



Does Open Education Work?

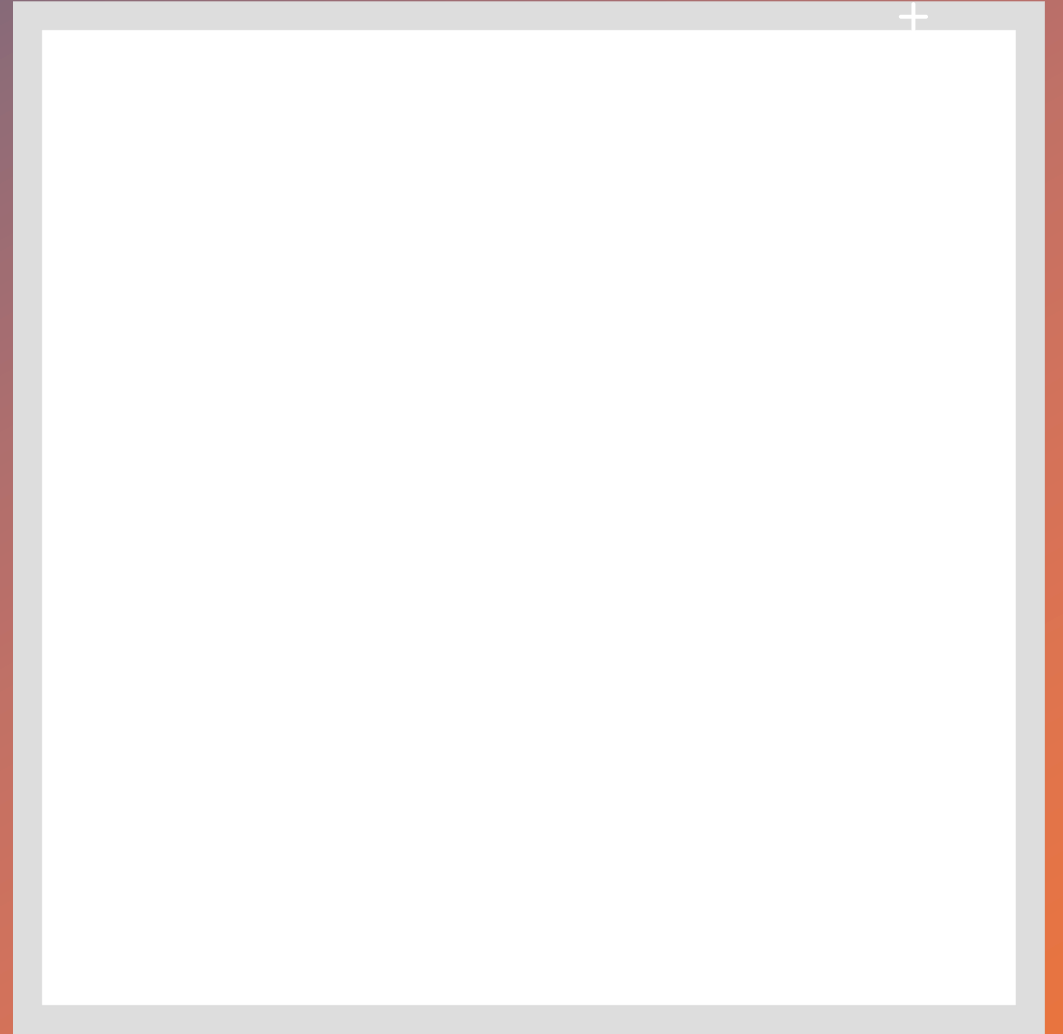
Ten Years of Research at USG Institutions

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About Us



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Poll:
Where are
you joining
us from
today?

Link:

https://PollEv.com/clickable_images/QAgNk99doflmCB7MV9KPn/respond



About ALG and Open Ed Research





About ALG

- A GALILEO Initiative
 - Started with RACL
 - Pilot Team: Librarians, Instructional Designers
- ALG Grants
 - Transformation Grants
 - Continuous Improvement Grants
- Publishing Open Work
 - GALILEO Open Learning Materials (Digital Commons)
 - GKR Integration
 - OpenALG (Manifold)



About Open Education

- OER = Open Educational Resources
 - Free to use and customize
 - Enabled by open licensing (Creative Commons)
 - Attribution, ShareAlike, NonCommercial, (Don't use NoDerivs)
- Open Pedagogy
 - Using the power of Open within instruction
 - Giving students the agency to create and share knowledge
 - Public sharing for student works is often opt-in

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How do you measure and evaluate Open Education?

- Newer field
 - Larger-scale Open Ed started in 2012 with OpenStax Textbooks
- What do you measure?
 - Open Education Group: COUP Framework
 - Cost (Savings Data)
 - Outcomes (Learning)
 - Usage (Analytics, UX)
 - Perceptions (student opinion, faculty perceptions of quality)

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○ Poll:
What do you think are the pros and cons of Open Education?

- Pros - <https://PollEv.com/discourses/0PQ26AvOHZX6vHDIwa0cB/respond>
- Cons - <https://PollEv.com/discourses/uAwQT1zr1YtLKvR3vkLHz/respond>



ALG – from Grants to Research Projects



- Sustainability Plans and Research Plans at end of Final Report
 - In the reports for Fall 2023, **22 out of 29** reports said they either already conducted or will conduct scholarship
 - Presentations and Panels
 - Articles
 - **We've had ten years of grants with scholarship resulting from ALG grantee work, so...**
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 - What has USG research on Open Ed shown?

In ALG's first round of grants, students saved money without affecting learning outcomes or retention.

Croteau, E. (2017). "Measures of student success with textbook transformations: The Affordable Learning Georgia Initiative." Open Praxis, 9(1).

- Formerly VSU, now at University of Kentucky

“These results suggest a consistent level of student performance pre- and post-transformation and underscores the quality of each chosen OER. The survey data that was provided generally supports the notion that students did not perceive a difference in quality or understandability when using the OER and the demonstration that students performed equally as well with the OER supports perceived high quality.”

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Students
perceived
faculty using
open textbooks
as more kind,
encouraging,
and creative.

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[Vojtech, G. and Grissett, J. \(2017\). "Student perceptions of college faculty who use OER." International Review of Research in Open and Distributed Learning, 18\(4\).](#)

- Georgia Southwestern State University
“...more "textbook cost - positive" justifications were provided for the faculty member using an open textbook (n = 40) versus a traditional copyrighted textbook (n = 4)... It was also used more often to justify the likelihood of taking a course for faculty members using an open textbook (n = 9) compared to a traditional copyrighted textbook (n = 0).”

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Students perceived a free and open OpenStax Biology textbook as comparable to the work of commercial publishers.

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Watson, E. Domizi, D., and Clouser, S. (2017). "Student and faculty perceptions of OpenStax in high enrollment courses." International Review of Research in Open and Distributed Learning, 18(5).

- University of Georgia

“In an open-ended question, we asked students what they liked best about the OpenStax book. For the most part, their responses were brief and they listed one or two things. For example, "It is easy to access and free" is a representative response to this question. **The most common response was that they liked that it was free (n=604). Students also indicated it was easy to access the text (n=265),** with comments such as, "I can access it from my computer, so that I don't have to always bring it with me."”


All students benefited from OER use across multiple courses in overall grades.

Pell-eligible students, students of non-white races and ethnicities, and part-time students benefited disproportionately.

Colvard, N., Watson, E., and Park, H. (2018). "The Impact of Open Educational Resources on Various Student Success Metrics." International Journal of Teaching and Learning in Higher Education.

- University of Georgia

“To analyze the data for all students and groups involved in the study, **two sample t-tests were used to compare non-OER to OER courses.** To compare student financial aid status (Pell and non-Pell recipients), ethnic origin characteristics (White and non-White students), and registration status (fulltime and part-time) with regard to enrollment in non-OER and OER courses, we used **two-way ANOVAs with grade as the dependent variable and OER status and student demographic information as fixed factors.**”



Faculty were motivated to adopt OER due to the cost of other course materials and a desire to increase student success. Oh, and grants!

Nagashima, T. and Hrach, S. (2021). “Motivating Factors among University Faculty for Adopting Open Educational Resources: Incentives Matter.” Journal of Interactive Media in Education.

- Columbus State University


“...faculty were motivated not only by factors reported in prior literature such as the lowered costs and improved student learning but also by additional incentives provided by the University System of Georgia, including a monetary incentive and recognition for using OER.”

COVID and
Computer Science:
Students did not
perceive
differences in
quality and
usability with an
open textbook.


Angelopoulou, A., Hodhod, R., & Perez, A. J. (2022). "Factors affecting student educational choices regarding OER material in Computer Science." Journal of Computers in Education.

- Columbus State University

“However, two student characteristics presented significant differences. Students who used the OER textbook more frequently were more likely to have a less positive attitude towards the online format of the textbook. Also, students with higher motivation to learn perceived it as a better resource than the traditional textbook compared to students with lower motivation to learn.”




Students use an
open textbook
as inconsistently
as a commercial
textbook.



- Students are positive about ancillary resources supporting an open textbook so long as they use them.
- [Tijerina, T. & Arnett, E. J. \(2023\). “Perspectives from a Departmental Adoption of an Open Technical Communication Textbook.” Programmatic Perspectives.](#)

“From the student survey, students’ actual use of OER is about as inconsistent as their use of traditional commercial textbooks, students’ use of supplementary resources has a positive effect on their perception of the OER as long as they choose to use them, and students’ interest in an OER and their perception of its quality do not appear to be related.”





For non-
USG
research:

Open Education Group: The
Review Project

[https://openedgroup.org/the-
review-project/](https://openedgroup.org/the-review-project/)

“This review provides a summary of all known empirical research on the impacts of OER adoption (including our own). The version below will be periodically updated with new articles as we become aware of them.”

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- Poll:
Where might we focus more research?
What are the research gaps?

Link:

<https://PollEv.com/discourses/Gis3UNGv4xf35ASlwkIKT/respond>

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What's next?

- **Research Grants** (limited funding category, still our first year) for small teams of faculty in the USG
- More **national coordination and cross-institution/system communication** needed
 - Open Ed doesn't have a society or a disciplinary organization
- Bigger, bolder studies on learning outcomes and retention like the UGA study **still needed**
- Less affordability-study focus on “all” students, more focus on groups of students who would benefit from affordable materials
- More emphasis on **open pedagogy**, less on *just* the resources

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What else?

We're about to enter a world where commercial *and* open authors will use GenAI tools – how will this differ from what came before?

ALG Guidelines for Using Generative AI Tools in OER:
<https://www.affordablelearninggeorgia.org/resources/create/opengenai/>



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What are your questions?

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Thank You!

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Find us on LinkedIn!