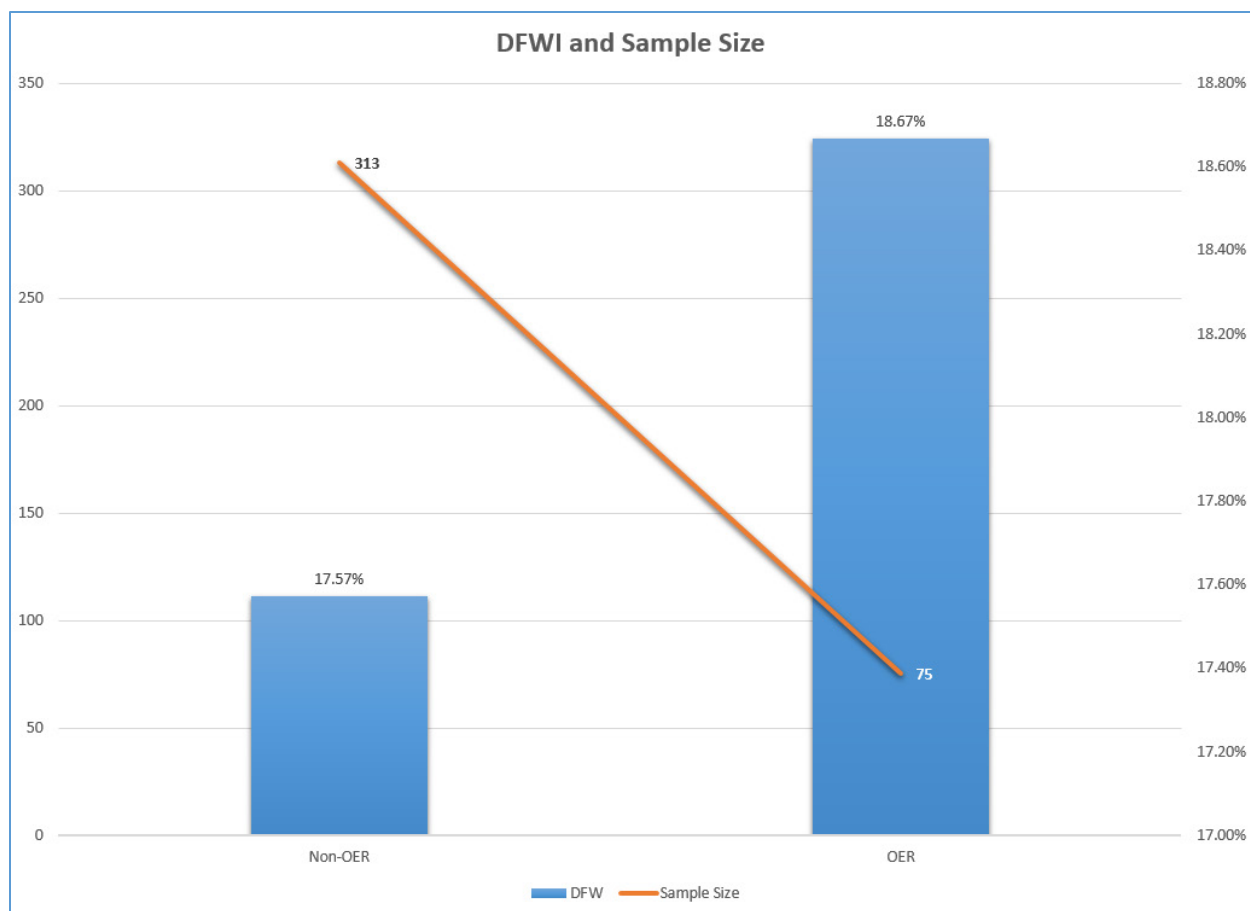


Figure 2: Comparison of DFWI rates and sample sizes of the OER and non-OER courses taught Spring 2018 through Fall 2018

Figure 3 compares the OER and pre-OER data. While this comparison is also effected by dramatic differences in sample size, here the DFWI percentage in the OER is nearly 18% less than the pre-OER DFWI percentage. This comparison is important as it looks at the instructor's classes before and after the transformation. This data supports the hypothesis the transformation would decrease the DFWI rate.

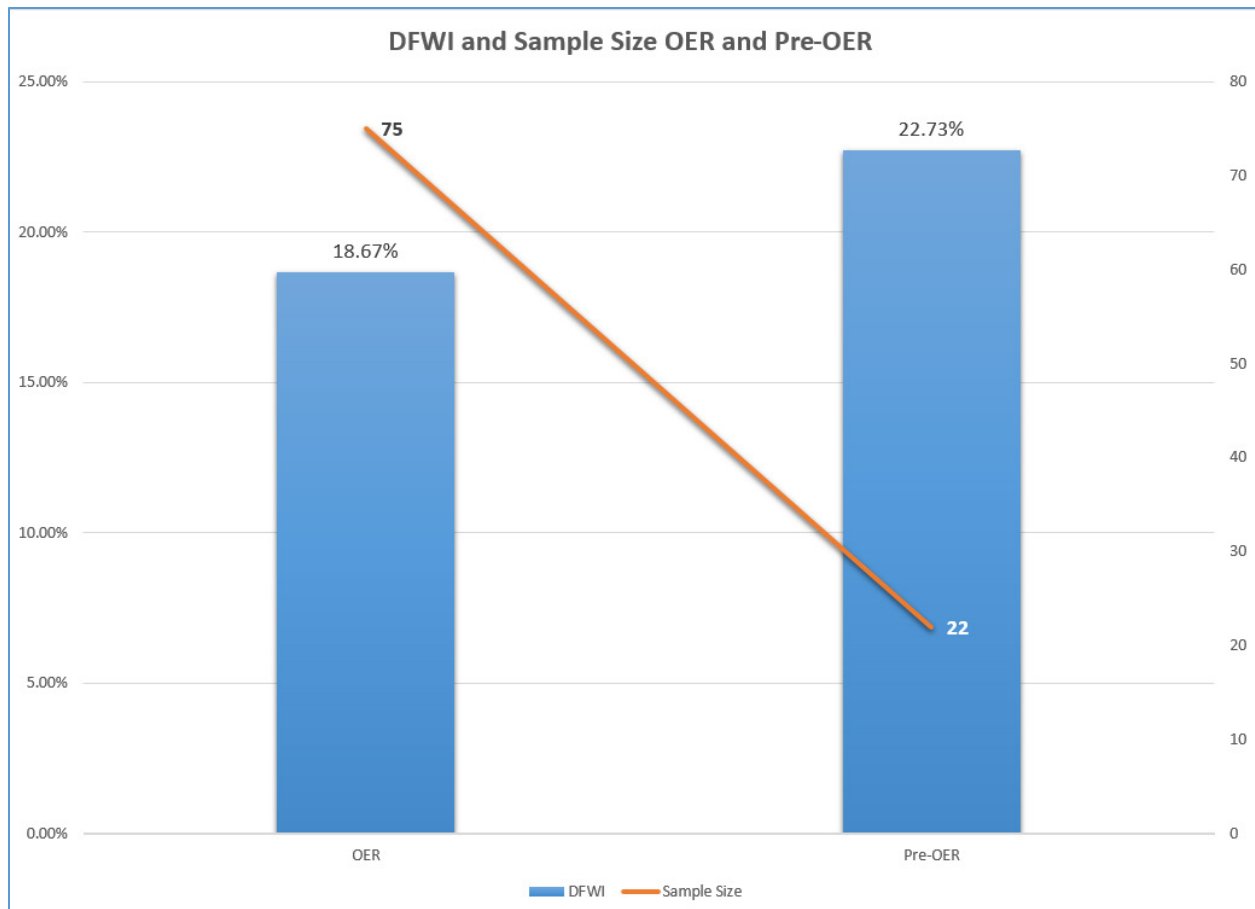


Figure 3: Comparison of DFWI rates and sample sizes of the pre and post DFWI rates for the instructor's class

Using the final grade data from the pre-OER, OER and non-OER courses are used to calculate GPAs. The DFWI data above would suggest that the GPA of the non-OER would have the highest GPA since it has the lowest DFWI rate. However, this is not the case. As seen in Figure 4 the calculated GPA of the OER transformation has the highest GPA of the three compared. Like the DFWI data from the non-OER sections, the sample size and change in the textbook in Fall 2018 may have caused the lower GPA. But, like the DFWI rates, additional research would need to be conducted.

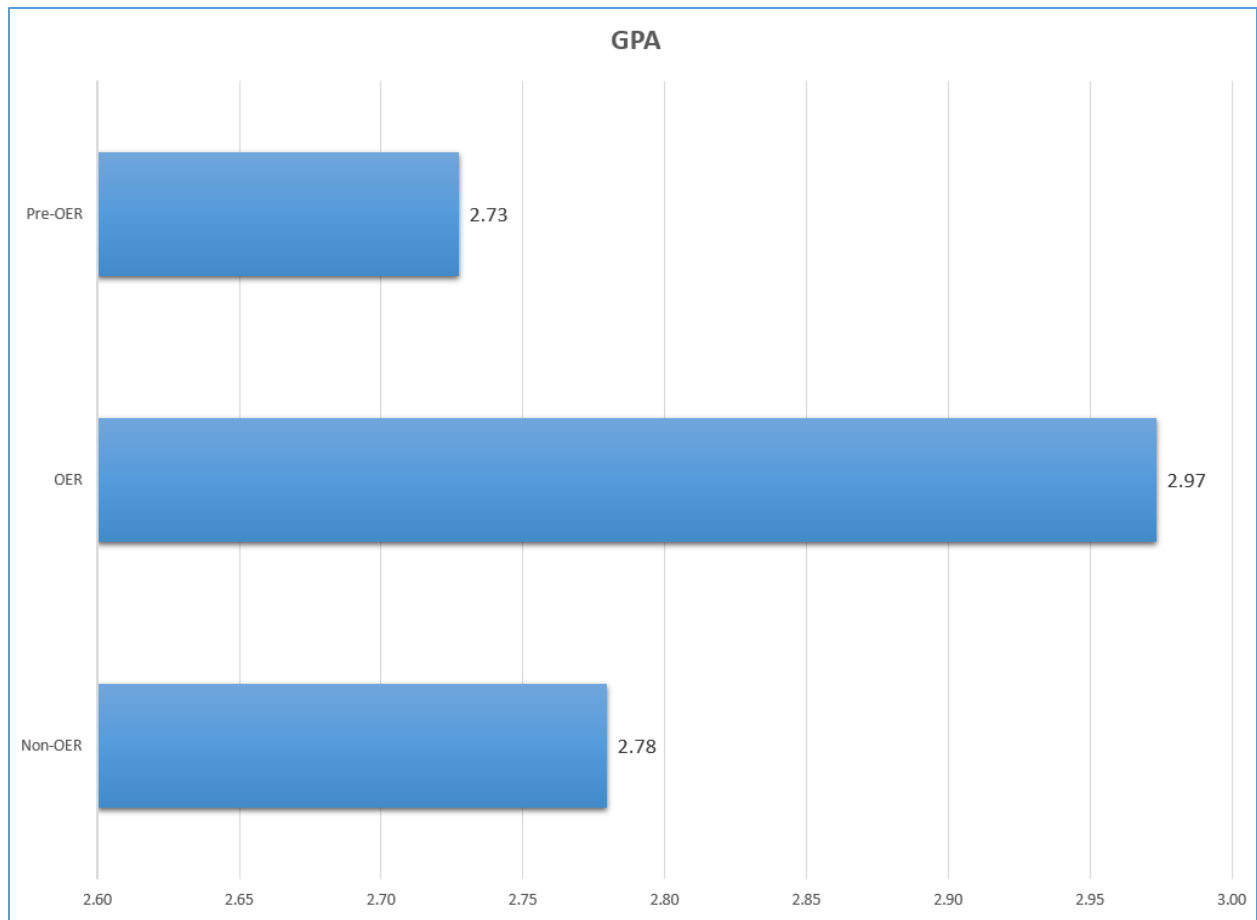


Figure 4: The GPA of the courses in the OER transformation was higher than the non-OER course taught during the same period and higher than the pre-OER course.

The driving purpose of any OER transformation is to increase student success. The GPA and DFWI rate information shows that progress is being made to increase student success. The other very important piece of an OER transformation is student satisfaction. Transforming a course to an OER should not be only for the faculty member, students must find the transformation useful, helpful and the same or better than having a text book. To gather this information, a survey was administered in each section of the OER transformation to gauge student satisfaction. The survey results are found in Table 1.

Table 1: Results of OER Student Satisfaction Survey

Question	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The Module Presentations and PowerPoints used for this course was sufficient for my needs to complete the course	23	13	2	0	0
I had access to a device and internet that allowed me to use the no-cost resource(s)	30	6	1	0	1
I take into consideration the cost of a course textbook and other class materials when I register for a class	17	9	6	3	3
If a used textbook were cheaper and available to buy, then I would buy the used textbook rather than the new textbook	28	5	3	0	2
I will only buy a course textbook if I feel it is absolutely necessary	20	10	4	1	3
When an instructor develops a course, he or she should take into consideration the cost of a textbook and other class materials	26	8	3	0	1
I would feel comfortable using free or low cost alternatives to a traditional course textbook	30	7	0	0	1
Although an instructor did not adopted a textbook for the class, I would still want the option to buy a printed copy.	5	7	11	7	8
I have taken courses that require books but the instructor rarely used or referred to the book	25	9	2	1	1
I was concerned not having a textbook for the course	6	2	5	10	15
I feel the quality of the no-cost resource(s) were just as good as a traditional textbook or external learning tools.	27	5	3	1	1
I feel I am doing/I did better in this course because I had access to the no-cost resource(s) from the first day of class	21	11	5	0	1



From the survey results and additional comments from students, it can be said with confidence this OER transformation is benefiting students. The survey also asked how many students chose this OER section of BUSA 2205 because it had a no cost text book and only 41% of respondents said that was the case.

#### 4. Sustainability Plan

The maintenance of the materials will be based on the changes and updates that occur to Microsoft Excel. The screen shots, examples and procedures taught in the course are specific to the 2016 version. When Microsoft releases a new version all of the materials and videos will have to be updated. This will be maintained by David Bridges. The revised materials will then be added to the LibGuide for this project. The older material will still be made available as many people do not upgrade software at the initial release of a product.

#### 5. Future Plans

Even though the grant period is over, I still plan on teaching my course using the transformation. I find that students are gaining the knowledge and skills necessary to achieve the learning objectives outlined for this course. Teaching students how to use a computer application like Excel in the business environment is tricky. It is important the course does not become too focused on the technology, forgetting there is an application side to what is being learned. There are no immediate plans to present this project or to publish the findings.

#### 6. Description of Photograph

- David Bridges, instructor
- Katie Bridges, instructional designer