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the greater strategic plan of the university. Finally, it is necessary that students have a means of directly supporting and offering feedback to their instructors about educational resources, engaging one another about the financial burdens associated with their educations, and ultimately recognizing that their voices are being heard and considered by faculty and administrators. When factored in broadly among the contexts, cultures, and infrastructure of a university, it becomes difficult to situate OER as sustainable in itself. It is the active contribution of all stakeholders that enables an OER adoption program to thrive at the institutional level, because programs, like OER, must be designed and iterated to fit the contexts of a specific university.

The K-State Open/Alternative Textbook Initiative (OATI) is now in its fourth year. Spearheaded by faculty members from Mathematics, Food, Nutrition, Dietetics and Health, and the Libraries, the design of K-State's initiative recognizes that a lack of financial reward, release time, and university support discourages faculty from implementing open or alternative resources to replace textbooks within their courses. Mindful of grant-awarding initiatives like those at Temple University, the University of Massachusetts at Amherst, and other institutions where faculty are provided stipends to adopt and adapt low- or no-cost replacements

interdepartmental nature of the collaboration backing the KOATI and an offer of an additional \$10,000 of financial support from the K-State Libraries if a \$50,000 ask was awarded through SCTE. This SCTE proposal was accepted in April, and a call for OAER proposals was drafted and distributed to faculty. Table 1 summarizes annual initiative activities.

Table 1

Annual Initiative Activities

Early April	Call for OAER grant proposals
Mid May	Announce faculty OAER grant awards
Early July	Awardees receive first half of their grant funds
Early November	Distribute second half of funds if faculty meet approved expectations/outcomes and are teaching with resource instead of textbook during Fall Semester
Late September	Call for OAER grant proposals
Early November	Initiative faculty communicated with and/or met individually with awardees to discuss their progress and plans for completing and/or teaching with OAER
Early December	Announce faculty OAER grant awards
Early January	Awardees receive first half of their grant funds
Early February	Distribute second half of funds if faculty meet approved expectations/outcomes and are teaching with resource instead of textbook during Spring Semester
Late April	Awardees upload resources to LMS, allowing all awardees to access resources prior to meeting and discussing their experiences from participating in the initiative
Summer	Initiative faculty communicate with and/or meet individually with awardees to discuss their progress and plans for completing and/or teaching with OAER

Since SCTE funding was likely a one-time award, KOATI organizers sought representation and input from across the univers 0 0 1 12

during the first two years of funding. In addition to these students, invitations to serve on the evaluation panel were also extended to the staff of the Teaching and Learning Center and to the Office of Vice Provost for Undergraduate Studies. A representative from each served on a panel during the first year. Awards went to 12 out of the 14 applicants, with \$60,000 committed to funding their OAER projects during the first year of the program. All 12 faculty members proved successful in creating, adapting, and/or adopting OAER to use in their courses and received full financial compensation. Resulting OAER took a variety of forms including adapted OpenStax resources, interactive course modules within the K-State learning management system (LMS), instructional videos or website media, and iBooks-based alternative texts.

After the first year, the wording in the 2013 call for SCTE applications had been revised to discourage repeat awards but few alternatives existed through which the initiative might secure funding. The K-State Libraries again pledged \$10,000 in funding and a smaller \$30,000 SCTE application was submitted in December 2013. The more modest proposal was accepted, and the KOATI began implementing the same schedule outlined in Table 1 for the program's second year. In summer 2014, the K-State president and provost requested a meeting with organizers to learn more about the KOATI and expressed interest in supporting and potentially expanding the initiative based on its success and estimated returns on investment. A proposal was developed for central administration by KOATI leaders that described an approach for scaling up the adoption of OAER with the goal being that OAER would replace commercial textbooks in 75% of freshmen and sophomore courses.

Just before the review of OAER applications for Fall 2014, a pair of 2015-2016 student body president and vice president candidates contacted KOATI organizers and were interested in learning more about the program and potentially including it as a part of their collective SGA platform. The candidates served as student representatives on the Fall 2014 evaluation panel and were later elected on a platform that included the KOATI. During the Fall Semester, word circulated that funding for the KOATI would be provided by the central administratioA

Under the urging and support of the student body president and vice president, the K-State Division of Communications and Marketing

Given the university's financial investment in OAER courses was under \$150,000, the annual return on investment was 6 times greater in terms of student savings. Assuming that these courses continue to use OAER as other courses adopt OAER, this rate will only grow over time.

If, from the beginning, a \$10 course fee were imposed on the 17,963

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publicly available website resources has expressed interest in making the websites' content open through a Creative Commons licenses rather than copyrighted. Six of the 11 awardees who have authored document resources indicated that they were in the process of making them open or interested in making them open. One awardee did not think their resources were ready to be made open yet, while two others noted that their resources could not be made open because they contained copyrighted content. Among those with iBook resources, one awardee, who has received two awards, expressed interest in moving them to a different platform in order to make them open. The other iBook author indicated a preference to focus on K-State students rather than making it open. The LMS module resources typically use copyrighted resources and thus are not openly available. For instance, one OAER has used library resources heavily in order to access library-

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facilitate arguably greater immediate adoption from any instructor because s/he is capable of both leveraging paid-for university, and copyrighted resources when developing content and devoting more time and attention to designing materials around their students' needs. For these reasons, initiatives that start with a push for low-cost yet innovative alternative resources, in particular, may meaningfully prompt a general interest in12(i)TBT1ijyTBT1001177.98 707.26 Tm4[(i)4(ni)45(F)-21A10(es 119(y-11(t)4(OA(o)-Te)-I))4(n)-1rials

- Friesen, N. (2009). Open educational resources: New possibilities for change and sustainability. *The International Review of Research in Open and Distributed Learning, 10*(5). Retrieved from <u>http://www.irrodl.org/index.php/irrodl/article/view/664/1388</u>
- Hilton III, J. L., Lutz, N., & Wiley, D. (2012). Examining the reuse of open textbooks. *The International Review of Research in Open and Distributed Learning*, *13*(2), 45-58. Retrieved from http://www.irrodl.org/index.php/irrodl/article/view/137
- Hilton III, J. L., Robinson, T. J., Wiley, D., & Ackerman, J. D. (2014). Cost-savings achieved in two semesters through the adoption of open educational resources. *The International Review of Research in Open and Distributed Learning*, *15*(2). Retrieved from http://www.irrodl.org/index.php/irrodl/article/view/1700/2833
- Hilton III, J.L., & Wiley, D. (2010). A sustainable future for open textbooks? The Flat World Knowledge story. *First Monday*, *15*

- Paulsen, M. B., & St. John, E. P. (2002). Social class and college costs: Examining the financial nexus between college choice and persistence. *The Journal of Higher Education*, 73(2), 189-236. doi:http://dx.doi.org/10.1353/jhe.2002.0023
- Provasnik, S., & Planty, M. (2008). Community colleges: Special supplement to the condition of education 2008. Statistical Analysis Report. NCES 2008-033.
- *National Center for Education Statistics*. Retrieved from <u>http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2008033</u>
- Student Governing Association. (n.d.). SGA documents. *Kansas State University.* Retrieved from <u>http://www.k-state.edu/sga/documents/</u>
- UNESCO. (2002). Forum on the impact of open courseware for higher education in developing countries: Final report. Retrieved from <u>http://unesdoc.unesco.org/images/0012/001285/128515e.pdf</u>
- Wiley, D.A. (2000). Connecting learning objects to instructional design theory: A definition, a metaphor, and a taxonomy. In D.A. Wiley (Ed.), *The instructional use of learning objects: Online version*. Retrieved from <u>http://reusability.org/read/chapters/wiley.doc</u>
- Wiley, D., Bliss, T. J., & McEwen, M. (2014). Open educational resources: A review of the literature. In J.M. Spector, M.D. Merrill, J. Elen, & M.J. Bishop (Eds.), *Handbook of research on educational communications and technology* (pp. 781–789). New York: Springer. Doi:http://dx.doi.org/10.1007/978-1-4614-3185-5_63
- William and Flora Hewlett Foundation. (2013). *Open educational resources: Breaking the lockbox on education* [White paper]. Retrieved from <u>http://www.hewlett.org/wp-</u> <u>content/uploads/2016/08/OER%20White%20Paper%20Nov%2022%202013%20Final_0.pdf</u>

Appendix

The College Board estimates that an average student spends over \$1000 per year on textbooks. With over 19,000 undergraduates, that would be a total of around \$20 million per year spent by our students on textbooks. By moving away from purchased textbooks, we can recover part of this money, reducing costs to our students while increasing funds available to meet the goals of K-State 2025.

With support from the student government and K-State Libraries, we have run the Open/Alternative Textbook program for the past two years. This program has provided grants, typically of around \$5000, to faculty who wish to convert their class to use free materials. This has involved everything from updating a syllabus to use existing online materials in place of a purchased textbook, designing supplemental materials to adapt existing online materials to the needs of a specific course, developing a completely new online text, or moving from a textbook entirely to using video or other modern resources. The program has been very successful in saving students significant amounts of money on textbooks in the affected classes, with \$96,000 in one-time awards leading to *annual* savings in the range of \$800,000 to \$1 million. Furthermore, initial results are that using materials that are more precisely aligned with the course leads to increased student use and increased student learning. This is a successful program and should be rapidly expanded. There are several issues that can and should be addressed in this expansion.

We have only been able to address about 20 classes over three semesters of funding. While we have targeted primarily large-enrollment classes, the amount of total funding needs to be significantly increased for students to know most of their (at least low-level) classes will not require costly textbooks.

Because funding from the student government comes at inconvenient times, our advertising of the availability of funds has been limited to a short window. While conversations with faculty show many are interested in moving to a more affordable model for textbooks, they need to have time to think through the issues and plan before submitting a proposal, which is not possible given the current funding window.

Right now we only need to fund new developments. But just as textbooks come out with new editions every 4 years or so, running a course with an open/alternative textbook requires maintenance. In a few years we will need to be funding proposals for pa(p)5()-3(nd)-3(i)4-9(iuf)-1efETBT9 O Oimfer

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but of course not every project is likely to need or want a mentor. An additional amount needs to be provided for running workshops and other professional development opportunities, leading to the rough estimate of \$400,000 per year. The plan calls for the budget to scale up over time so we will not reach that level immediately. Given that the current pilot program is already saving students on the order of \$800,000 to \$1 million a year, this seems a reasonable investment, particularly if some funding can be raised from donations.

Primary Outcome

There are approximated 200 lower-level classes that use a textbook currently on campus. While some faculty will not change, others have already switched to open/alternative materials. Targeting the larger classes, we will need about 75-100 classes to switch to meet this goal. This is a stretch, but with both improved funding and increased campus acceptance of the need to consider open/alternative textbooks, it seems possible. We will of course also try to encourage and support faculty in higher-level classes in using open/alternative textbooks as appropriate.

Secondary Outcomes

. By decreasing the overall amount students pay, we will become more affordable for both in-state and out-of-state students. Since financial issues are the primary barrier to student enrollment and are one of the two main issues in retention, this should directly improve our enrollment management efforts, our freshman-sophomore retention rate, and our six-year graduation rate.

Giving faculty a month of summer support to adapt or develop course materials will improve the learning experience for students. Open/Alternative materials offer the ability to more closely integrate the materials and the course than a prepackaged textbook. They also can be updated much more quickly and easily to adapt to changing situations. Students learning will improve with the appropriate use of these materials.

. Making and

keeping a plan to significantly reduce purchased textbooks will be a signature accomplishment that will draw national attention to K-State. Such stature will improve our ability to draw students from across the country and the world. It will also make it easier to attract top-tier talent in pursuit of the goals of K-State 2025.

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