AOER 101: An Introduction to Affordable and Open Education Resources for Your Classroom:

Script

Slide One (1)
Greetings! Welcome to AOER 101: An Introduction to Affordable and Open Education Resources for your Classroom! My name is Dr. Megan Lowe. I am the Director of University Libraries at Northwestern State University of Louisiana. I am located at the main campus of Northwestern, which is located in Natchitoches. My ‘home’ library is Watson Memorial Library. I am also the OER Content Expert for the UL System! I have been involved in the open access movement for many years, which led me into open education resources (OER) about a decade ago. Since then, I’ve been involved with OER at the institutional and state levels. I obtained my doctorate in 2022, and I did my dissertation on faculty perceptions of AOER.

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Slide Two (2)
Abbey Elder based her presentation on a collection of other resources, which are included here. This presentation is actually an excellent example of an open education resource – there’s no need to reinvent the wheel, when you can stand on the shoulders of giants!

Slide Three (3)
What are AOER? AOER stands for affordable and open education resources. They are interrelated ideas, but they are quite different.
Though the A comes first, we’re starting with the O – OER – because it’s easier to understand as a concept. OER are either public domain or have an open license, which grants users with certain permissions. The definition used here comes from UNESCO: “Open Educational Resources (OER) are learning, teaching and research materials in any format and medium that reside in the public domain or have been released under an open license, that permit no-cost access, re-use, re-purpose, adaptation and redistribution by others.” A keyword in that definition is permit. OER come with certain kinds of permissions.

What kind of permissions? Well, OER are usually licensed using Creative Commons Licensing (or CCL) models and designations. The license I discussed in slide one (1) and the odd graphic in the lower lefthand corner are representations of a CCL. If you haven’t watched the Copyright, Fair Use, and Creative Commons Licensing presentation, be sure to check that one out!

These permissions are sometimes called the five (5) Rs – retain, revise, remix, reuse, and redistribute. How you use these permissions will depend on the license attached to the resource you want to use. Not all CCLs permit all of the uses.

Let’s pull back for a minute to look at permissions. I’m not going to linger on this slide – this is meant to be a brief overview. Be sure to check out the Copyright, Fair Use, and CCL presentation, which goes into more depth. What you need to know is that copyright means all rights reserved; there are very specific ways these materials can be used. Fair use means as educators and researchers that we can use copyrighted material in certain ways without having to obtain explicit permissions. This is how we do AER with traditionally copyrighted materials.

Creative Commons Licensing means that some rights are reserved. If you think of copyright as a bundle of rights, CCL unbundles those rights. Public domain means that no one owns the property. It can be used in just about any way.
Slide Seven (7)
OER can be a lot of things, and that’s good! OER come in many types and come in many forms. This means that instructors are not limited – they can innovate! One of the misconceptions I’ve encountered in talking with faculty about OER is that they think open textbooks are the only kind of OER. Fortunately, that’s not true! OER DOES include open textbooks, but OER also include whole self-contained courses, images, ancillary materials like testbanks and study guides, course modules, software, all kinds of media, and so much more!

Slide Eight (8)
Here are some great examples of OER that aren’t textbooks!

- Activities: [H5P exercises and quizzes](#)
- Simulations: [PhET Sims](#)
- Labs: [Gel Electrophoresis Genetics Lab Sim](#)
- Videos: [Class Piano Tutorials](#)
- Case Studies: [Food Justice Primer](#)
- Homework Software: [MyOpenMath](#)
- Lecture Slides & Lesson Plans: [MIT Courseware](#)

Slide Nine (9)
So…in a galaxy of OER types, what *isn’t* OER? Well, anything that isn’t BOTH free and open with the 5R permissions. This includes:

- Library-licensed resources: they’re free (to you) but not open.
- Most blogs, podcasts, and websites: they’re free but not (always) open.
- Images you find on Google: they may be free but not open (check for the license).
- Open access monographs: they may be free and open but may not be remixable.

But remember: if something isn’t an OER, that doesn’t mean you can’t use it! Some of these resource types, like library-licensed resources, fall into the category of AER – AFFORDABLE education resources – which I’ll discuss shortly.
So, about affordable education resources or AER. An AER is defined by LOUIS, the statewide academic library consortium, as “A single or collection of required educational resources that may be offered at no or low cost to a student through a post-secondary education institution or an affiliated college bookstore at a pre-sales tax cost to a student that does not exceed an amount equal to four times the federal minimum wage” (LOUIS, 2021).

Low-cost is a specific designation. In Louisiana, an AER cannot cost more than $29, based on Act 125.

As we discussed on the previous slide, library-licensed resources are AER not OER. Library resources are AER because they are “copyright-protected material” but they are purchased by the library and provided to the student at no cost.

Let me emphasize that again: these resources are traditionally copyrighted. When you use resources under the Fair Use statute, you are essentially using AER.

At the end of the day, SOMEONE has paid for an AER – either the institution or the student, but either way it helps the student obtain needed course materials while keeping costs for them down.

What are the pros and cons of AOER? I think it’s important to be honest about the limitations of such resources. While they definitely seem like a great idea – and they are – there are downsides. But let’s look at the up and downsides to AOER.

The Pros of AOER! Let’s check out the upsides.

Let’s consider some numbers. These percentages from ISU Student Survey, 2022, using a sample size of 1,913 students. Due to high textbook costs:

- 91% of students delayed purchasing required course materials.
- 70% of students tried to pass without purchasing required materials.
- 65% of students downloaded illegal copies of materials online.
- 34% of students had to purchase textbooks instead of groceries.
• 23% of students **dropped a course**, affecting their progress toward graduation.

These numbers don’t truly reflect the other realities of how expensive a college education is or how vulnerable college students can be. In the US, 30-40% of college students experience food insecurity. 40-50% of them experience housing insecurity. Students have had to choose between buying food and/or paying rent and purchasing course materials. Food insecurity was initially the driving force to my dissertation, especially when the pandemic began to shine a light on the plight of college students. So, AOER have the capacity to help students manage costs. But AOER can do more than that!

**Slide Fourteen (14)**

In addition to being free or affordable, OER can support:

- **Better learning outcomes**: The literature shows: students who don’t get access to the course materials early on, they don’t perform well academically. In the interest of full disclosure, inclusive access has its own problems, though it does increase first-day access to resources. That’s also one of the main benefits of AOER – they increase first-day access to resources. However, without that access, students can fall behind quickly, which usually causes them to drop out. Which takes us to the next point:

- **Higher retention rates**: So, bad performance in class means failure or dropping out. But when students have access to the materials in a timely fashion, they can participate equitably. When course materials don’t cost an arm and a leg, they can pay their rent – they can buy food. That also helps them perform well academically. This, in turn, increases their capacity for persistence – not JUST retention.

- **Closer alignment with your course objectives**: But it’s not just about the students. Having more control over the course materials means you can more closely align the content with the objectives.

- **More flexibility in how you teach**: AOER can also provide you with more flexibility in how you teach – allowing you to engage with multiple modalities, for both your students’ benefit AND your own! It also allows you more freedom of expression in how you teach. AOER can help you customize/tailor your course materials!
• More up-to-date content: In some disciplines, using AOER allows you to use more up-to-date content, rather than waiting between editions as one might for a traditional commercial textbook. The best example I have of this is an atmospheric sciences professor who preferred using real-time NOAA maps in class to teach.

Slide Fifteen (15)
So, how does OER support all of these good things? Well, through access, fit, relevance, and accessibility.

• **Access.** All students can access OER used in their courses, not just those with the means to purchase. Access also means considering the DEI piece of what we do in higher education. We are able to support equitable access to resources, to be more inclusive.

• **Fit.** Open content can be adapted to better fit the teaching style and learning objectives of your course. Multiple modalities!

• **Relevance.** OER can be revised as needed, not on a publisher’s timeframe (which may be more or less often than you’d like).

• **Accessibility.** OER can be adapted to meet accessibility standards if it doesn’t already.

Side note: this slide was adapted from *OER Basics* by Kelsey Smith, licensed CC BY 4.0.

Slide Sixteen (16)
So far, this sounds pretty good for students and faculty. The next obvious question is: how is this good for colleges? Well:

• Providing free course materials can help current students continue in their degree path, take more courses, and progress to graduation. This in turn supports retention and persistence! OER also increases affordability, making a college education more accessible to a wider audience.

• Showcasing OER created at or adapted for use at an institution can help build interest in your school’s curriculum among potential future students and parents. OER can help build out or enhance curricula with little to no fiscal investment in the course materials.
• It can also showcase the capacity and expertise of your institution’s faculty in both content and pedagogy. More and more, institutions are regarding AOER pursuits on the part of faculty as valid tenure/promotion activities, especially as they can be used to obtain grant funding, enhance teaching/learning activities, and increase an institution’s research profile.

**Slide Seventeen (17)**

There’s one more group of stakeholders in the AOER ecosystem who benefit from the use of OER – the authors of those materials. Unlike commercial publishing, which relies on copyright (all rights reserved), OER authors typically use CCL. This means they are able to retain copyright over their work, allowing them to unbundle their rights and control how their work is used/reused.

Going open means that an author’s work widens the reach of that work to a global audience, for greater impact. This helps showcase an author’s expertise as an instructor and an expert in their field.

The adaptation and production of OER, and/or innovation in the classroom thanks to OER, can be leveraged in tenure and promotion discussions, as discussed in the previous slide. This enhances the reputation of the individual and can make critical work more accessible to their colleagues.

**Slide Eighteen (18)**

OER use has had a measurable impact on student savings in Louisiana. This dashboard was created and is maintained by LOUIS. You can see several UL institutions upfront – Northwestern, McNeese, Nicholls, and Southeastern jump out. But not only does this show the quantitative impact of OER in Louisiana, it shows something else: when you decide to engage with OER, you already have access to a community of practitioners across the state! You aren’t alone in the pursuit, and there’s not just a community of practitioners, but also a collection of resources!
Now, the reality check. The cons of OER. The downsides.

Now, OER as a concept has been around since the 1970s. However, in terms of active practice, particularly in Louisiana, OER is a relatively recent innovation. Consequently, there may be variable availability of OER in terms of:

- Your discipline
- The level(s) you teach
- The format(s) you prefer

I will be the first to acknowledge that some disciplines just don’t contain a lot of OER (…yet). Complex topics/courses like pharmacotherapeutics are not likely to have a lot of OER. Courses containing proprietary material – like tests and measures – would not necessarily have a lot of OER. OER for graduate-level courses may not exist (yet). For some materials, only open textbooks may exist, when you need (or would prefer) a testbank or a video.

But to be honest, these issues are not inherent to OER or only found in these materials. They can also apply to traditional commercial course materials. But there are other barriers to the use of OER that have to be addressed.

The initial concerns and criticisms around OER centered on issues such quality and availability. Those remain present in current conversations around issues with OER. Finding the right content for some disciplines remains a problem. Some OER aren’t as accessible in terms of accommodation as they should or could be. Quality has improved over time, but faculty have still expressed concerns around this issue.

However, these issues are being continuously addressed. If they remain barriers to the adoption and usage of OER, they are not insurmountable. The biggest barrier isn’t insurmountable, but it is a certainly significant resource: **TIME**.

In my dissertation which focused on the perceptions and experiences of faculty at my previous institution regarding OER, all of the participants indicated that OER
required a large time investment. Whether they were identifying and adapting pre-made OER for their courses OR creating original OER, all participants indicated that time was the greatest challenge.

However, it is worth noting that all of those same faculty all indicated that the time investment was *worthwhile*. In many cases, that time investment was upfront, and once that work was done, using OER was merely a question of maintenance, equal to that of traditional course materials.

**Slide Twenty-Three (23)**

So, let’s bring this all together.

**Slide Twenty-Four (24)**

When it comes to OER, you have options. It’s not an “all or nothing” conversation. You don’t have to immediately convert all of your course materials and courses to AOER. You can adopt some OER without jumping in completely. You may have already done so, without realizing – if you link to Youtube videos or resources on education or government websites, you’re ‘doing’ OER. You can take advantage of existing OER resources – you don’t have to create entirely new resources. But if you want to, you can start small and innovate! You can swap out traditional course materials with library-licensed resources or leverage Fair Use. It is not necessary to make sweeping course or curricular change. Small steps are still valid steps!

**Slide Twenty-Five (25)**

To get started, take stock of what you have. Do you have original assignments, PowerPoint presentations, study guides, testbanks, or other original course materials that you’re using? Those all qualify as OER.

There are many OER repositories out there where you can search for resources for your class. Your library also has a world of resources that can be used as AER – through LOUIS, all academic libraries in the state have amazing access to electronic periodical databases and ebooks that could be used in our courses.

Also, consider sources of support. Do you have staff – such as in the library or colleagues in your departments – who are already doing the OER thing? Do you have student workers or graduate assistants who could support your OER interests? Do you have a means to get course releases where you could use that time to investigate and/or develop OER? Does your campus have grant funding sources
that you could leverage? LOUIS often shares grant opportunities or funding opportunities with which your library faculty could connect you.

**Slide Twenty-Six (26)**
Most importantly, consider what you need. Remember, you can create simple materials for use, like assignments or quizzes. If you are interested in creating OER, consider what gaps exist in the available OER – how might you fill that gap? Can you leverage materials created by colleagues? What AER could be used in the meantime?

And don’t forget that there is support external to your institutions. Throughout the state and system, there are disciplinary working groups, state grants, and national organizations where you can find assistance and resources! And you have me, too!

**Slide Twenty-Seven (27)**
AOER represent opportunities.

1. You can adopt, adapt, or create content for your course.
2. You can fully integrate OER or adopt only ancillaries.
3. Use the resources at your disposal--and be creative!
4. AER are a valid option as well – what does your library provide access to that could be leveraged?
5. You don’t have to do this alone!

**Slide Twenty-Eight (28)**
Like I said before: you have me! If you have questions, please don’t hesitate to reach out to me. The best way to reach me is through email. My email is loweme@nsula.edu. Thanks for your attention today!