

## **Online OER Champion Courses: How a Scrappy Solution to Cope With Capacity Turned Into a Vital Tool to Build OER Awareness, Interest, and Knowledge on Campus**

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# Online OER Champion Courses: How a scrappy solution to cope with capacity turned into a vital tool to build OER awareness, interest, and knowledge on campus

## **Abstract**

The Colorado School of Mines (Mines) has been funded for an Open Educational Resource (OER) grant to build OER participation and community across campus through small incentive grants for faculty. The Mines OER Steering Committee developed an asynchronous course to provide participating faculty grantees with a strong foundation in OER topics. This paper discusses the development of the OER @ Mines Champion courses in relation to the larger, grant funded OER initiatives on campus. It provides an overview on the curriculum and how participants engage with the topics as they work through the modules. This project utilizes survey data and participant feedback to assess the courses' ability to increase awareness, interest, and knowledge of various OER subjects. Findings on the strengths and weaknesses of the courses' curriculum provide readers with valuable information on how different topics interest, challenge, and engage faculty. The paper also includes successes and lessons learned in participant recruitment and engagement.

## **Introduction**

The OER @ Mines Champion certificate program was first launched in 2019 as a resource for Mines faculty participating in the campus OER incentive program. This incentive program funded faculty to adopt, adapt, and create OER for their courses. The initial interest in the program was higher than anticipated and it was challenging for the Scholarly Communications Librarian to support the accessibility needs, copyright consultations, and development of each of the funded projects.

Since the program first launched, 23 projects have been funded and the number continues to increase. Managing the growth of the Mines OER program has been a challenge for the campus' OER Steering Committee. While interest and participation among faculty has increased significantly; capacity to support this growth has not increased. This certificate program was initially developed as a mechanism for the Scholarly Communications Librarian to cope with limited capacity and support faculty working on OER projects. The intention of this course is to provide basic OER information, such as copyright, to the awarded faculty, with the intention of mitigating some of the one-on-one support from the Scholarly Communications Librarian. The certificate program has grown into a training tool for the greater Mines community as well as an

open resource that other institutions can adopt and adapt for their own campus training.

## **Literature Review**

The movement towards incorporating Open Education Resources (OER) into institutions of higher learning has been gaining momentum since the mid-2000s, with early promoters recognizing that the key to sustaining this movement meant encouraging faculty on a large scale to adopt, adapt, and create OER. Peter Reed noted in his 2012 study, “Awareness, Attitudes and Participation of Teaching Staff towards the Open Content Movement in One University,” that teaching faculty are open to sharing their work, but “they are not doing so to any large-scale degree, that is, through specific OER repositories and open licensing.”<sup>1</sup> The challenge of encouraging faculty to understand and incorporate OER can often derive from their unfamiliarity with terms and policies related to copyright.<sup>2,3</sup> These concerns are compounded by faculty questions regarding OER content quality and the peer review process.<sup>3</sup> However, these issues can be mitigated by informational courses offered by university libraries that not only allow faculty to better understand the concepts and purpose of OER, but also teach them how to use repositories and participate in the development of new content.

The role of the library in providing development opportunities for faculty has also been well demonstrated in the literature.<sup>4,5</sup> As Stamatina K. Koutsileou, et al. of the National Technical University of Athens note, academic libraries should become advocates of OER, including organizing “seminars/workshops for the faculty as well as individual (‘one-on-one’) meetings” among other efforts.<sup>6</sup> Others, including R. John Robertson of University of Strathclyde, go so far as to argue for the library’s role in developing “OER Literacy.”<sup>7</sup> Leadership in campus OER development and ownership of the Champions course by the Mines Library aligns with this demonstrated role of academic libraries.

Much of the published literature on OER adoption in higher education acknowledges the need for professional development opportunities for faculty.<sup>8,9,10,5</sup> These studies are largely focused on faculty perceptions of OER based on large scale OER programs or efforts. In their study of Oregon community colleges, Lantrip and Ray found, “the adoption process should provide training for faculty on pedagogical best practices and technology associated with the OER in addition to time to reflect on how to incorporate these into their adoption process.”<sup>11</sup> Many of these studies do not go into much detail regarding the creation and assessment of online learning modules or faculty development courses. It is often simply described as “training and professional support.”<sup>4</sup> Two notable exceptions to this broad description include the Tidewater Community College’s Z Degree<sup>4</sup> and Marisa Petrich’s evaluation of the OER training program hosted by the University of Washington Tacoma Library.<sup>12</sup> The Mines assessment of the OER Champion certificate program will provide a unique contribution to the field by evaluating the effectiveness of online OER training opportunities for faculty.

## **OER @ Mines Champion Course**

The OER program at Mines has developed extensively since 2018 with the support of two grants from the Colorado Department of Higher Education (CDHE). The primary purpose of the CDHE funded grant is to incentivize faculty to adopt, adapt, and create OER for their courses. This

program has already brought OER into 26 courses and are now saving enrolled students approximately \$150 each.

The first cycle of CDHE grant included a detailed plan to provide faculty with educational forums and workshops on various OER topics, including open pedagogy, copyright, and licensing. However, an unfunded Term OER Librarian position made it difficult for the team to provide this support to the funded faculty. While the team had the expertise to provide this training, they lacked the capacity to realize this aspect of the grant as intended. The OER Steering Committee at Mines developed the OER @ Mines Champion certificate program as a solution for providing maximum outreach and education in OER with limited capacity.

The Scholarly Communications Librarian initially developed the OER @ Mines Champion certificate program as a high-impact, low maintenance solution for providing faculty with learning materials on OER topics. Participants were recruited through campus-wide announcements and at OER-related events. The first iteration of the certificate program was launched in October 2019 and took participants approximately five hours to complete over four weeks. The course was developed as a self-directed, asynchronous training on Canvas, the campus' learning management software. The curriculum included modules on OER basics, finding OER, copyright and licensing, and how to be an OER champion on campus. The target audience was faculty who were adopting, adapting, or creating OER through the campus mini-grant program; however, unfunded faculty and graduate students also participated. A total of nine faculty and students registered for the first iteration of this program.

The certificate program is broken into four modules, each of which takes approximately one hour for participants to complete. Despite the asynchronous nature of the course, these modules fostered community by encouraging the grantees to interact with one another. The first module, "Introduction to OER," provides basic OER information, including context for the textbook crisis, the need for OER, and common OER myths. At the end of the first module, participants are asked to introduce themselves on the course discussion board. The second module introduces how to find OER and a variety of OER repositories. This module also includes an activity for participants to practice finding OER in various repositories. The third module introduces basic concepts of copyright and Creative Commons licenses. The module ends with a quiz to match Creative Commons licenses with their definition. Most of the content in the third module, including the quiz at the end, was adopted from an OER developed by Amanda Gorrell at Alamo Colleges. This OER was shared under a CC-BY license on Canvas Commons and is used in the course as an example of using openly licensed OER work. The fourth module covers the OER community and initiatives at Mines and across Colorado. This final module also includes a coffee break with the Mines OER Steering Committee for open conversation on OER initiatives and challenges on campus.

The second state grant that the Library received provided funding for the team to hire a Library and Information Science graduate student as an OER Fellow. This Fellow enhanced the OER @ Mines Champion curriculum by streamlining content delivery, updating modules, increasing interactivity, and facilitating discussion. While expanding the accessibility modules in the course, the Fellow and the Scholarly Communications Librarian quickly recognized that accessibility topics are too complex to introduce and cover comprehensively in a few modules. They recognised the need to pull out this part of the curriculum and provide a separate training entirely

on addressing accessibility needs and ensuring resources meet the Americans with Disabilities Act (ADA) standards. The accessibility training is being developed in partnership with the campus' Disability Support Services and Teaching & Learning Center to ensure the curriculum addressed the campus' existing accessibility requirements.

The second iteration of the OER certificate program had a total of 13 registered faculty and student participants. As graduate students are increasingly hired to support OER creation across campus, the percentage of student participants was higher than anticipated - 4 graduate students took the course. Unfortunately, none of the funded faculty members adopting, adapting, or creating OER as part of the second cohort participated in the course.

### Program Effectiveness

While the first iteration of the course was not formally assessed, the second was designed in light of feedback received from the first cohort. Following revisions, five questions were devised by course designers to assess the fundamental goals of the course. Consequently, participants were asked to respond to an anonymous pre- and post-course survey to measure changes in their knowledge and understanding of the various OER topics covered in the course. They were asked to reflect on and rate the following using a five-point Likert scale: general knowledge of OER, the importance of OER in higher education, comfort level navigating copyright in OER, knowledge of accessibility needs in OER, and familiarity with OER initiatives at Mines.

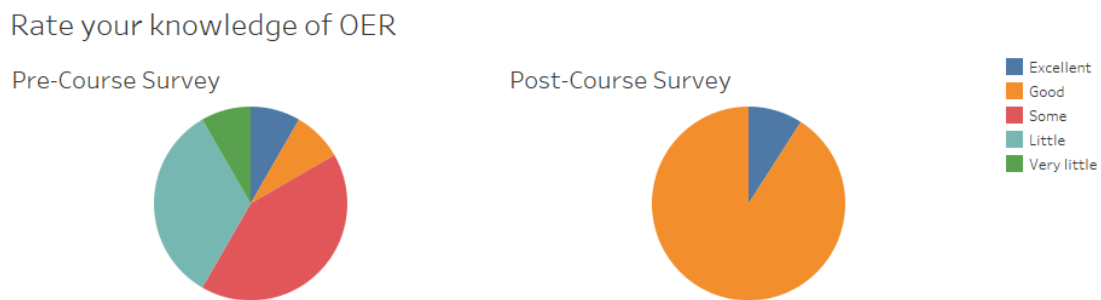


Figure 1: Results from pre- and post-course survey to "Rate your knowledge of OER"

There were a total of 12 responses to the pre-course survey and 11 responses to the post-course survey. Responses to the pre-course survey showed that the majority of participants (n=10) indicated that they had only "some" to "very little" knowledge of OER generally before taking the course. Nearly half of participants (n=5) indicated that they were at least "somewhat uncomfortable" navigating copyright concerns of OER, with much of the remainder (n=5) indicating that their comfort level was only "neutral". Responses showed the greatest need for improvement to be in familiarity with accessibility needs in OER. With only one exception, all participants (n=11) indicated that they had at most "some" knowledge of accessibility needs in OER. In fact, this category received the most "very little" responses (n=4). Responses to the final question reflected an overall low knowledge of institutional OER initiatives at Mines. The majority of responses (n=7) indicated "little" to "very little" knowledge of these initiatives. However, this was not surprising to the team as one of the goals of the curriculum is raise

awareness of OER initiatives. In the open text responses, the majority of participants (n=8) commented that they were most interested in learning about the general landscape of OER: what OER exist and where the best resources can be found. The minority of participants (n=2) commented that they were most interested in creating their own OER and wanted guidance in doing so.

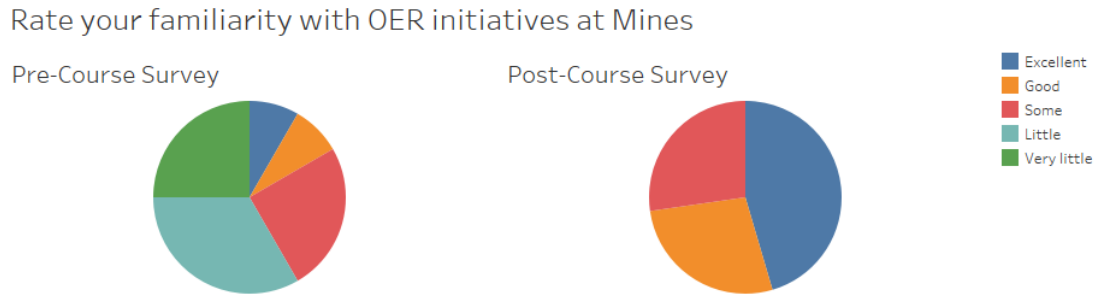


Figure 2: Results from pre- and post-course survey to "Rate your familiarity with OER initiatives at Mines"

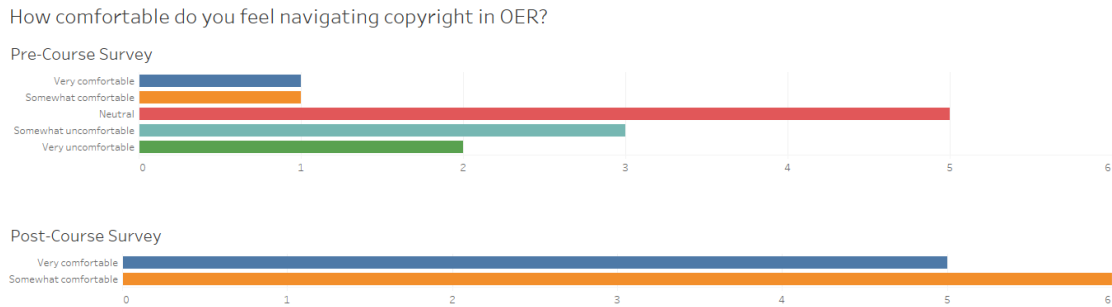


Figure 3: Results from pre- and post-course survey to "How comfortable do you feel navigating copyright in OER?"

The post-course survey saw a significant increase in the self-assessments across the board. All but one participant (n=10) rated their knowledge of OER as "good". The importance of OER in higher education was also evaluated highly with the majority (n=8) indicating that they felt it was of "high importance". The remainder (n=3) indicated that OER was of "moderate importance" to higher education. Participants' comfort level with navigating copyright issues also improved across the board, with a near-even split between students indicating that they feel "somewhat comfortable" (n=6) and "very comfortable" (n=5). Ratings for accessibility needs in OER saw modest improvement. The majority (n=6) felt that their understanding was "good". The same number of participants (n=2) indicated "excellent" and "some" respectively. One participant felt that they still understood "very little" about accessibility after finishing the course. Self-assessed familiarity with OER initiatives at Mines specifically did not improve as much as expected. While 5 participants responded that their familiarity was "excellent", the remainder of responses (n=6) were split between "good" and "some". Half of the open text responses (n=5) commented on the helpfulness of the copyright module of the course, particularly the creative commons licensing

quiz. The remainder (n=5) reflected on the developments in OER quality and quantity in the past several years.

## Discussion

Course designers were, overall, pleased with the outcomes of the course; however certain areas, such as accessibility training and outreach, still need to be further developed. Generally, participants noted improvement across most areas of self-assessment and appeared to find that their own areas of interest were adequately addressed. In particular, it's notable that participants felt somewhat comfortable to very comfortable regarding copyright, since this is a topic that has traditionally been unfamiliar to faculty seeking to support and share OER. Furthermore, the high rate of interaction between participants during the course is significant considering the course was asynchronous and took place during a pandemic.

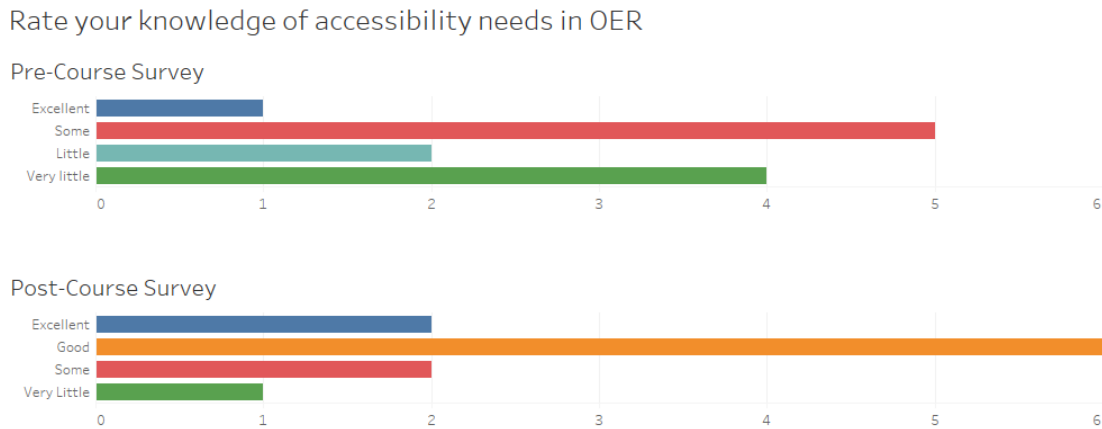


Figure 4: Results from pre- and post-course survey to "Rate your knowledge of accessibility needs in OER?"

As seen in the survey responses, confidence levels regarding accessibility in OER improved slightly. However, the survey designers recognized that the survey may not have captured the correct data as they did not specify the meaning or context of "accessibility" in the survey. In the future, the survey will explicitly define accessibility in terms of ADA compliance, to differentiate from topics of accessibility in terms of access to educational materials and making education equitable.

The need for greater investment in the topic of accessibility for OER creators was recognized prior to the launch of the second OER @ Mines Champion cohort. Consequently, a stand-alone OER accessibility course is currently in development, with plans to launch in early Summer 2021. This course will supplement the OER @ Mines Champion program by providing faculty with the skills needed to assess their materials for ADA compliance and make them accessible for all learners.

Additionally, the number and types of participants in the OER @ Mines Champion course demonstrates a need to better market the course across campus. The course was advertised

through campus-wide announcements, at OER-related events and workshops, and directly to grantees from the OER incentive program, however, the course recruited few instructors looking to adopt OER into their courses. The majority of participants were taking the course for general interest or because of their involvement with the campus Writing Center's OER project. While the certificate program is welcome to all types of participants, the team plans to recruit more course instructors in hopes they will finish the program feeling equipped and compelled to use OER in their courses - thus increasing the number of OER courses across campus. For the next iteration of the certificate program, the team plans to directly contact department heads, asking them to encourage their faculty to participate.

## Conclusion

Investment in OER initiatives at Colorado School of Mines and elsewhere has steadily increased over the past several years. The OER @ Mines Champion course is one representation of the next logical step in the OER movement on college and university campuses, seeking to actively persuade and educate rather than simply assess current perceptions. While participants in all cohorts remain a small percentage of the total faculty and staff at Mines, interest continues to grow. Survey results from the second cohort showed improvement across all areas of assessment, while also providing a clear path for increasing OER education at Mines. Supporting accessibility remains a weakness for the Mines OER program, but intends to be addressed by developing a course focusing on specifically on making educational resources accessibility. In addition, the Mines OER Steering Committee will expand outreach and participation efforts.

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