

## Table of Contents

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Yang, Yan - #2576 - 380 .....	1
Letter of Support .....	12
Proposal Narrative .....	13

# Application Summary

## Competition Details

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<b>Competition Title:</b>	Textbook Transformation Grants, Round Twelve (Fall 2018-2019)
<b>Category:</b>	University System of Georgia
<b>Award Cycle:</b>	Round 12
<b>Submission Deadline:</b>	09/13/2018 at 11:59 PM

## Application Information

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<b>Submitted By:</b>	Yan Yang
<b>Application ID:</b>	2576
<b>Application Title:</b>	380
<b>Date Submitted:</b>	09/11/2018 at 8:25 AM

## Personal Details

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<b>Institution Name(s):</b>	University of West Georgia
<b>Applicant First Name:</b>	Yan
<b>Applicant Last Name:</b>	Yang
<b>Applicant Email Address:</b>	yyang@westga.edu
<b>Applicant Phone Number:</b>	6788396133
<b>Primary Appointment Title:</b>	Associate Professor
<b>Submitter First Name:</b>	Yan
<b>Submitter Last Name:</b>	Yang
<b>Submitter Email Address:</b>	yyang@westga.edu
<b>Submitter Phone Number:</b>	6788396133
<b>Submitter Title:</b>	Principal Investigator

## Application Details

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### Proposal Title

380

### Final Semester of Project

Fall 2019

### Requested Amount of Funding

\$10,730

### Type of Grant

No-or-Low-Cost-to-Students Learning Materials

**Course Title(s)**

Educational Psychology

**Course Number(s)**

CEPD 4101

**Team Member 1 Name**

Yan Yang

**Team Member 1 Email**

yyang@westga.edu

**Team Member 2 Name**

CJ Ivory

**Team Member 2 Email**

civory@westga.edu

**Team Member 3 Name**

Anne Barnhart

**Team Member 3 Email**

barnhart@westga.edu

**Team Member 4 Name**

**Team Member 4 Email**

**Additional Team Members (Name and email address for each)**

**Sponsor Name**

Denise Overfield, Ph.D.

**Sponsor Title**

Associate Vice President of Research

**Sponsor Department**

Department of Academic Affairs

**Original Required Commercial Materials (title, author, price)**

Snowman, J. & McCown, R. (2014). Psychology applied to teaching (14th ed.). Belmont, CA: Wadsworth, Cengage Learning.

\$306.00 (New)

210.00 (Used)

**Average Number of Students per Course Section Affected by Project in One Academic Year**

35

**Average Number of Sections Affected by Project in One Academic Year**

5

**Total Number of Students Affected by Project in One Academic Year**

175

**Average Number of Students Affected per Summer Semester**

35

**Average Number of Students Affected per Fall Semester**

70

**Average Number of Students Affected per Spring Semester**

70

**Original Total Cost per Student**

\$306.00 (New); 210.00 (Used)

**Post-Project Cost per Student**

\$0

**Post-Project Savings per Student**

\$210.00-\$306.00

**Projected Total Annual Student Savings per Academic Year**

\$36,750.00-\$53,550.00

**Using OpenStax Textbook?**

No

**Project Goals**

- 1. To transform the current Educational Psychology class using readings and resources that are no cost to students.** Educational Psychology is a required, upper-level undergraduate course, a core course in meeting INTASC teaching standards for education majors. While there is no set text for this course across all sections at University of West Georgia (UWG), the most common textbook, which provides major theories applied to teaching, is costly. It places a significant burden on students who are already financially stressed with college costs. The no-cost transformation of this course will eliminate this cost for five large (35 students) sections of Educational Psychology (two sections for each of spring and fall semesters, and one section for summer semester). Consequently, the transformation will impact 175 students per year for a cost savings of up to \$53,550.
- 2. To evaluate the effect of student access to free and suitable learning materials on student learning and engagement, as operationally defined and measured in a way described in the measurement section.** As this proposed transformation incorporates formative assessment exercises and tools as well as the expensive texts, it will allow me to measure the students' progress continually during the semester instead of waiting for a test or exam, and to intervene with the student as early as possible to enhance student success in this course.
- 3. To establish a template for the Educational Psychology course that can be copied and used by other Educational Psychology instructors at UWG and other schools with access to D2L.** The template will include resources for both students and instructors designed to provide incentives for its use. Since strategies and methods to keep the content current without major revisions are included in the transformation, it will result in an OER course that remains both timely and effective. This propagates the use of Affordable Learning materials and reduces course preparation time for the instructors involved. By making this course available for use by other Educational Psychology instructors, the course transformation would potentially lead to more student savings.
- 4. To lay the groundwork for broader adoption, use, and integration of the free and appropriate learning materials for the additional sections (presently, Fall Semester 2018, constituting 105 students in total) of Educational Psychology taught in the Department of Educational Technology and Foundations each semester.** I anticipate that our preparatory work supported by this grant will lay the groundwork for a more sustained funded effort in which we make the free and suitable learning materials available uniformly to students in all sections of Educational Psychology. The end result will be an estimated per-semester savings to students of \$31,500 (assuming a low-end textbook cost to each student of \$300) to \$42,000 (with a higher-end textbook cost of \$400 per student).

## Statement of Transformation

Description of Current State and Need for Course Transformation: Since 2009, I have taught well over 1000 students in face-to-face, hybrid, and 100% online versions of the Educational Psychology course. I have seen great diversity in my students in their socio-economic status, life circumstances, geographic location, experience levels, and their educational preparedness. Specifically I have found that students vary regarding their (a) purchasing, (b) reading, and (c) benefiting in their learning from a required text. In my experience as an instructor, a high percentage of students cannot afford textbooks and hence are limited to supplemental course materials in learning Educational Psychology. As textbooks become increasingly expensive, student access to the required textbook has become a significant concern. To encourage access to and use of the required commercial textbooks and promote student learning, I have purchased multiple copies of the textbooks and put them on course reserve to help promote student access to the textbook. These course reserve materials are only available to students who are physically on campus and due to copyright concerns they cannot be digitized to enable online students the same access. Furthermore, print course reserve materials are only available for in-library use limiting their usefulness to those students whose life circumstances allow them to spend hours in the library. Only students who spend a good deal of time on campus can reasonably be expected to take advantage of the textbook copies on course reserve. This situation leads to issues of inequity for students who live outside of our immediate West Georgia area or who have other obligations that limit their ability to be on campus for hours on end.

I am concerned that the current textbook's price – and limited accessibility – privileges students who can afford to purchase or access the text thus giving them an unfair advantage over other students. To lessen this learning inequity, I have been searching diligently in the textbook pool for good deal packages for my students, that is, better quality and lower cost. Unfortunately, the final candidates typically still cost students well over \$200 each. And my review of available and popular texts suggests a median cost to students approaching \$300 each.

Consequently I have not been able to assume an equal access on students' part to the required textbook, and it has posed a serious learning equity and academic success issues. Developing free and suitable learning materials in replacement of the required expensive commercial textbook on Desire2Learn (our internet student learning platform) would accomplish the following things:

- Save student expenses significantly
- Achieve the same learning objectives but at no cost to the student
- Enable me to assume an equal access on the part of students to course learning materials
- Allow for a more intentional integration of my video tutorials and on-line activities with OER materials
- In the future, modify and tailor the free learning materials to my sections of the course in particular and eventually to all sections of the course (in a future grant application by way of sustainability) more generally

Transformative Impact on the Course, Department, and Institution: Educational Psychology is a required core course in all teacher education programs as well as several other non-teacher education programs such as Health and Wellness Education at the University of West Georgia. It is also a popular elective course to many other majors such as music and history students who are interested in possible future teacher certification. The current use of an expensive textbook puts a tremendous financial and learning burden on the students from across the University. Even if students rent or use e-books, the cost is still rather significant. Students with scholarships often have to wait until well into the semester before they have the funding, hindering their ability to learn from the texts. Not only that, students who rent or use e-books to save on costs are unable to easily highlight or make notes to facilitate their thinking and recollection. Other students will either spend time hunting a less expensive version of the book, frequently purchasing an older version of the book that is missing material and does not have the updated information. Some students choose not to purchase the class materials which makes their learning harder and, particularly in the case of the Educational Psychology text, prevents them in participating in the learning activities. This can also impact their grade because, as the instructor, I base grades on their demonstrated understanding of the required text.

Therefore, the first stakeholders would be the 70 students in the two sections of Educational Psychology in Fall 2019 to be taught by me. These are typically juniors and senior students from multiple disciplines from math, science, history, and early childhood majors to health and wellness education. All of them plan to become educators in various fields and many of them aspire to be teachers in the K-12 school system. When the course materials are costly, it

puts an undue burden on the students who are already struggling to pay the heavy cost of higher education. Most of them rely on parental and/or other support such as financial aid in addition to their employment and savings. Eliminating the cost to the student of the course materials for this required course makes it easier for them to meet the requirements necessary for graduation and hence improves student retention rates. Developing open educational resources for Educational Psychology would be extremely beneficial to students and all parties involved regarding the cost savings and pedagogical benefits.

I anticipate that the course transformation would have considerable positive impact both on the students taking the course and on their learning engagement, motivation, and success. This increased learning about Educational Psychology will also benefit not only them in their careers but the students with whom they interact as teachers. The no-cost transformation of this course allows for the compiling and creation of timely, interesting, and relevant material as well as interactive exercises. An important part of the transformation is development of a process and procedure to ensure that materials are updated each semester, which otherwise costs significantly with new editions of traditional textbooks. By replacing the expensive commercial textbook with open educational resources developed through this grant project, I will ensure each student with free and equal access to the course learning materials. I anticipate that students would not only be more engaged and more motivated to learn, but also perform better on text-dependent learning measures. Further, they may also experience additional persistence and success in this course with the variety of free open educational resources that encourages collaboration, group work, and social interaction, which I hope to eventually contribute to better student retention, progress, and graduation, and program success in the long-term.

Transforming this course to include tools for both instructors and students to monitor progress and provide timely interventions in place of costly materials will help improve student retention, progress, and graduation (RPG) at the University of West Georgia. When students struggle with a course, particularly due to financial reasons, they risk becoming frustrated and not completing college. This no-cost transformation will help mitigate that risk.

The second stakeholder is the Department of Educational Technology and Foundations (ETF) of UWG. This transformation will allow the department to offer a no-cost version of the required Educational Psychology class both in the classroom and online. This will allow the department to better serve the University and the community.

Instructors within the department will also be impacted because they will not be required to spend time and effort choosing textbooks and other materials for the course as well as dealing with issues at the bookstore. Selecting appropriate texts for a class is time consuming as is incorporating and or creating other materials that correspond with the text.

The third stakeholder benefiting from this transformation is UWG, which will be able to offer a required course that does not require students to pay for texts or resources. This will help improve student retention, continued progression, and timely graduation. Additionally, by transforming this class with the help of two knowledgeable librarians, the quality of the course will be ensured with comprehensive literature review through exhaustive library search, hence ensuring student success and increasing the likelihood that students will complete college.

Since Educational Psychology is a required course for multiple majors at UWG, it is imperative that the ETF Department supports the students in every way possible to be successful in the class to ensure their retention, progression, and graduation (RPG). An Affordable Learning option for this class would remove the substantial cost barrier, particularly for financially less fortunate students. By formatting the class in a way that ensures timely monitoring and intervention by the instructor, student retention, progression, and graduation rates increase. Providing tools through the OER project will allow progress tracking and intervention needed to ensure increased RPG rates. As the ability of the student to both afford and succeed in the Educational Psychology class increases, the ability for students to remain in college, progress through their courses, and graduate increases.

Another important group of stakeholders are the residents of Georgia and the other states in which our students live. As mentioned above, the majority of the students who take Educational Psychology will work as educators after they

graduate. Their enhanced understanding of the educational psychology theories and applications of the subject matter will be of benefit to students they teach throughout their careers.

I am hopeful that our pioneering work in this grant project at the University of West Georgia will provide an exemplary model for reducing student cost and lay a solid foundation for a more sustained effort to transition the institution to OER modification and usage for all of our students, with significant economic and pedagogical benefit across multiple courses and programs involved. We anticipate seeing a significant increase in student enrollment due to the no-cost course transformation. As it is a core course in teacher education, health and wellness programs at the University of West Georgia, we anticipate to see the positive impact on the programs as well.

### **Transformation Action Plan**

### 1. Preliminary evaluation of existing OER materials & action plan for developing the new course materials:

In examining the current OER inventory including OpenStax and MERLOT etc., we were able to locate a couple of OER textbooks of introductory general psychology, but no specific textbook of upper-level Educational Psychology is available. Therefore, we plan to start from scratch and develop a collection of OER materials, integrating the existing lecture notes and supplementary materials with the addition of the learning materials in a way that is faithful and specific to our course. To achieve this goal, we plan to take the following actions:

- Determine material needed to meet Learning Objectives designated by UWG for Educational Psychology course
- Develop Syllabus outline
- Review existing Affordable Learning materials and assess appropriateness to achieve Learning Outcomes designated by UWG for Educational Psychology
- Identify gaps between existing class notes and learning materials and needs
- Identify or develop no-cost materials to fill gaps
- Identify and develop tools and assignments to monitor student progress throughout the semester
- Complete syllabus using Affordable Learning tools
- Establish access to materials through D2L Build up course template based on the new syllabus. Establish access to resources, activities, tools associated with each topic in the syllabus
- Develop and incorporate success measurements
- Develop procedures to review and update materials and resources
- Develop appropriate additional resources for students and instructors
- Develop D2L course template for incorporation into future Educational Psychology courses

### 2. The course syllabus and instructional design/redesign of the course would highlight the following:

- Including and integrating the extremely limited existing free OER such as OpenStax materials in reading assignments for each class meeting (as indicated in the course schedule of the syllabus)
- Including and integrating the existing class notes and demonstrations and activities in the course learning materials which is not only specific to the course, but also freely accessible and friendly
- Searching for and compiling additional learning materials through library database and websites to make sure the content is well covered as it is intended
- Designing project guidelines, assignment grading rubrics and test questions based on these newly developed OER materials
- Finding ways to begin to unite and integrate existing lecture notes, class demonstrations, activities and quizzes with the new additions of the learning materials into a comprehensive OER collection of materials for the course

### 3. The activities and roles of each team member would be as follows:

Yan Yang, Ph.D., Associate Professor in Educational Psychology, principal investigator: I will be the instructor of record for this course, and I will also be responsible for organizing and facilitating the work I have outlined. I have a preliminary collection of supplementary learning materials developed over the past 9 years, as well as a pile of class notes from each semester of Educational Psychology I have taught in the past. I will develop a new syllabus, search and screen for new class learning materials and map them onto readings and other class components and activities, coordinate the integration of existing class notes and links with the new additions, and develop and administer exit surveys on students' experience with OER materials in the transformed Educational Psychology course. I'll also submit an IRB together with my team members for the collection and dissemination of the survey results of the OER project in summer 2019.

CJ Ivory, MLIS, Assistant Professor & Instruction Librarian, project executor: Professor Ivory will be responsible primarily for exhaustive literature search for free references and course learning materials through library database and various websites, integrating the existing notes and references into each content module of the course, clearing of copyright issues, transferring the newly developed OER materials to GALILEO Open Learning Materials to ensure free public access, and collecting effective measures on student engagement, motivation, and success after the development and adoption of the free OER learning materials. Professor Ivory will also be in charge of the major logistics of the project including meeting arrangements and survey management on Qualtrics.

Anne Barnhart, M.A. & M.S., Associate Professor and Head of Instructional Services, project coordinator: Professor

Barnhart will coordinate institutional support and provide infrastructure and additional teaching-learning related resources to supplement our class materials in each content module on various educational psychology topics tailoring to OER.

4. Open Access to the new OER materials will be ensured through:

- Notifying students in the syllabus, on CourseDen (the online learning platform at UWG), and in the schedule, of the availability and URL links to the OER resources
- Assignment of specific OER resources and activities in the course calendar
- Verification with each student of internet access and procedural access to the OER resources in CourseDen
- Hosting of the OER resources of Educational Psychology course through GALILEO Open Learning Materials repository as well as an appropriate website such as LibGuides or OER Commons to ensure public availability of our developed materials.

### **Quantitative & Qualitative Measures**

IRB will be submitted to ensure eligibility of data collection and dissemination of the research results on the potential impact of incorporating OER learning materials into the Educational Psychology course. Quantitative measures of student engagement, motivation, satisfaction, and performance will include the following:

1. CourseDen (D2L) tracking of students' opening the link to the OER materials
2. Students' individual verification via an on-line, one-item quiz on D2L that they are able to successfully access the OER materials
3. D2L projects, speaking to specific sections of the OER materials;
4. Inclusion of OER-specific items on content exams
5. Comparison of student performance on course assignments based on OER materials with previous semesters in which a textbook was required. T-tests will be performed using SPSS to report the potential significant impact of OER on student performance
6. Drop/Fail/Withdraw Rates will be compared pre-and post-OER integration periods, with particular attention to at-risk students
7. At the end of the semester the students will be provided with an exit survey to rate, among other aspects, the overall experience with the transformed course, the effectiveness of the course, and appropriateness of OER class materials on a 5 point scale. Descriptive statistical analyses using SPSS will be performed to report the quantitative results

Qualitative data will include specific questions on the Course Evaluation asking students to evaluate the extent to which the integration of OER materials contributed to their learning. We will also set up an exit survey on Qualtrics and link it on Desire2Learn asking students these questions at the end of a semester, and will report the qualitative results through content thematic analysis. Specific measure will include, but are not limited to the following:

1. Issues reported by students in accessing OER materials
2. A problem log maintained to track problems encountered by students throughout the semester.
3. A solution log maintained to resolve any issues or complaints reported by the students.
4. Student responses to essay questions in the exit survey at the end of the semester about their 1) understanding of educational psychology theories, 2) interest in educational psychology, and 3) ability to apply educational psychology concepts and theories to their future professions
5. Feedback provided by students to an open ended question in the exit survey at the end of the course regarding their experience with OER learning materials in the course
6. Overall comments made by students in their exit survey regarding OER learning materials in the course.

We plan to present our research findings of OER impact on student learning and satisfaction at USG teaching conference as well as other learned societies, and publish our findings in a peer-reviewed journal (Studies in Educational Evaluation).

### **Timeline**

While the project executor will run the project throughout the entire period starting in Fall 2018 until Fall 2019, the principal investigator will accomplish the bulk of the work during Summer 2019 as detailed in the following.

#### Fall 2018 & Spring 2019

- Attend kickoff meeting Determine types of material needed to meet Learning Objectives designated by UWG for Educational Psychology Develop Syllabus outline Review existing Affordable Learning materials and assess appropriateness to achieve Learning Outcomes designated by UWG for Educational Psychology Review and begin to examine existing limited OER such as OpenStax and MERLOT textbooks on introductory psychology and integrate the related parts to the Educational Psychology course. Visit and review National Center for Academic Transformation (NCAT) Resources Visit and review Open Education Conferences Resources Visit and review OER Commons Compile OER resources through library search and other channels (class notes and activities) for later integration with the OER materials Clear any potential copyright issues involved

#### Summer 2019

- Identify gaps between existing materials and needs. Identify and develop materials to fill gaps (including readings, websites, videos, and simulations, etc.) Finalize OER collections Identify places for integration of existing notes/links with the OER additions Begin process of integration of existing notes/links with the OER additions Identify and develop tools to monitor student progress through the semester Create "renewable assignments" made possible through the use of OERs that will benefit future students Design class projects and exams based on the required but free OER resources included in the course Develop measures of student engagement, motivation, and learning success, DFW rates Complete syllabus using Affordable Learning tools Create D2L OER-specific links and activities Establish access to materials through D2L Set up course template to follow syllabus Establish access to resources, activities, tools associated with each topic in the syllabus Incorporate success measurements Develop an exit survey to include both quantitative and qualitative measures for student performance in and satisfaction with the transformed no-cost Educational Psychology course Develop and submit IRB for data collection on the impact of the transformed course on student performance and satisfaction

#### Fall 2019

- Teach first semester of the transformed course as no-cost category to students Measure student engagement, motivation, and learning success, DFW rates, and subjective experience as outlined previously Begin comparison of these data with pre-transformation course data Disseminate the findings through refereed conference presentations and publications on a peer-reviewed journal Begin process of grant application for sustainability, in which the OER may be adopted uniformly for all sections of Educational Psychology in the future Continue revising the Spring 2020 Educational Psychology course based on student feedback from Fall 2019

#### **Budget**

- Salary compensation for Principal Investigator, Summer, 2019: \$4,975
- Salary release for Project Executor, Fall 2018, Spring, Summer, & Fall, 2019: \$4,955
- Travel funding: \$800

Overall Project Expense: \$10,730

Total requested budget: \$10,730

#### **Sustainability Plan**

Sustainability of the course and course materials will occur in at least the following five areas:

1. Although the course transformation is for multiple sections of Educational Psychology by one instructor, a template of D2L class as a result of the transformation project will be available and can be copied into future sections for use by any and all instructors of this course across all delivery formats including online sections as they wish.
2. Because the design of the course is based on tying the Affordable Learning materials to the Learning Outcomes for the Educational Psychology course, it provides a clear and documented link and measure for achieving the Learning Outcomes. This saves future instructors from having to develop and document those links themselves. Additionally, the availability of the template reduces time spent by instructors in developing and establishing the course in D2L. They will be able to easily copy the course materials into their course, review the materials, and provide any supplements as they deem necessary. This allows the instructors to spend more time supporting and interacting with students.
3. Hosting of the modified syllabus and OER course materials including course exams and projects through GALILEO Open Learning Materials as well as on the D2L server, allowing for broad access to course OER materials by instructors of similar courses.
4. Analyzing the pre-and post-OER data, and sharing the work with other colleagues through conference presentations and a peer-reviewed journal article.
5. If the research results of this project suggest significant educational benefit to students, we hope to work with other colleagues teaching Educational Psychology to adopt the OER materials for the entire upper-level course and to partner with the library as well as Center for Teaching & Learning at UWG to provide professional development workshops and seminars for instructors on ways to use and adopt the OER materials. This would not only allow for more student expense savings and access for multiple sections of Educational Psychology (typically well over 100 students per semester), but also encourage other instructors to consider transforming their courses to no-cost categories at the University of West Georgia.

## **Acknowledgment**

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### **Grant Acceptance**

[Acknowledged] I understand and acknowledge that acceptance of Affordable Learning Georgia grant funding constitutes a commitment to comply with the required activities listed in the RFP and that my submitted proposal will serve as the statement of work that must be completed by my project team. I further understand and acknowledge that failure to complete the deliverables in the statement of work may result in termination of the agreement and funding.

August 30, 2018

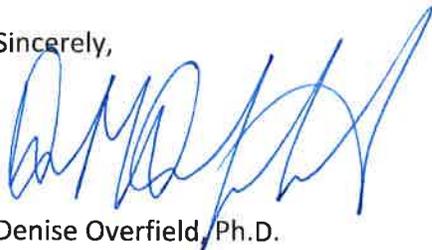
Jeff Gallant  
Program Manager, Affordable Learning Georgia  
Library Services, Board of Regents of the University System of Georgia

Dear Mr. Gallant and the ALG Textbook Transformation Grant Committee:

Please accept this letter of enthusiastic support for the ALG proposal by Professors Yan Yang, CJ Ivory, and Anne Barnhart. This proposal is for the development of materials for Educational Psychology, a critical course for students who are preparing to enter the teaching field.

Professors Yang, Barnhart, and Ivory have the full support and endorsement of their department chair and college dean. With this level of support and with the quality of this project, we are confident that this project is worthy of funding, and we look forward to providing support for it.

Sincerely,



Denise Overfield, Ph.D.  
Associate Vice President for Research and Dean of the Graduate School



Textbook Transformation Grants, Round Twelve (Fall 2018-2019)  
 Proposal Form and Narrative

**Applicant, Team, and Sponsor Information**

The **applicant** is the proposed Project Lead for the grant project. The **submitter** is the person submitting the application (which may be a Grants Officer or Administrator). The submitter will often be the applicant – if so, leave the submitter fields blank.

Institution(s)	University of West Georgia
Applicant Name	Yan Yang
Applicant Email	yyang@westga.edu
Applicant Phone #	678-839-6133
Applicant Position/Title	Associate Professor
Submitter Name	
Submitter Email	
Submitter Phone #	
Submitter Position	

Please provide the first/last names and email addresses of all team members within the proposed project. Include the applicant (Project Lead) in this list. Do not include prefixes or suffixes such as Ms., Dr., Ph.D., etc.

	Name	Email Address
Team Member 1	Yan Yang	yyang@westga.edu
Team Member 2	CJ Ivory	civory@westga.edu
Team Member 3	Anne Barnhart	barnhart@westga.edu
Team Member 4		
Team Member 5		
Team Member 6		
Team Member 7		
Team Member 8		

If you have any more team members to add, please enter their names and email addresses in the text box below.

Please provide the sponsor’s name, title, department, and institution. The sponsor is the provider of your Letter of Support.

Denise Overfield, Ph.D., Associate Vice President of Research, Department of Academic Affairs, University of West Georgia

**Project Information and Impact Data**

<b>Title of Grant Project</b>	OER for Educational Psychology
<b>Type of Grant</b>	No-Cost-to-Students Learning Materials
<b>Requested Amount of Funding</b>	\$10,730
<b>Course Names and Course Numbers</b>	Educational Psychology, CEPD 4101
<b>Final Semester of Project</b>	<i>Fall 2019</i>
<b>Average Number of Students Per Course Section Affected by Project</b>	35
<b>Average Number of Sections Affected by Project in One Academic Year</b>	5
<b>Total Number of Students Affected by Project in One Academic Year</b>	175
<b>Average Number of Students Affected per Summer Semester</b>	35
<b>Average Number of Students Affected per Fall Semester</b>	70
<b>Average Number of Students Affected per Spring Semester</b>	70
<b>Title/Author of Original Required Materials</b>	Snowman, J. & McCown, R. (2014). <i>Psychology applied to teaching</i> (14 <sup>th</sup> ed.). Belmont, CA: Wadsworth, Cengage Learning. ISBN-13: 978-1-285-73455-2
<b>Original Total Cost Per Student</b>	\$306.00 (New) 210.00 (Used)
<b>Post-Project Cost Per Student</b>	\$0
<b>Post-Project Savings Per Student</b>	\$210.00-\$306.00
<b>Projected Total Annual Student Savings Per Academic Year</b>	\$36,750.00-\$53,550.00
<b>Using OpenStax Textbook?</b>	No.

## Narrative Section

### 1. Project Goals

**1. To transform the current Educational Psychology class using readings and resources that are no cost to students.** Educational Psychology is a required, upper-level undergraduate course, a core course in meeting INTASC teaching standards for education majors. While there is no set text for this course across all sections at University of West Georgia (UWG), the most common textbook, which provides major theories applied to teaching, is costly. It places a significant burden on students who are already financially stressed with college costs. The no-cost transformation of this course will eliminate this cost for five large (35 students) sections of Educational Psychology (two sections for each of spring and fall semesters, and one section for summer semester). Consequently, the transformation will impact 175 students per year for a cost savings of up to \$53,550.

**2. To evaluate the effect of student access to free and suitable learning materials on student learning and engagement, as operationally defined and measured in a way described in the measurement section.** As this proposed transformation incorporates formative assessment exercises and tools as well as the expensive texts, it will allow me to measure the students' progress continually during the semester instead of waiting for a test or exam, and to intervene with the student as early as possible to enhance student success in this course.

**3. To establish a template for the Educational Psychology course that can be copied and used by other Educational Psychology instructors at UWG and other schools with access to D2L.** The template will include resources for both students and instructors designed to provide incentives for its use. Since strategies and methods to keep the content current without major revisions are included in the transformation, it will result in an OER course that remains both timely and effective. This propagates the use of Affordable Learning materials and reduces course preparation time for the instructors involved. By making this course available for use by other Educational Psychology instructors, the course transformation would potentially lead to more student savings.

**4. To lay the groundwork for broader adoption, use, and integration of the free and appropriate learning materials for the additional sections (presently, Fall Semester 2018, constituting 105 students in total) of Educational Psychology taught in the Department of Educational Technology and Foundations each semester.** I anticipate that our preparatory work supported by this grant will lay the groundwork for a more sustained funded effort in which we make the free and suitable learning materials

available uniformly to students in all sections of Educational Psychology. The end result will be an estimated per-semester savings to students of \$31,500 (assuming a low-end textbook cost to each student of \$300) to \$42,000 (with a higher-end textbook cost of \$400 per student).

## 2. Statement of Transformation

Description of Current State and Need for Course Transformation: Since 2009, I have taught well over 1000 students in face-to-face, hybrid, and 100% online versions of the Educational Psychology course. I have seen great diversity in my students in their socio-economic status, life circumstances, geographic location, experience levels, and their educational preparedness. Specifically I have found that students vary regarding their (a) purchasing, (b) reading, and (c) benefiting in their learning from a required text. In my experience as an instructor, a high percentage of students cannot afford textbooks and hence are limited to supplemental course materials in learning Educational Psychology. As textbooks become increasingly expensive, student access to the required textbook has become a significant concern. To encourage access to and use of the required commercial textbooks and promote student learning, I have purchased multiple copies of the textbooks and put them on course reserve to help promote student access to the textbook. These course reserve materials are only available to students who are physically on campus and due to copyright concerns they cannot be digitized to enable online students the same access. Furthermore, print course reserve materials are only available for in-library use limiting their usefulness to those students whose life circumstances allow them to spend hours in the library. Only students who spend a good deal of time on campus can reasonably be expected to take advantage of the textbook copies on course reserve. This situation leads to issues of inequity for students who live outside of our immediate West Georgia area or who have other obligations that limit their ability to be on campus for hours on end.

I am concerned that the current textbook's price – and limited accessibility – privileges students who can afford to purchase or access the text thus giving them an unfair advantage over other students. To lessen this learning inequity, I have been searching diligently in the textbook pool for good deal packages for my students, that is, better quality and lower cost. Unfortunately, the final candidates typically still cost students well over \$200 each. And my review of available and popular texts suggests a median cost to students approaching \$300 each.

Consequently I have not been able to assume an equal access on students' part to the required textbook, and it has posed a serious learning equity and academic success issues. Developing free and suitable learning materials in replacement of the required expensive commercial textbook on Desire2Learn (our internet student learning platform) would accomplish the following things:

- Save student expenses significantly

- Achieve the same learning objectives but at no cost to the student
- Enable me to assume an equal access on the part of students to course learning materials
- Allow for a more intentional integration of my video tutorials and on-line activities with OER materials
- In the future, modify and tailor the free learning materials to my sections of the course in particular and eventually to all sections of the course (in a future grant application by way of sustainability) more generally

Transformative Impact on the Course, Department, and Institution: Educational

Psychology is a required core course in all teacher education programs as well as several other non-teacher education programs such as Health and Wellness Education at the University of West Georgia. It is also a popular elective course to many other majors such as music and history students who are interested in possible future teacher certification. The current use of an expensive textbook puts a tremendous financial and learning burden on the students from across the University. Even if students rent or use e-books, the cost is still rather significant. Students with scholarships often have to wait until well into the semester before they have the funding, hindering their ability to learn from the texts. Not only that, students who rent or use e-books to save on costs are unable to easily highlight or make notes to facilitate their thinking and recollection. Other students will either spend time hunting a less expensive version of the book, frequently purchasing an older version of the book that is missing material and does not have the updated information. Some students choose not to purchase the class materials which makes their learning harder and, particularly in the case of the Educational Psychology text, prevents them in participating in the learning activities. This can also impact their grade because, as the instructor, I base grades on their demonstrated understanding of the required text.

Therefore, the first stakeholders would be the 70 students in the two sections of Educational Psychology in Fall 2019 to be taught by me. These are typically juniors and senior students from multiple disciplines from math, science, history, and early childhood majors to health and wellness education. All of them plan to become educators in various fields and many of them aspire to be teachers in the K-12 school system. When the course materials are costly, it puts an undue burden on the students who are already struggling to pay the heavy cost of higher education. Most of them rely on parental and/or other support such as financial aid in addition to their employment and savings. Eliminating the cost to the student of the course materials for this required course makes it easier for them to meet the requirements necessary for graduation and hence improves student retention rates.

Developing open educational resources for Educational Psychology would be extremely beneficial to students and all parties involved regarding the cost savings and pedagogical benefits.

I anticipate that the course transformation would have considerable positive impact both on the students taking the course and on their learning engagement, motivation, and success. This increased learning about Educational Psychology will also benefit not only them in their careers but the students with whom they interact as teachers. The no-cost transformation of this course allows for the compiling and creation of timely, interesting, and relevant material as well as interactive exercises. An important part of the transformation is development of a process and procedure to ensure that materials are updated each semester, which otherwise costs significantly with new editions of traditional textbooks. By replacing the expensive commercial textbook with open educational resources developed through this grant project, I will ensure each student with free and equal access to the course learning materials. I anticipate that students would not only be more engaged and more motivated to learn, but also perform better on text-dependent learning measures. Further, they may also experience additional persistence and success in this course with the variety of free open educational resources that encourages collaboration, group work, and social interaction, which I hope to eventually contribute to better student retention, progress, and graduation, and program success in the long-term.

Transforming this course to include tools for both instructors and students to monitor progress and provide timely interventions in place of costly materials will help improve student retention, progress, and graduation (RPG) at the University of West Georgia. When students struggle with a course, particularly due to financial reasons, they risk becoming frustrated and not completing college. This no-cost transformation will help mitigate that risk.

The second stakeholder is the Department of Educational Technology and Foundations (ETF) of UWG. This transformation will allow the department to offer a no-cost version of the required Educational Psychology class both in the classroom and online. This will allow the department to better serve the University and the community.

Instructors within the department will also be impacted because they will not be required to spend time and effort choosing textbooks and other materials for the course as well as dealing with issues at the bookstore. Selecting appropriate texts for a class is time consuming as is incorporating and or creating other materials that correspond with the text.

The third stakeholder benefiting from this transformation is UWG, which will be able to offer a required course that does not require students to pay for texts or resources. This will help improve student retention, continued progression, and timely graduation. Additionally, by transforming this class with the help of two knowledgeable librarians, the quality of the course will be ensured with comprehensive literature review through exhaustive library search, hence ensuring student success and increasing the likelihood that students will complete college.

Since Educational Psychology is a required course for multiple majors at UWG, it is imperative that the ETF Department supports the students in every way possible to be successful in the class to ensure their retention, progression, and graduation (RPG). An Affordable Learning option for this class would remove the substantial cost barrier, particularly for financially less fortunate students. By formatting the class in a way that ensures timely monitoring and intervention by the instructor, student retention, progression, and graduation rates increase. Providing tools through the OER project will allow progress tracking and intervention needed to ensure increased RPG rates. As the ability of the student to both afford and succeed in the Educational Psychology class increases, the ability for students to remain in college, progress through their courses, and graduate increases.

Another important group of stakeholders are the residents of Georgia and the other states in which our students live. As mentioned above, the majority of the students who take Educational Psychology will work as educators after they graduate. Their enhanced understanding of the educational psychology theories and applications of the subject matter will be of benefit to students they teach throughout their careers.

I am hopeful that our pioneering work in this grant project at the University of West Georgia will provide an exemplary model for reducing student cost and lay a solid foundation for a more sustained effort to transition the institution to OER modification and usage for all of our students, with significant economic and pedagogical benefit across multiple courses and programs involved. We anticipate seeing a significant increase in student enrollment due to the no-cost course transformation. As it is a core course in teacher education, health and wellness programs at the University of West Georgia, we anticipate to see the positive impact on the programs as well.

### 3. Transformation Action Plan

1. Preliminary evaluation of existing OER materials & action plan for developing the new course materials:

In examining the current OER inventory including OpenStax and MERLOT etc., we were able to locate a couple of OER textbooks of introductory general psychology, but no specific textbook of upper-level Educational Psychology is available. Therefore, we plan to start from scratch and develop a collection of OER materials, integrating the existing lecture notes and supplementary materials with the addition of the learning materials in a way that is faithful and specific to our course. To achieve this goal, we plan to take the following actions:

- a. Determine material needed to meet Learning Objectives designated by UWG for Educational Psychology course
  - b. Develop Syllabus outline
  - c. Review existing Affordable Learning materials and assess appropriateness to achieve Learning Outcomes designated by UWG for Educational Psychology
  - d. Identify gaps between existing class notes and learning materials and needs
  - e. Identify or develop no-cost materials to fill gaps
  - f. Identify and develop tools and assignments to monitor student progress throughout the semester
  - g. Complete syllabus using Affordable Learning tools
  - h. Establish access to materials through D2L
    - o Build up course template based on the new syllabus.
    - o Establish access to resources, activities, tools associated with each topic in the syllabus
  - i. Develop and incorporate success measurements
  - j. Develop procedures to review and update materials and resources
  - k. Develop appropriate additional resources for students and instructors
  - l. Develop D2L course template for incorporation into future Educational Psychology courses
2. The course syllabus and instructional design/redesign of the course would highlight the following:
    - a. Including and integrating the extremely limited existing free OER such as OpenStax materials in reading assignments for each class meeting (as indicated in the course schedule of the syllabus)
    - b. Including and integrating the existing class notes and demonstrations and activities in the course learning materials which is not only specific to the course, but also freely accessible and friendly
    - c. Searching for and compiling additional learning materials through library

database and websites to make sure the content is well covered as it is intended

- d. Designing project guidelines, assignment grading rubrics and test questions based on these newly developed OER materials
- e. Finding ways to begin to unite and integrate existing lecture notes, class demonstrations, activities and quizzes with the new additions of the learning materials into a comprehensive OER collection of materials for the course

3. The activities and roles of each team member would be as follows:

Yan Yang, Ph.D., Associate Professor in Educational Psychology, principal investigator: I will be the instructor of record for this course, and I will also be responsible for organizing and facilitating the work I have outlined. I have a preliminary collection of supplementary learning materials developed over the past 9 years, as well as a pile of class notes from each semester of Educational Psychology I have taught in the past. I will develop a new syllabus, search and screen for new class learning materials and map them onto readings and other class components and activities, coordinate the integration of existing class notes and links with the new additions, and develop and administer exit surveys on students' experience with OER materials in the transformed Educational Psychology course. I'll also submit an IRB together with my team members for the collection and dissemination of the survey results of the OER project in summer 2019.

CJ Ivory, MLIS, Assistant Professor & Instruction Librarian, project executor: Professor Ivory will be responsible primarily for exhaustive literature search for free references and course learning materials through library database and various websites, integrating the existing notes and references into each content module of the course, clearing of copyright issues, transferring the newly developed OER materials to GALILEO Open Learning Materials to ensure free public access, and collecting effective measures on student engagement, motivation, and success after the development and adoption of the free OER learning materials. Professor Ivory will also be in charge of the major logistics of the project including meeting arrangements and survey management on Qualtrics.

Anne Barnhart, M.A. & M.S., Associate Professor and Head of Instructional Services, project coordinator: Professor Barnhart will coordinate institutional support and provide infrastructure and additional teaching-learning related resources to supplement our class materials in each content module on various educational psychology topics tailoring to OER.

4. Open Access to the new OER materials will be ensured through:

- a. Notifying students in the syllabus, on CourseDen (the online learning platform at

- UWG), and in the schedule, of the availability and URL links to the OER resources
- b. Assignment of specific OER resources and activities in the course calendar
  - c. Verification with each student of internet access and procedural access to the OER resources in CourseDen
  - d. Hosting of the OER resources of Educational Psychology course through *GALILEO Open Learning Materials* repository as well as an appropriate website such as LibGuides or OER Commons to ensure public availability of our developed materials.

#### 4. Quantitative and Qualitative Measures

IRB will be submitted to ensure eligibility of data collection and dissemination of the research results on the potential impact of incorporating OER learning materials into the Educational Psychology course. Quantitative measures of student engagement, motivation, satisfaction, and performance will include the following:

- a. CourseDen (D2L) tracking of students' opening the link to the OER materials
- b. Students' individual verification via an on-line, one-item quiz on D2L that they are able to successfully access the OER materials
- c. D2L projects, speaking to specific sections of the OER materials;
- d. Inclusion of OER-specific items on content exams
- e. Comparison of student performance on course assignments based on OER materials with previous semesters in which a textbook was required. T-tests will be performed using SPSS to report the potential significant impact of OER on student performance
- f. Drop/Fail/Withdraw Rates will be compared pre-and post-OER integration periods, with particular attention to at-risk students
- g. At the end of the semester the students will be provided with an exit survey to rate, among other aspects, the overall experience with the transformed course, the effectiveness of the course, and appropriateness of OER class materials on a 5 point scale. Descriptive statistical analyses using SPSS will be performed to report the quantitative results

Qualitative data will include specific questions on the Course Evaluation asking students to evaluate the extent to which the integration of OER materials contributed to their learning. We will also set up an exit survey on Qualtrics and link it on Desire2Learn asking students these questions at the end of a semester, and will report the qualitative results through content thematic analysis. Specific measure will include, but are not limited to the following:

- a. Issues reported by students in accessing OER materials
- b. A problem log maintained to track problems encountered by students throughout the semester.
- c. A solution log maintained to resolve any issues or complaints reported by the students.
- d. Student responses to essay questions in the exit survey at the end of the semester about their 1) understanding of educational psychology theories, 2) interest in educational psychology, and 3) ability to apply educational psychology concepts and theories to their future professions

- e. Feedback provided by students to an open ended question in the exit survey at the end of the course regarding their experience with OER learning materials in the course
- f. Overall comments made by students in their exit survey regarding OER learning materials in the course.

We plan to present our research findings of OER impact on student learning and satisfaction at USG teaching conference as well as other learned societies, and publish our findings in a peer-reviewed journal (*Studies in Educational Evaluation*).

## 5. Timeline

While the project executor will run the project throughout the entire period starting in Fall 2018 until Fall 2019, the principal investigator will accomplish the bulk of the work during Summer 2019 as detailed in the following.

### Fall 2018 & Spring 2019

- Attend kickoff meeting
- Determine types of material needed to meet Learning Objectives designated by UWG for Educational Psychology
- Develop Syllabus outline
- Review existing Affordable Learning materials and assess appropriateness to achieve Learning Outcomes designated by UWG for Educational Psychology
  - Review and begin to examine existing limited OER such as OpenStax and MERLOT textbooks on introductory psychology and integrate the related parts to the Educational Psychology course.
  - Visit and review National Center for Academic Transformation (NCAT) Resources
  - Visit and review Open Education Conferences Resources
  - Visit and review OER Commons
  - Compile OER resources through library search and other channels (class notes and activities) for later integration with the OER materials
- Clear any potential copyright issues involved

### Summer 2019

- Identify gaps between existing materials and needs.
- Identify and develop materials to fill gaps (including readings, websites, videos, and simulations, etc.)
- Finalize OER collections
- Identify places for integration of existing notes/links with the OER additions

- Begin process of integration of existing notes/links with the OER additions
- Identify and develop tools to monitor student progress through the semester
- Create “renewable assignments” made possible through the use of OERs that will benefit future students
- Design class projects and exams based on the required but free OER resources included in the course
- Develop measures of student engagement, motivation, and learning success, DFW rates
- Complete syllabus using Affordable Learning tools
- Create D2L OER-specific links and activities
- Establish access to materials through D2L
  - Set up course template to follow syllabus
  - Establish access to resources, activities, tools associated with each topic in the syllabus
  - Incorporate success measurements
- Develop an exit survey to include both quantitative and qualitative measures for student performance in and satisfaction with the transformed no-cost Educational Psychology course
- Develop and submit IRB for data collection on the impact of the transformed course on student performance and satisfaction

#### Fall 2019

- Teach first semester of the transformed course as no-cost category to students
- Measure student engagement, motivation, and learning success, DFW rates, and subjective experience as outlined previously
- Begin comparison of these data with pre-transformation course data
- Disseminate the findings through refereed conference presentations and publications on a peer-reviewed journal
- Begin process of grant application for sustainability, in which the OER may be adopted uniformly for all sections of Educational Psychology in the future
- Continue revising the Spring 2020 Educational Psychology course based on student feedback from Fall 2019

#### 6. Budget

- Salary compensation for Principal Investigator, Summer, 2019: \$4,975
- Salary release for Project Executor, Fall 2018, Spring, Summer, & Fall, 2019: \$4,955
- Travel funding: \$800

Overall Project Expense: \$10,730

Total requested budget: \$10,730

## 7. Sustainability Plan

Sustainability of the course and course materials will occur in at least the following five areas:

- i. Although the course transformation is for multiple sections of Educational Psychology by one instructor, a template of D2L class as a result of the transformation project will be available and can be copied into future sections for use by any and all instructors of this course across all delivery formats including online sections as they wish.
- ii. Because the design of the course is based on tying the Affordable Learning materials to the Learning Outcomes for the Educational Psychology course, it provides a clear and documented link and measure for achieving the Learning Outcomes. This saves future instructors from having to develop and document those links themselves. Additionally, the availability of the template reduces time spent by instructors in developing and establishing the course in D2L. They will be able to easily copy the course materials into their course, review the materials, and provide any supplements as they deem necessary. This allows the instructors to spend more time supporting and interacting with students.
- iii. Hosting of the modified syllabus and OER course materials including course exams and projects through GALILEO Open Learning Materials as well as on the D2L server, allowing for broad access to course OER materials by instructors of similar courses.
- iv. Analyzing the pre-and post-OER data, and sharing the work with other colleagues through conference presentations and peer-reviewed journal articles.
- v. If the research results of this project suggest significant educational benefit to students, we hope to work with other colleagues teaching Educational Psychology to adopt the OER materials for the entire upper-level course and to partner with the library as well as Center for Teaching & Learning at UWG to provide professional development workshops and seminars for instructors on ways to use and adopt the OER materials. This would not only allow for more student expense savings and access for multiple sections of Educational Psychology (typically well over 100 students per semester), but also encourage other instructors to consider transforming their courses to no-cost categories at the University of West Georgia.

### Note: Letter of Support

*A letter of support must be provided from the sponsoring area (unit, office, department, school, library, campus office of the Vice President for Academic Affairs, etc.) that will be responsible for receipt and distribution of funding. Letters must reference sustainability. In the case of multi-institutional affiliations, all participants' institutions/departments must provide a letter of support.*