

OER Equity Blueprint

OER Equity Blueprint

THE ROLE OF OER IN ADVANCING EQUITY

DOERS3 EQUITY WORKING GROUP

DOERS3



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Introduction

The Driving OER Sustainability for Student Success (DOERS3) Collaborative is a group of 25 public higher education systems and statewide/provincewide organizations that are committed to supporting student success by promoting free, customizable open educational resources (OER). Launched in 2018, DOERS3 helps member organizations implement, scale, and sustain OER by advancing research and policy, sharing tools and learnings, and showing how OER can foster equity and student success. Learn more at doers3.org.

Authors, Designer and Inspiration

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RUBRIC INSPIRATION

The *Equity Through OER* rubric was inspired by other rubrics and models, including the Peralta Equity Rubric, the Transfer and Dual Enrollment Playbook Assessment Tools developed by the Aspen Institute and the Community College Research Center at Columbia University, the AAC&U VALUE rubrics, and the NERCHE Self-Assessment Rubric for the Institutionalization of Diversity, Equity, and Inclusion in Higher Education [pdf]. The NASH Equity Action Framework [pdf], under development simultaneously by one of the authors, also provided cross-fertilization.

PART I

OVERVIEW, FRAMEWORK, AND RESEARCH

Overview: What is the OER Equity Blueprint?

The **OER Equity Blueprint** is designed to define, unpack, and explain the multiple dimensions of equity and foreground the role of OER in closing equity gaps.

The **OER Equity Blueprint** begins with the *Theoretical Framework section*, including a statement of the Blueprint's vision, values, and definitions. The Theoretical Framework draws on the work of those scholars and academic leaders who have elevated equity and social justice as essential to the mission of public education. The following *Research Foundation section* provides an overview of research into why and how OER programs have worked to improve access and affordability, deepen student learning, and close equity gaps for historically underrepresented and minoritized students. This research is emerging. There are other research and impact studies underway that will bolster the evidence and case for the critical role OER play in addressing equity and student success.

The Blueprint then moves into the practice realm with a rubric organized by roles and functions within and across higher education institutions. The *Equity Through OER Rubric* is a self-assessment tool designed to guide students, faculty and other academic practitioners and leaders to understand and act on the equity dimensions of OER. The rubric is the heart of the Blueprint, the tangible application of the design that enables higher educators to comprehend the big picture and work deliberately through concrete action to achieve it. Moreover, through the unpacking of roles and responsibilities for those focused on building engagement with OER across the multiple dimensions of higher education institutions, the rubric foregrounds the extent to which equity and quality are inextricably bound.

The final section of the Blueprint is a *Case Studies section* that shares exemplars and stories of OER work seeking to advance equity, including but not limited to specific initiatives, projects, research, and analysis. Additional case studies will be welcome once the Blueprint is published.

The Blueprint is licensed under a Creative Commons Attribution 4.0 International License (CC BY). It is designed to be adopted, adapted and customized by those who seek to utilize and improve it. DOERS3 intends for others to contribute their case studies, research, data and practice so that the Blueprint remains a living document, seeking continuous improvement and progress, like the movements for equity and social justice themselves.

Overview: Blueprint Objective and Outline

Objective

The overarching goal of the DOERS3 *OER Equity Blueprint* is to define, unpack, and explain the multiple dimensions of equity and foreground the role of OER in closing equity gaps.

Outline

The Blueprint is composed of three sections:

1. Overview, Theoretical Framework, and Research Foundation
 - a. Overview: What is the OER Equity Blueprint?
 - b. Theoretical Framework: Vision, Values and Definitions
 - c. Research Foundation
2. The Equity Through OER Rubric
 - a. A detailed guide and self-assessment tool to integrate equity and equity-mindedness into OER and mobilize OER to close equity gaps.
3. Case Studies*
 - a. Affordable Learning Georgia and Accessibility (Jeff Gallant)
 - b. BC Campus and Accessibility (Josie Gray)
 - c. The Ohio State University's Racial Justice Grant Program to increase diverse voices in course materials (Ashley Miller and Jasmine Roberts)

**We envision an initial set of case studies with additional ones to be added over time to the Blueprint.*

Framework: Why a blueprint for the role of OER in advancing equity?

As a collaborative, DOERS3 works to position its members and other higher educators to realize the promise of high-quality, accessible, and sustainable OER implementation to achieve equity and student success at scale. In recognition that equity requires intentionality of purpose and action, the DOERS3 Equity Work Group was convened to develop a blueprint identifying the equity dimensions of higher education engagement with OER, and to foreground the role of OER in closing equity gaps.

Attending to equity has always been implicit in OER. Globally, equity has been a stated goal of OER expansion across all educational sectors exemplified in UNESCO's commitment to Open Education and the 2007 Capetown Open Education Declaration. Higher educators focused on building engagement with OER across all types of institutions name equity as a primary motivation.

The OER Equity Blueprint goes beyond naming and explicitly binds equity outcomes to OER. In addition to elevating the multiple dimensions of equity, the Blueprint seeks to identify institutional players' roles and responsibilities, and propose levels of engagement, action, and assessment designed to aid OER in fulfilling their promise. Building engagement with OER in higher education is about leveling the playing field for students by making college more affordable and inclusive, leading to improved student success. Course materials that are openly licensed allow higher educators to improve OER with attention to quality, cultural relevance, and responsiveness. In addition, a focus on equitable and equity-centered educational environments requires attention to a level playing field for OER agents, including faculty, staff, and administrative leadership.

In a global environment of rising income inequality—much of which is race-based—increasing the students' social mobility serves as a driver of OER adoption and expansion. With this equity motivation at the heart of OER, other dimensions of equity must also be attended to, including ability, race/ethnicity, sexual orientation, gender, gender identity, geography, and digital and technological capital. Because inequities are historically rooted in income inequality and structural racism, closing equity gaps requires acknowledgement of—and confrontation with—those two barriers.

The DOERS3 Equity Work Group has been motivated by the work of many higher education leaders, both individuals and organizations. For example, the work group believes that “students' cognitive, cultural and interdisciplinary diversity” (Ladson-Billings, 1994), should be included in any understanding of equity. The work group also views OER as a critical means to commit to and take action on inclusive excellence, as articulated by the Association of American Colleges and Universities:

The vision and practice of inclusive excellence...calls for higher education to address diversity, inclusion, and equity as critical to the well-being of democratic culture. ...The action of making excellence inclusive requires that we uncover inequities in student success, identify effective educational practice, and build such practices organically for sustained institutional change. (AAC&U, n.d.)

Equally critical is the insistence that the adoption and expansion of OER requires *equity-mindedness* to

engender analysis of policy and practice to address “the distribution of power, access to resources and knowledge, and the reproduction of social stratification” (Bensimon, 2009).

Finally, Sarah Lambert’s work to reclaim the social justice dimensions of Open Education deepens and broadens the motivation at the heart of OER engagement and expansion. Without using the word “equity,” she provides a definition of Open Education grounded in redistributive, recognitive, and representational justice that is all about equity:

Open Education is the development of free digitally enabled learning materials and experiences primarily by and for the benefit and empowerment of non-privileged learners who may be under-represented in education systems or marginalized in their global context. Success of social justice aligned programs can be measured not by any particular technical feature or format, but instead by the extent to which they enact redistributive justice, recognitive justice and/or representational justice. (Lambert, 2018)

With equity-mindedness and social justice as guideposts, this Blueprint serves to guide Open Education leaders in institutions, systems, and state-wide organizations in implementing and assessing this core equity within their Open Education and affordability programs.

Framework: Values and Definitions

VALUES

The DOERS3 Equity Work Group holds the following values as guides in the development of the Blueprint:

- Learner-centered OER promotes equity, inclusion, and accessibility, captured in one member's reminder that "we are teaching students—not content."
- Recognizing inequities and working to redress them requires taking responsibility and action that is personal and professional, as well as individual and institutional.
- Equity and quality should be understood as constituent components of one another—inclusive, capacious, and interdependent. Efforts to make access, participation, and completion equitable without assurance of quality are a hollow promise.
- In higher education, achieving equity results in increased student success in terms of access, participation, persistence, completion, and entry into the workforce.

DEFINITION

The DOERS3 Equity Work Group proposes the following definitions of equity, which has been developed by members and builds on their work and that of others, and equity-mindedness, which has been developed by Estela Mara Bensimon.

EQUITY

Life chances and choices are limited by many kinds of inequality, including social, income, racial, ethnic, gender, and ability. Equity is a corrective process that demands fairness for marginalized and minoritized populations by reducing gaps in opportunity and achievement through systematic efforts.

In higher education, equity is measurable and must be attended to across multiple touchpoints along the student success continuum, including: **access** to, **participation** in, **persistence** through, and **completion** of **quality** educational programs across student populations, disaggregated by race/ethnicity, income, gender, ability, first-generation and geography, among other characteristics.

EQUITY-MINDEDNESS

"The term 'Equity-Mindedness' refers to the perspective or mode of thinking exhibited by practitioners who call attention to patterns of inequity in student outcomes. These practitioners are willing to take personal and institutional responsibility for the success of their students, and critically reassess their own practices. It also requires that practitioners are race-conscious and aware of the social and historical context of exclu-

sionary practices in American Higher Education.” (Bensimon at the Center for Urban Education at the University of Southern California)

The DOERS3 Equity Work Group encourages all who engage with the Blueprint and the *Equity Through OER Rubric* to reflect on and determine definitions that are most appropriate and relevant to their own educational contexts. Likewise, they should reflect on and identify their context-specific student and practitioner populations of opportunity.

Research: Summary

The use of OER is a significant contributor to increasing affordability for students by reducing the cost of textbooks and out-of-pocket expenses, reported by students as the second biggest cost challenge they face after tuition (NACS Student Watch, 2017-2018). OER also contributes to improved student learning outcomes, persistence, and completion.

The use of OER is a significant contributor to increasing affordability for students by reducing the cost of textbooks and out-of-pocket expenses, reported by students as the second biggest cost challenge they face after tuition (NACS Student Watch, 2017-2018). OER also contributes to improved student learning outcomes, persistence, and completion. Studies suggest that not only is OER effective at improving student learning outcomes, but it also has an especially compensatory advantage in improving the outcomes of under-represented students (Ashford, 2018; Colvard, Watson, & Park, 2018; Hilton, 2016; Hilton, et al., 2016; SRI International, 2020). Thus, OER is a critical element to address equity and improve quality.

The use of OER will not have any deleterious effect on faculty members' principles of academic freedom. In fact, the utilization of OER enhances academic freedom by providing additional resources not available to faculty using traditionally published curricular materials. OER published with Creative Commons licenses allow faculty to use course material in ways that would otherwise be impossible if using materials published under traditional copyright.

The Georgia and Achieving the Dream research studies remain seminal to building the body of evidence for the ways in which OER close equity gaps and deepen student learning and success. There is emerging research from across North America and beyond that further reinforces the case, while also amplifying the need for additional research, data collection and analysis to explore further the role of OER in addressing systemic inequities across student populations, disaggregated by race/ethnicity, income, gender, ability, first-generation and geography, among other demographics and characteristics.

DOERS3 is committed to advancing this research agenda across multiple fronts. The Equity Work Group will continue its engagement with the role of OER in addressing the full dimensions of equity in higher education. Additionally, the DOERS3 Research Work Group is addressing the need for additional research, data collection, and analysis through the establishment of common data standards and the collection of meta-data organized around a set of research questions. As a collective, DOERS3 is united in delving further into the role of OER in enhancing quality and closing equity gaps in student learning outcomes and success.

Research: Foundation

There is an emerging body of research on the impact of OER on closing equity gaps, deepening student learning, and improving student success outcomes.

The development and use of OER can create more equitable learning experiences for all students. Simply stated, the cost of textbooks and other ancillary course materials should not be a barrier to success in higher education. Adoption of OER provides all students access to necessary textbooks[1] that will enable them to be more successful in class, persist from one semester to the next, and complete their degrees. In addition, OER closes equity gaps because it provides students who cannot afford required course materials access to the resources they need. This is important given the survey results from the Babson Survey Group (2018) which found that, in a survey of 2,700 U. S. faculty, 52 percent of faculty “believe that cost is the primary reason that not all students have access to required course materials” (Seaman, J.E. and Seaman, J., 2019).

Moreover, several studies, as referenced below, affirm that OER use also improves student success outcomes.

- Students were able to use their textbooks on the first day of class rather than waiting to buy the textbooks – if they bought them at all – until they could afford them.
- Students learned and performed better academically when they had immediate access to their educational materials.
- Research has also shown that OER initiatives address and improve the performance of all students, but especially the most under-represented students in the United States.

The Center for Teaching and Learning (CTL) at the University of Georgia (UGA) began to encourage the use of OER in the summer of 2013. A study was conducted of faculty who taught large enrollment courses and were currently using an expensive textbook or textbook/technology package. For the more than 21,000 students involved in this study, not only did they enjoy significant savings using work mostly created by OpenStax, but there was also a positive impact on their learning. The study at the University of Georgia also showed a significant and positive impact on under-represented students:

When considering Federal Pell eligibility, we observed an increase in A through B+ letter grades and a decrease in B through DFW grades. A significant decrease in DFW rates for Pell-eligible students was found (a 4.43 percent change) when OER was adopted as the textbook for the class. This research [also] revealed significant differences in academic performance (average final grade) for both White and non-White students enrolled in OER courses. But the magnitude in which non-White students' grades improved is very compelling (Colvard, Watson, & Park, 2018, p. 272).

These types of findings were echoed in the 2018 Achieving the Dream (ATD) community college study where 48 percent of Pell Grant recipients and 52 percent of under-represented minorities said OER courses had a significant impact on their ability to afford college compared to 41 percent for other students (Ashford, 2018). When students have access to course learning materials, it positively affects their in-class performance leading to student success, persistence, and completion.

The results from the 2018 ATD study were echoed again in the 2020 Achieving the Dream study conducted by their partners SRI Education and rpk GROUP (2020). This study involved eleven community colleges across the country. The average age of the study participants was 20. At least a third or more of the participating students were eligible for or had received a Pell grant. The proportion of students from historically under-represented ethnic minority groups ranged from 25 percent to 88 percent (SRI International, 2020). “In 6 of the 11 colleges, treatment students[2] taking OER courses accumulated significantly more course credits than those who had not taken any OER courses” (SRI International, 2020, p. 20). While the study did not find a significant impact on GPA by students taking OER courses, students maintained their GPAs despite taking more courses. Finally, “the number of credits earned by Pell students taking OER courses relative to their Pell-eligible peers was significantly higher than the number of credits earned by non-Pell-eligible students taking OER courses relative to their non-Pell-eligible peers” (SRI International, 2020, p. 4).

Additionally, the benefits for part-time students were equally compelling. Higher education often overlooks part-time students, and 71 percent are self-financing their education (Bombardieri, 2017). This population contains many under-represented students and tends to be concentrated at community colleges. The UGA study found a 53.12 percent increase in average course grades and a 29.54 percent decrease in DFW rates for part-time students (Colvard, Watson, & Park, 2018).

A common concern among faculty and administrators is the accessibility of digital resources. Disability Services professionals know that online websites and resources often are not as accessible as they should be, even if they pass basic Web Content Accessibility Guidelines. As Camille Thomas wrote in a piece for SPARC News, “We all benefit from good user experience and access that is comprehensive, beyond compliance at the bare minimum.”[3] Thus, the use of OER offers an opportunity to promote an expansive definition of equity that addresses issues related to accessibility for all students in higher education. In addition, in order to further facilitate disability access there are three resources that are particularly helpful for faculty to consider when choosing and/or creating OER that improve student access; especially students with disabilities:

- a. The *BC (British Columbia) Campus Open Education Accessibility Toolkit* (2nd Edition 2018)[4] by Amanda Coolidge, Sue Doner, Tara Robertson, and Josie Gray;
- b. *The Floe Inclusive Design Learning Handbook*[5] by the members of the Floe Project of the Inclusive Design Research Center at OCAD University; and
- c. the adoption of Universal Design for Learning principles[6].

Finally, the use of OER enhances faculty pedagogy and produces “significant benefits in instruction and student learning experience,” according to the study from Achieving the Dream (Ashford, 2018). Over 60 percent of students reported their overall learning experience was higher in an OER course than in courses using traditional materials (Ashford, 2018; Colvin, Watson, & Park, 2018; Hilton, 2016; Hilton et al., 2016). It is important to add that the significant benefits are not because OER course materials are easier or of less quality. In a major meta-analysis conducted by Clinton and Kahn (2019), they found there was no meaningful differences in learning between students who utilized traditional textbooks and open textbooks. In addition, students using open textbooks were less likely to withdraw from their courses (Clinton & Kahn, 2019).

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- [1] Whenever the phrase textbooks only are used, it also includes textbooks and other ancillary course materials.
 - [2] These are defined as students who received a high degree of OER courses by enrolling in three or more.
 - [3] Thomas, C. (2018, Oct 8). OER and Accessibility: Working Toward Inclusive Learning Open Education SPARC NEWS. Retrieved from <https://sparcopen.org/news/2018/oer-accessibility-working-toward-inclusive-learning/>
 - [4] Coolidge, A., Doner, S., Robertson, T. & Gray, J. (2018). BCcampus open education accessibility toolkit. (2nd ed.). BCcampus. Retrieved from <https://opentextbc.ca/accessibility-toolkit/>

- [5] Floe Project (n.d.). Floe: The inclusive learning design handbook. Canada: Inclusive Design Research Centre, OCAD University. Retrieved from <https://handbook.floeproject.org/>
- [6] TKI Inclusive Education. (n.d). Guide to Universal Design for Learning. Retrieved from <https://www.inclusive.tki.org.nz/guides/universal-design-for-learning/>

PART II

THE EQUITY THROUGH OER RUBRIC

A Rubric for Equity Through OER

THE WHAT, WHO, WHY AND HOW OF OER RUBRIC

WHAT

The *Equity Through OER Rubric* is a comprehensive self-assessment tool, designed to guide students, faculty, administrators and other academic practitioners and leaders in not only better understanding, but also acting on the equity dimensions of OER. The rubric is organized by categories, aligned with roles and functions for higher education institutions, units and practitioners. Its overarching goal is to enable users to integrate OER in equitable ways across higher education leading to equitable student access, outcomes and success.

WHO

College, university and university system educators and students from across all spheres of influence and practice, as well as practitioners and policy-makers from a broad spectrum of adjacent organizations and associations, are invited to use the *Equity Through OER Rubric*. The rubric identifies three broad categories of institutional focus and engagement: Students, Practitioners, and Leadership & Accountability. The three broad categories are broken down further into additional dimensions. While focused on individual institutions, the rubric has broad applicability and relevance to university systems and other educational entities.

WHY

In recognition that equity does not happen without intentionality of purpose and action, the DOERS3 Equity Work Group was formed to develop a blueprint—the *OER Equity Blueprint*—to identify the equity dimensions of OER in higher education, and to foreground the role of OER in closing equity gaps. The blueprint reclaims, amplifies and elevates the origins of OER in equity and social justice. Over the course of its work, the Equity Work Group realized the extent to which quality and equity are intertwined: *doing OER with an equity lens is doing OER well*. Equity is embedded in quality OER programs, just as quality is embedded in equity-minded OER programs, reinforcing the extent to which quality and equity are constituent components of one another.

HOW

There are multiple ways to engage with the rubric. The rubric developers invite higher educators to use it as a means to both recognize and honor their commitment to equity, as well as evaluate progress and act on those areas identified as requiring additional focus and effort. The rubric can be used to assess the institution as a whole, and/or may also be used by units and offices, including but not limited to colleges, academic departments, student support services, libraries, bookstores, information and instructional technologies, and business affairs. There is a distinct section for leadership and administrators, including those responsible and accountable for making student-facing, academic, policy and budgetary decisions. At the same time, the rubric seeks to make clear that all stakeholders have leadership roles to play in advancing equity through OER.

The *Equity Through OER Rubric* was created by members of Driving OER Sustainability for Student Success (DOERS3). DOERS3 is a collaborative that works to position its members and other higher educators to realize the promise of high-quality, accessible, and sustainable OER implementation in order to achieve equity and student success at scale. In addition to the Equity Work Group, DOERS3 also has work groups focused on research and capacity-building.

The rubric is a tangible application of the theoretical framework proposed in the Equity Work Group's OER Equity Blueprint. It brings the Blueprint into the practice and action realm by identifying roles and responsibilities of institutional players, and proposing levels of engagement, action, and assessment required to aid OER in fulfilling their promise. It is recommended that users read the Blueprint framework prior to engaging with the rubric.

The rubric will be under a Creative Commons Attribution 4.0 License (CC-BY). Users are encouraged to take advantage of the CC-BY license to adopt, adapt, and customize to best suit their needs.

Scale of Adoption

The scale of adoption proposes multiple stages of OER engagement, from not present, to beginning, to emerging, to established.

The rubric is not intended to shame people or induce guilt, even if users find that they fall into stages of adoption where there is no or only beginning activity and attention. Evaluating where action and attention are absent is a necessary first step to being intentional, equity-minded, taking action, and making progress.

Given that OER engagement is still nascent at many U.S. institutions of higher education, where resource constraints are all too real, the established stage will remain aspirational for many for some time.

The holistic planning embedded in these stages, with emphasis on continuous improvement, sustainability and scaling, is intended as a blueprint for reaching equity, the corrective process that demands fairness for marginalized and minoritized populations by reducing opportunity and achievement gaps through systematic efforts.

THE MULTIPLE STAGES OF OER ENGAGEMENT ARE:

1. Not Present
2. Beginning
3. Emerging
4. Established

Not Present

No attention paid to OER

Beginning

Activity and/or attention are beginning to be paid in isolation or ad hoc within units and/or institution

Emerging

More coordinated & intentional attention is being paid, and activity is underway in key dimensions of the OER category. A plan is being discussed and/or under development.

Established

Unit- and/or institution-wide foundation in place that includes a comprehensive plan for action, assessment, and continuous improvement.

Overall Info on Rubric Categories and Dimensions

The *Equity Through OER Rubric* includes three broad organizational categories, each with several dimensions, and each of which is essential to build and sustain capacity.

The categories represent not only areas of focus and engagement, but also stakeholder communities that sometimes intersect in terms of practice and responsibility:

1. Students
2. Practitioners
3. Leadership/Administrators

Within these categories, rubric users are asked to engage and evaluate themselves along a set of key dimensions and the rubric is organized accordingly.

STUDENTS

- Equitable Availability of OER
- Access to Technology
- Student Awareness of OER

PRACTITIONERS

- Equity-centered Instruction, Pedagogy and Content
- Multiple Dimensions of Infrastructure, including:
 - Staff Support
 - Course Markings
 - IT Support
 - Bookstores

LEADERSHIP*

- Ongoing Assessment and Continuous Improvement including:
 - Strategic planning and budgeting
 - OER-Equity goal-setting
 - Policy and Staffing
 - Instructor Incentives
 - Professional Development
 - Recognition in faculty promotion and tenure

*While leadership should be understood broadly and responsibility is required across all dimensions of the rubric, this section is focused on decision-makers and their responsibility and accountability.

Rubric Category: Students

EQUITABLY LEADING TO EQUITABLE STUDENT ACCESS, OUTCOMES AND SUCCESS.

- Availability of OER
- Access to Technology
- Student Awareness of OER

Availability of OER

- **Not Present:**
 - OER are not adopted in any programs or courses, and hence not available to students.
- **Beginning:**
 - OER are adopted in a few academic programs and courses.
- **Emerging:**
 - OER are being adopted more widely and intentionally in academic courses and programs, with attention being paid to availability for specific student populations.
 - OER are available online.
 - OER available offline through limited printing access.
- **Established:**
 - Comprehensive plan is developed with implementation underway to increase availability of OER to students institution-wide, with focused attention to targeted student populations by ability, income, race/ethnicity, gender, geographic location, and majors.
 - OER are accessible to all learners, and available online and offline.
 - New OER are designed in adherence to accessibility requirements and standards.
 - Monitoring plan in place to ensure no disparities in students accessing OER, including by ability, income, race/ethnicity, gender, geographic location, and majors.

Access to Technology

(Broadband, Devices and Services)

- **Not Present:**
 - Access to technology not considered as part of OER usage and/or planning.
- **Beginning:**
 - Access to broadband, devices and service considered as part of OER usage and/or planning.
- **Emerging:**
 - Alternatives for accessing OER are offered for students with technology impediments with attention to broadband, service and device needs.
- **Established:**
 - Comprehensive plan is developed with implementation underway to ensure technological access to OER for students, with attention to differing needs of student populations.
 - The plan includes alternatives for accessing OER for students with technology impediments and students can access course materials in a variety of ways.

Student Awareness of OER

- **Not Present:**
 - Students are not informed about what OER are, where to find them, or how to use them.
- **Beginning:**
 - Some institutional units and departments are beginning to take responsibility for informing students about OER and how to access them.
 - Course schedules and catalogues, and bookstore increasingly include clear OER course markings.
- **Emerging:**
 - More institutional units and departments are informing students about OER, including library, academic units, advisement and student support units, and bookstore.
 - Published cost-of-attendance information includes language on no- and low-cost textbooks and course materials.
 - Students are informed about data privacy aspects of automated textbook purchasing programs and other course material options.
- **Established:**
 - Comprehensive communication plan is developed with implementation underway

in which units take responsibility for informing students, including orientation, registration, financial aid, advisement, libraries and academic departments, and bookstore.

- Communication plan includes continuous monitoring of assessment, improvement, and dissemination.

Rubric Category: Practitioners

This section focuses on equity-centered Instruction & Pedagogy, Content, and multiple dimensions of Infrastructure, including Staff Support, Course Markings, IT Support, and Bookstores—all designed to build practitioner capacity institution-wide in terms of equity-centered OER engagement and expansion leading to equitable student access, outcomes and success. N.B. The Leadership & Accountability section below also includes attention to support for instructors, professional development, and academic policy like tenure and promotion, focused on those with decision-making authority and responsibility.

PRACTICE SIDE OF INSTRUCTION AND PEDAGOGY.

- Instruction & Pedagogy
- Content: Quality of OER Content
- Content: OER Across the Curriculum
- Infrastructure – Staff Support
- Infrastructure – Course Marking Responsibility
- Infrastructure – IT Support
- Infrastructure – Bookstore Engagement

Instruction & Pedagogy

- **Not Present:**
 - No attention paid to inclusive pedagogy.
 - Faculty of diverse voices, perspectives, career stages and identities not represented among instructors that use OER, and/or they do not have adequate support.
 - No incentives, professional development, financial or technical support provided to instructors.
 - Faculty receive no recognition of OER engagement for tenure and promotion.
- **Beginning:** Attention beginning to be paid to inclusive pedagogy, including:
 - Growing awareness and action to ensure faculty of diverse voices, perspectives, career stages and identities are represented among OER instructors.
 - Culturally and ability-inclusive OER content, including attention to bias in images, multi-media, and text.

- Diversity, equity and inclusion statements and expression of commitment to inclusive pedagogy made by faculty and some departments. Instructors have access to some *ad hoc* instructional design resources, professional development, financial or technical support.
- Faculty receive some recognition of OER engagement for tenure and promotion in isolated departments
- **Emerging:**
 - Faculty of diverse voices, perspectives, career stages and identities are more equitably represented among instructors using OER across departments, units and colleges.
 - Culturally and ability-inclusive OER content, including attention to bias in images, multi-media, and text, have been widely adopted.
 - Instructors increasingly have access to incentives to engage with OER, including more instructional design and other technical and financial support through designated staff, units, funding and/ or structured professional development.
 - Faculty increasingly receive recognition of OER engagement for tenure and promotion across academic departments and colleges.
- **Established:**
 - Faculty of diverse voices, perspectives, career stages and identities are represented equitably among instructors using OER institution-wide.
 - All instructors have access to ongoing and sustained professional development, including instructional design and technical support, funding and time.
 - All instructors have access to sustained grant program to incentivize and support adoption and creation of OER, and culturally and ability-inclusive OER content.
 - Faculty receive full recognition for OER engagement in tenure and promotion.

Content: Quality of OER Content

- **Not Present:**
 - No definition or shared understanding of quality in OER content as defined by cultural responsiveness, relevance and inclusiveness, accessibility and inclusive design, instructor authority over resources, and alignment of OER with course learning outcomes and assessment.
- **Beginning:**
 - Quality standards beginning to be defined, shared and adopted in isolated and limited ways across departments and units.
- **Emerging:**
 - Quality standards are adopted and implementation plan is under development to include assessment and continuous improvement, and unit- and/or institution-wide dissemination.
 - Quality content standards include attention to many of the following components: cultural responsiveness, relevance and inclusiveness, accessibility and inclusive design, instructor authority over resources, and alignment of OER with course learning out-

comes and assessment.

- **Established:**

- Implementation of OER quality content plan across unit(s) and/or institution, including regular assessment and continuous improvement.
- OER quality content plan includes attention to all of the following components: cultural responsiveness, relevance and inclusiveness, accessibility and inclusive design, instructor authority over resources, and alignment of OER with course learning outcomes and assessment.

Content: OER Across the Curriculum

- **Not Present:**

- No attention is paid to availability and assessment of OER across the curriculum, in Gen Ed, Core and gateway courses, majors and transfer pathways, to ensure access by diverse student populations in terms of ability, income, race/ethnicity, gender, geographic location, and majors.

- **Beginning:**

- Some attention is paid to OER availability and assessment across the curriculum in Gen Ed, Core and gateway courses, and/or majors.

- **Emerging:**

- More coordinated attention is being paid and a plan is developed or underway for ensuring availability and assessment of OER across the curriculum, with attention to Gen Ed, Core and gateway courses, majors and transfer pathways, with a focus on diverse student populations in terms of ability, income, race/ethnicity, gender and geographic location.

- **Established:**

- Implementation of OER Across the Curriculum plan, including assessment and identification of continuous improvement and scaling opportunities to ensure availability of OER in Gen Ed, Core and gateway courses, majors and transfer pathways, with a focus on diverse student populations, in terms of ability, income, race/ethnicity, gender and geographic location.

Infrastructure – Staff Support

- **Not Present:**

- No staff expertise around OER.

- **Beginning:**

- Limited and inconsistent staff knowledge of OER exists but some staff are developing expertise, and conversation about staffing required for OER capacity-building is occurring in isolated units, including library, instructional design, or Center for Teaching and

Learning (CTL).

- **Emerging:**

- Part-time staff support in place, including OER librarian, instructional designers, or dedicated CTL staff.
- Planning underway for additional staff requirements and professional development needed to build staff capacity

- **Established:**

- Full-time staff support in place, including OER librarian(s), instructional designers, and/or dedicated CTL staff.
- Comprehensive OER staffing plan in place that includes dedicated position lines, funding, regular professional development, and continuous evaluation and improvement designed to scale institution-wide.

Infrastructure – Course Marking Responsibility

- **Not Present:**

- No course marking of OER taking place

- **Beginning:**

- Initial course marking of OER taking place in isolated units or departments.
- Exploration of options underway, including conversations with stakeholders (students, library, faculty, administrative leadership, registrar, bookstore) regarding federal and/or state requirements, and how the institution can better serve students and work towards compliance through policy, practice, and platforms.

- **Emerging:** Planning underway to implement course markings across departments and units, including:

- Identification of roles and responsibilities
- Policy guidance
- Budgetary requirements, including staffing and platform/technology
- Clear instructions
- Bookstore, faculty, and student engagement;
- Communication to build understanding of course marking designations, i.e., OER, ZTC /Zero Textbook Cost, zero-cost course materials, LTC/Low Textbook Cost or low-cost course materials (with defined amount).

- **Established:** Comprehensive plan developed and implementation underway for institution-wide course marking. Plan includes:

- Student engagement
- Dissemination and adoption of policy and instructions, roles and responsibilities for library, registrar, faculty, departments, course coordinators
- Required resources for staffing, platform and technology support
- Bookstore engagement

- OER courses and other course designations flagged in data systems, i.e., bookstore listings, course schedules and registration
- Evaluation with metrics and ongoing monitoring

Infrastructure – IT Support

- **Not Present:**
 - No IT support for OER, in terms of staffing or technology.
- **Beginning:**
 - Growing awareness and conversations that IT support is essential for OER implementation, in terms of budget, staff and platforms.
- **Emerging:**
 - Part-time IT support is put in place.
 - Planning underway for staff, budgetary and platform development requirements, including conversations about platform options, what can be done locally, and what needs to be out-sourced.
- **Established**
 - Comprehensive OER IT plan being implemented, including dedicated budget for staff and platform, and ongoing evaluation of needs and requirements.
 - Full-time IT support in place, with platform operational.
 - Institutionalization of plan includes continuous improvement designed to scale and sustain funding.

Infrastructure – Bookstore Engagement

- **Not Present:**
 - No conversation with bookstore or consideration of bookstore role in advancing equity through OER.
- **Beginning:**
 - Bookstore starting to be recognized as important partner in advancing equity through OER.
 - Conversations beginning to make bookstore aware of OER options and requirements.
 - Some consideration underway of roles and responsibilities of institutions and instructors in bookstore relationship, including policies, protocols and deadlines
- **Emerging:** Planning underway to:
 - Engage faculty, registrars, other administrative units and bookstore as partners with respective roles and responsibilities.
 - Identify policies, protocols and deadlines.

- Inform students and faculty about where OER are available.
- Inform students and faculty about proprietary textbook and course material costs, options and requirements.
- Develop o procure bookstore software to track information from faculty and departments.
- **Established:** Comprehensive plan developed with implementation underway that includes the following:
 - Bookstore works with faculty to make OER options available and transparent.
 - Bookstore communication to enable students to make informed choices about OER and proprietary options.
 - Cooperation between bookstore and registrar.
 - Bookstore infrastructure to support and track OER options and make them clearly available to students and faculty
 - Institution has a process for attaching ISBN to OER.
 - Institution-wide policies, protocols and deadlines communicated broadly.
 - Transparency and tracking also for proprietary textbook and course material costs, options and requirements.
 - Institutionalization of plan includes ongoing evaluation for continuous improvement, scalability, and sustainable funding designed to support and sustain bookstore partnership and accountability.

Rubric Category: Leadership & Accountability

While leadership should be understood broadly and responsibility for equity is required across all dimensions of the rubric, this section focuses on decision-makers who have not only responsibility, but also accountability for ongoing assessment and continuous improvement, including strategic planning and budgeting, OER-Equity goal-setting, policy, staffing, infrastructure, instructor incentives, professional development and faculty tenure and promotion recognition. The overarching goal remains equitable student access, outcomes and success.

ASSESSMENT AND IMPROVEMENT

- Ongoing Assessment: Quantitative and Qualitative
- Continuous Improvement: Leadership Commitments

Ongoing Assessment: Quantitative and Qualitative

- **Not Present:**
 - There is no assessment of OER and its role in advancing equity.
 - No support for or identification of designated roles for assessment responsibility, nor how leadership is accountable for acting on results.
 - Student success data for OER (i.e., cost, outcomes, utilization, and perceptions) courses is not collected, disaggregated, analyzed, shared with the community, or input into planning and budgeting processes.
- **Beginning:** Assessment of OER and its role in advancing equity is beginning, with some attention paid to the following:
 - Who is responsible and accountable for assessment.
 - Cost savings to students using OER.
 - Perception of OER through student and/or faculty satisfaction surveys.
 - Diversity of faculty and staff engaging with OER
- **Emerging:** More coordinated assessment of OER and its role in advancing equity is taking place, both quantitative and qualitative, including much of the following:
 - Cost savings to students.

- ROI formula developed to track \$\$ savings to units and/or institution.
- Utilization data, including # of OER courses/sections, increase in faculty adoption.
- Student performance and success data collected for OER courses and academic programs, focused on: student enrollments in OER courses/sections; changes in DFW rates; and overall GPAs; subsequent course performance.
- Qualitative assessment of OER usage through student and faculty surveying.
- For both student and faculty engagement, data are disaggregated by populations, including race/ethnicity, gender, income ability, and geographic location.
- In addition to support for designated assessment roles and responsibilities, leadership assumes accountability for acting on assessment results.
- **Established:** Comprehensive quantitative and qualitative assessment plan is in place across units and/or institution-wide that includes:
 - Leadership accountability for acting on results.
 - Sustained support for assessment roles and practice.
 - Cost savings to students.
 - Institution-wide ROI formula in place to track cost savings to units and/or institution.
 - Utilization of data, including # of OER courses/sections, increase in faculty adoption; participation in and impact of professional development.
 - Student performance and success data collected for OER courses and some programs, focused on: student enrollments in OER courses/sections; changes in DFW rates; and overall GPAs; subsequent course performance; impact on retention and graduation rates.
 - Qualitative assessment of OER usage through student and faculty surveying.
 - For both student and faculty engagement, data are disaggregated by populations, including race/ethnicity, gender, income, ability, geographic location.
 - Data are disaggregated by academic programs, including Gen Ed, gateways courses and majors.
 - Data are analyzed for improvement opportunities and shared with the institutional community and system.
 - Data are utilized in strategic planning and budgetary decisions.
 - Assessment plan is institutionalized and made public in ways that promote sustainability and continuous reinforcement through data, action, improvement and scaling.

Continuous Improvement: Leadership Commitments

(strategic planning and budgeting, policy, staffing, infrastructure, funding, professional development, recognition and rewards, and sustainability of OER as contributor to advancing equity)

- **Not Present:**

- No efforts have been made to address Equity and OER through a leadership commitment to continuous improvement in terms of policy, staffing, infrastructure, funding, professional development, recognition and rewards, and sustainability.
- **Beginning:** Leadership has stated a public commitment to OER and Equity, and is beginning to address ad hoc attention to several key areas, for example:
 - Limited funding for staffing, infrastructure, faculty incentives, and professional development
 - Student-facing or academic policy, including faculty recognition and rewards
 - Some conversations with institutional stakeholders, including library, student groups, individual departments
- **Emerging:** Strategic planning and budgeting is underway to ensure equity-driven continuous improvement in the form of:
 - Establishment of equity goals for OER engagement by student and faculty and staff
 - OER Staffing and infrastructure
 - Professional development for faculty and staff
 - Policy changes to institutionalize OER engagement, including those impacting students, faculty and student governance, faculty tenure and promotion, etc.
 - Leadership-led engagement of institutional stakeholders, including faculty senates, deans, student groups, libraries, student affairs, business affairs, administrators, etc.
 - Leadership evaluation includes attention to progress on OER-Equity goals.
 - Solid plan for continuous improvement initiated, but is not deep, pervasive, or consistent
- **Established:**
 - Leadership takes responsibility for progress on OER-Equity goals, including student and faculty engagement across disaggregated populations; ROI and budgetary goals; review and updating of policy and practice; and improvements to strategic planning and funding commitments.
 - Leadership is regularly evaluated on progress on OER-Equity goals.
 - Continuous improvement is publicly demonstrated through leadership commitment that is deep, pervasive, consistent, sustainable and scalable.
 - At the same time, recognizing OER culture as a contributor to advancing equity is so institutionalized that it will not be impacted by leadership changes.

PART III

CASE STUDIES

A New Accessibility Plan for Affordable Learning Georgia

By Jeff Gallant
University System of Georgia

ABSTRACT

Affordable Learning Georgia (ALG) was established in 2014 to reduce the cost of textbooks to students. Originally, the pilot team pictured ALG's flagship program, Textbook Transformation Grants, to largely focus on the adoption of existing open educational resources (OER), but this program surprisingly led to the creation of many new open resources. In addition, ALG partnered with the University of North Georgia (UNG) Press to create new peer-reviewed open textbooks for highly enrolled courses where such open textbooks did not exist.

Even with required accessibility training and UNG Press compliance with university press accessibility standards, most of these resources did not arrive in an accessible format, so ALG needed to develop a plan to amend previous resources for accessibility and guide faculty and staff in creating accessible materials moving forward. This case study outlines six actions in Affordable Learning Georgia's new accessibility plan, along with providing new accessible textbooks and templates which resulted from the initial work on this ongoing project.

INTRODUCTION

Giving full creative freedom to grantees, along with a reliance on partnerships for accessibility training, left Affordable Learning Georgia (ALG) with inaccessible digital materials. How could ALG make both its past and its future more accessible?

Affordable Learning Georgia was established in 2014 to reduce the cost of textbooks to students within the University System of Georgia (USG). USG institutions are largely independent from each other; while the Board of Regents (BOR) provides guidelines and policies, academic departments at each institution are trusted to be the experts on their own subjects and to guide the development of their own curricula. Because of this, ALG acts as a support initiative, avoiding mandates as much as it possibly can.

Originally, ALG's pilot team pictured its flagship program, Textbook Transformation Grants (which are now called Affordable Materials Grants), to largely focus on the adoption of existing open educational resources (OER) by teams of faculty and staff volunteering to do the extra work necessary to implement these resources. Keeping academic and creative freedom in mind, our grants would support the team members' time, but the plans and the content were mostly the responsibility of the teams themselves. Surprisingly, even the first rounds of grants led to the creation of many new open resources by these teams. Despite ALG

implementing required accessibility training for all grantees through a partner organization, many of these resources did not arrive in a format that would be deemed accessible by digital learners.

In addition, ALG partnered with the University of North Georgia (UNG) Press to create new peer-reviewed open textbooks for highly-enrolled courses where such open textbooks did not exist. The UNG Press, through a pilot project which started in 2011, created the first USG-wide open textbook for US History I, and published it in 2013 in partnership with the Office for Faculty Development in the USG. While copyright management and open licensing were clear in this creation process, digital accessibility features were not: the UNG Press had previous experience in creating print materials using Adobe InDesign, and the results were open textbooks which were machine-readable, with captions serving as alt-text for images, but they did not contain proper document structure.

ALG needed a plan to both amend previous resources for accessibility and guide faculty and staff in creating accessible materials moving forward. This case study outlines two challenges which led to ALG's new accessibility plan, along with the objective to meet each challenge and three actions taken per objective to reach the goal of a more accessible ALG.

Challenges Addressed

Challenge 1: An Accessibility Backlog

Affordable Learning Georgia (ALG) was established in 2014 to reduce the cost of textbooks to students; originally, the pilot team pictured its flagship program, Textbook Transformation Grants, to largely focus on the adoption of existing open educational resources (OER). Once the first round of grants reached their final semesters, this proved to be wrong: many grant teams had created their own resources, and these state funds-supported resources needed to be open-licensed and shared with the public. In addition, ALG partnered with the University of North Georgia (UNG) Press to create new peer-reviewed open textbooks for highly-enrolled courses where such open textbooks did not exist. While this ensured a high-quality textbook, these were created in a traditional press style, intended for print.

Both the Textbook Transformation Grants materials and the UNG Press materials were first hosted on various campus websites and free hosting options such as MERLOT Content Builder and OER Commons OpenAuthor until the GALILEO Open Learning Materials repository was established in 2016. While an accessibility organization provided training at the grantees' Kickoff Meetings and the UNG Press followed university press accessibility guidelines, these were not accessible enough for the general public as we framed these materials as globally-available open educational resources. Faculty-created resources were largely in Word or PDF formats with no document structure, alternative text, or accessible hyperlinks.

Affordable Learning Georgia aims to share all created open materials from its partnerships and grants globally, and in order to provide equitable access to these materials, these must consistently have screen reader-ready text, clear and navigable heading structures, accessible tables and charts, and alternative text descriptions for images.

Objective

ALG needed to address the substantive backlog of previously-created materials with little to no accessibility.

Action 1: CIDI Accessibility Audit and Amendment of Existing Textbooks

The Center for Inclusive Design and Innovation (CIDI), the USG's partner for Disability Services accessible materials requests, audited all ALG open textbooks and the most-used ancillary materials in order to establish a baseline of screen-reader accessibility. This project resulted in all ALG textbooks having at least optical character recognition (OCR) and auto-tagging on all PDFs. This did not establish further accessibility measures, however, including structured documents and alt text.

Action 2: ALG Internal Accessibility Audit of Grant-Created Materials

With the help of Tiffani Tijerina as Program Manager, ALG is now undergoing its own audit and revision of all grant project-created OER. Some resources have been revised in-house and others will be revised in-depth by the University of North Georgia Press. ALG is currently planning to hire a student worker to help make previous OER more accessible and available in Manifold.

Action 3: Partnering with UNG Press to Create Manifold-Ready Accessible Texts

A new partnership with the UNG Press allows the Press to create accessible, Manifold-ready versions of their textbooks with the help of Ms. Tijerina and funding for the time it takes to create these versions. The UNG Press is planning on creating one accessible textbook per month in Fiscal 2021.

Challenge 2: Faculty Time and Training for Future Accessibility

ALG's Textbook Transformation Grants are based on giving teams of faculty and staff as much agency and freedom as possible to implement and/or create the materials needed for their specific courses, but this led to major inconsistencies in accessibility. Due to the output of OER from previous years of Textbook Transformation Grants, ALG staff knew that a training block at the Kickoff Meeting was not enough to yield accessible materials at the end of grant projects. ALG has always been a small organization in terms of personnel; no more than 2 people have worked on the initiative full-time since its inception. Having dedicated accessibility staff would not be possible with this lean personnel structure.

Multiple options for increasing the accessibility of grant project deliverables were considered:

- Increasing accessibility training for grantees, including extra webinars throughout the process
- Increasing accessibility training through an online course which could validate completion
- An accessibility audit pass-through before any Final Report is accepted; the audit results would be sent back to grantees, and they would then make revisions and re-submit if needed
- Establishment of one required platform to create all OER where accessibility is integrated into the documents by default; training in order for faculty to effectively use the platform

These options were found to create too much of a time burden on the faculty and staff within grant teams; Textbook Transformation Grants were established to cover the extra time it takes to implement OER in a course, and adding these requirements would consume much of that time.

Objective

ALG needed to increase the accessibility of newly-created materials in a way which still allowed faculty the freedom and time to create these materials.

Action 1: Participation in Manifold Digital Services Pilot

Within the review, ALG reached out to other OER-focused organizations and leaders, and one standout recommendation was a new partnership between the University of Minnesota Press, the City University of New York (CUNY), and Cast Iron Coding; a new open-source book publishing platform called Manifold. Manifold is focused on ingesting static files such as Word documents and EPUB and converting them to web-readable, accessible, and structured texts. Manifold enables readers to highlight and annotate each text privately, in closed groups, and publicly, and accessibility features include font size and style adjustment, dark mode, structured text, and a responsive design for any device. ALG applied to participate in the pilot with the intention of bringing all ALG open textbooks into Manifold and was accepted as part of the pilot group.

Action 2: Establishing Accessible OER Templates for Manifold

Ms. Tijerina authored a single-document Word template with directions on how to create an accessible resource in Microsoft Word. This will allow grantees to more easily create both accessible and Manifold-ready texts. More templates will be created throughout the year.

Action 3: Authoring Faculty-Centered Accessibility Guides

Ms. Tijerina authored a set of ALG accessibility guides to assist faculty authors in creating OER. These guides intentionally avoid legal and in-depth accessibility terminology in favor of guiding faculty through common platforms such as Microsoft Word in creating accessible documents. Topics include:

- Document Design
- Alt Text
- Captioning and Transcripts
- PowerPoint
- Accessibility Checkers

In addition, ALG now has an Accessibility Checklist [word doc] for created OER.

RESULTS

ALG's new Accessibility Plan is just getting started, but the following deliverables are early indicators of a successful ongoing accessibility effort:

New Accessible Textbooks in Manifold

UNG Press Revised Textbooks

The following textbooks were revised through the partnership between Affordable Learning Georgia and the University of North Georgia Press.

- British Literature II Anthology
- Introduction to Art
- Understanding Music
- World History: Cultures, States, and Societies to 1500
- Writing the Nation

Grant-Created Revised Textbooks

The following textbooks were revised through our internal accessibility audit and in-house accessibility revisions.

- Arts Integration in Elementary Curriculum, 2nd Edition
- Exploring Public Speaking, 4th Edition
- Microbiology for Allied Health Students
- Open Technical Communication

Grant-Created Original Textbooks

The following textbooks are original creations by newer grant teams with an accessible document structure and Manifold ingestion.

- American History I
- Film Appreciation
- Global Business
- Programming Fundamentals

New Faculty Development Materials on Accessibility

The following materials were developed by Tiffani Tijerina as guides for faculty authors in creating accessible open content.

- ALG Accessibility Guides (CC BY 4.0)
- ALG Single-Document Word Template (CC BY 4.0)

CONCLUSIONS: LESSONS LEARNED

Support Creators Beyond Workshops and Training

Emphasizing accessibility when creating new open content was a priority from the inception of Affordable Learning Georgia in 2014. However, balancing the maintenance of instructors' academic and creative freedom with prescribing accessibility measures for open content creation proved difficult, particularly when accessible open textbook platforms such as Manifold did not exist. This resulted in limited accessibility support; namely, training provided by CIDI at each grant round's Kick-Off Meeting. New OER initiatives should not only provide training, but also templates and platforms which make accessible creation simple and usable from the outset.

OER Supporters Can Be Basic Accessibility "Experts"

Affordable Learning Georgia, similar to many government initiatives, started out by leveraging partnerships between departments that seemed better suited for particular tasks. This resulted in a partnership with an accessibility organization which deferred training and revisions only to them; this proved unsustainable in the long run. OER instructional designers, librarians, faculty, and administrators should educate themselves on how to create basic accessible content in various platforms. Even though accessibility does have a legal component in the United States, that legal component should not limit OER initiatives from providing basic training and support as the local accessible content creation "expert."

Start With Realistic Goals

Accessibility is not one easy-to-understand set of criteria for all types of resources; it is a spectrum of criteria for providing access to information to people with a diverse range of abilities. Instead of trying to address every ability possible with a long list of possibly infeasible accessibility requirements, start by addressing basic requirements which make resources more accessible to the most learners: structured headings in word processor documents, alt text in images, captions and transcripts in videos, and appropriate reading order in presentation slides, for instance. Some less frequent but necessary accessibility accommodations, such as Braille printouts for textbooks or audio description for videos, may need to be addressed on a more traditional case-by-case basis for resource and cost purposes.

NEXT STEPS

- **New Strategic Plan**

- Affordable Learning Georgia's new Strategic Plan for 2022-2025 will include a permanent set of guiding principles prioritizing accessibility and inclusion.

- **Continue Accessibility Plan and Balance COVID-19 Work**

- Extra tasks, such as moving all events online and managing grant teams encountering more emergency situations than normal, have arisen during the COVID-19 pandemic. Along with these new tasks and priorities, ALG will continue to revise previously-existing and newly-created OER for accessibility moving forward.

- **Require Accessibility in Grants Request For Proposals (RFP)**

- Now that ALG provides more training and platform support for accessible open content, newly-created OER through our grants are now required to be accessible per our RFP and application. people with a diverse range of abilities. Instead of trying to address every ability possible with a long list of possibly infeasible accessibility requirements, start by addressing basic requirements which make resources more accessible to the most learners: structured headings in word processor documents, alt text in images, captions and transcripts in videos, and appropriate reading order in presentation slides, for instance. Some less frequent but necessary accessibility accommodations, such as Braille printouts for textbooks or audio description for videos, may need to be addressed on a more traditional case-by-case basis for resource and cost purposes.

BCcampus' Accessibility Journey

By Josie Gray

ABSTRACT

This case study describes the work BCcampus Open Education has done to support the creation of accessible open educational resources (OER) in the province of British Columbia, Canada, and beyond. It describes the research and collaboration that went into the creation of the *Accessibility Toolkit*, a guide designed to support authors in creating accessible OER. In addition, it discusses how BCcampus has supported accessible design more directly, including by remediating existing inaccessible open textbooks and providing professional development opportunities to support others in creating accessible OER from the very beginning. The case study concludes by discussing the challenges that have come up with accessibility, including creating accessible equations, balancing the design considerations of print and digital formats, and making accessible design scalable.

About BCcampus Open Education

BCcampus is a provincial organization that supports the public post-secondary institutions in British Columbia, Canada. We do work in the areas of learning and teaching, open education, educational technology, and other collaborative projects.

In October 2012, BCcampus started the B.C. Open Textbook Project. The goal of the project was to make education more accessible by reducing student cost through the use of open textbooks. The project was asked to create a collection of open textbooks. At first, we focused on textbooks aligned with the top forty highest-enrolled subject areas in the province. In spring 2014, that was expanded to include twenty more textbooks targeting trades, technology, and skills training. Many of these textbooks we pulled from open textbooks published elsewhere. However, there was a lack of Canadian content, so BCcampus funded the creation and adaptation of a variety of textbooks to better meet the needs of Canadian faculty.

Currently, the B.C. Open Textbook Collection includes over 300 open textbooks. As of August 2021, students in B.C. have saved over \$26 million through the adoption of open textbooks.

In 2017, the B.C. Open Textbook Project was renamed BCcampus Open Education. This name change better reflects the work BCcampus does in open education beyond textbooks.

BUILDING OUR EXPERTISE IN ACCESSIBILITY

Accessibility Toolkit

Early on the project recognized that making OER available for free online was not enough. Cost is not the

only barrier students experience when it comes to learning materials. And if we care about equitable access, those barriers need to be addressed, too.

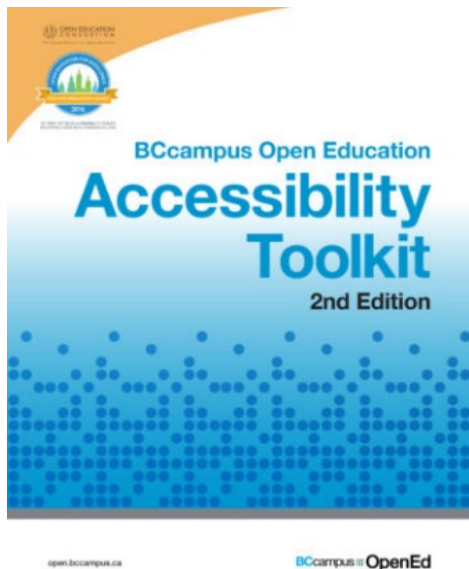


We realized we needed to learn more about designing OER for students with disabilities. As such, BCcampus partnered with CAPER-BC (Centre for Accessible Post-Secondary Education Resources) and Camosun College to address this challenge. This resulted in a three-person team including Amanda Coolidge at BCcampus, Tara Robertson from CAPER-BC, and Sue Doner, an instructional designer at Camosun College. In order to better understand what students with disabilities experience with open textbooks, they wanted to run user testing with disabled students.

At the end of 2014, they reached out to the disability services coordinators at different institutions to find student participants with print disabilities. Participants were

asked to evaluate five chapters from different open textbooks and provide their evaluation on each chapter. The students were asked to access the OER in their preferred format (webbook, eBook, or PDF) and then provide written feedback about their experience.

After that, the participants were invited to a half-day focus group session. The goal of this session was to better understand the students' experiences and why they responded – or didn't respond – to certain questions. They wanted to see how the students were reading and accessing the materials on their different devices. That in-person session was crucial. It allowed Amanda, Tara, and Sue to work directly with these students and better understand the challenges they were experiencing and how they were actually accessing and using these materials.



Based on the student feedback, BCcampus was able to begin to address the challenge of accessibility in open textbooks. In February 2015, Amanda, Tara, and Sue published the BCcampus Open Education Accessibility Toolkit. This toolkit was designed as an introduction to accessibility and specifically focuses on the context of open educational resources. The toolkit is broken up into two sections: Key Concepts and Best Practices. The Key Concepts section introduces universal design and provides several student personas with different disabilities to give context to the accessibility best practices. The Best Practices section then goes into detail about how to make different types of digital context accessible.

In 2016, the Open Education Consortium awarded the Accessibility Toolkit an award for Open Education Excellence in the category of Creative Innovation (Open Education Consortium, 2016), and in August 2018, BCcampus released a second edition of the Accessibility Toolkit. This second edition included updated examples, more specific information on using Pressbooks to create accessible OER, and a section on using Accessibility Statements. These updates were made based on our experiences with making the OER we publish

accessible.

What our accessibility work has looked like

To date, a lot of the work we have done has been remediation, meaning taking published open textbooks and fixing them so they are accessible. In 2016, BCcampus hired Josie Gray as a co-op student to focus on remediating existing open textbooks published by BCcampus. Since then, Josie and two other then co-

op students, Kaitlyn Zheng and Arianna Cheveldave, have edited twenty BCcampus-published textbooks to make them accessible. In addition, BCcampus is working hard to ensure that new books and resources we publish are accessible from the very beginning. We are not always successful and have experienced numerous challenges that we are still working through today, but we are always trying to do better. We have also been working hard to share this knowledge in British Columbia and beyond. The Accessibility Toolkit is an OER and has been adapted and reused by others all over. We also aim to provide training and other professional development opportunities for others creating OER. In February 2019, we hosted a weekly Inclusive Design webinar series, featuring Jess Mitchell, Senior Manager of the Inclusive Design Research Centre, who provided an introduction to inclusive design and how we can think beyond accessibility checklists. We have also hosted or participated in several other presentations or discussions on how to make OER accessible from the very beginning, including sessions specifically for faculty and staff in B.C. who have received funding from BCcampus to create OER. Here is a recording from a session titled: How to Create Inclusive and Accessible OER.

CHALLENGES

Equations

In the last few years, there have been some challenges. One of the biggest ones is math accessibility. Part of the barrier here was that no one on the BCcampus team had experience with math markup languages. In addition, at the beginning of the project, it was not possible to create accessible math in Pressbooks.

But there have been improvements. In July 2019, Pressbooks announced support for MathJax, a tool that translates mathematical markup into high resolution, accessible equations. This makes it possible to create accessible equations in Pressbooks. Authors can write equations in LaTeX, MathML, or AsciiMath, and MathJax will display the equation as an SVG file, which ensures the size of the equation can be increased or decreased easily without reducing quality. In addition, regardless of the markup language, MathJax will translate the equation to MathML, which ensures that the equation is accessible to students using screen readers.

But just because creating accessible equations is possible doesn't make it easy. We have had to learn LaTeX, which is difficult when no resources exist yet for using LaTeX to create accessible equations in Pressbooks. In the fall of 2019, Arianna Cheveldave spent a lot of her time working with Caroline Daniels at Kwantlen Polytechnic University (KPU) to publish an Intermediate Algebra textbook in Pressbooks. This work has allowed us to begin building our experience working with math content and making it accessible, and KPU is working on a LaTeX Guide to share that experience with the wider community.

In April 2020, BCcampus published our first accessible math textbook: *Math for Trades: Volume 1*, authored by Chad Flinn and Mark Overgaard. It uses both images with alternative text and LaTeX rendered with MathJax to create accessible math equations. These equations in this book are quite simple, but it marks a first step to being able to provide more accessible math content.

Digital vs. Print

Another challenge is balancing the features and design requirements of digital and print formats. OER are becoming increasingly multimodal and interactive, which ensures these resources are more engaging and useful for students. However, it also makes it harder to create offline and print formats that provide an equal learning experience. We know that students have preferences in how they access OER, and those preferences are often guided by accessibility needs, internet access, the technology they have access to, and their comfort with that technology. All these things are equity considerations, so we have also been working to ensure downloadable and printable copies offer as equal of a learning experience as possible.

For example, *Math for Trades* also includes video answers and interactive quiz questions created in H5P. These features help make the book more engaging, but they only work in the webbook. As such, we created

text versions of those answers and activities, which are in back matter of the book. If students want to watch the videos or complete the quiz questions online, they will be able to. But this way, we ensure that internet or computer access is not required to complete activities.

Another challenge we have been working through is how to provide external links to students using the print version. Web accessibility requires that link text describes the link destination. However, how then does a student using the print copy find the web address? We started with adding web addresses to footnotes, and then moved to creating a list of links organized by chapter to the end of the book. However, both of these methods require a lot of work, are hard to maintain, and are not that user-friendly for students using the print copy. Then, in January 2020, Christina Hendricks, the managing editor of a series of philosophy open textbooks published through the Rebus Community, published a blog post titled “Some things I’m learning about accessibility & open textbooks,” where she describes a CSS change that will cause Pressbooks to insert the URL after the link text in the Print PDF only. This solution works very well, and it is something we are working on applying to books published by BCcampus.

Scalability

One of the biggest challenges we are wrestling with is how to make accessibility scalable. Open education has taken off in B.C., and BCcampus is not able to help with every project. We provide lots of resources on accessibility, but authors writing OER are often already overcommitted.

And OER publishing is hard work. Someone writing an open textbook for the first time is likely using a new technology and learning about open licences, copyright, publishing, digital accessibility, and more. And then there is all the pedagogical elements that go into an effective learning resource. In the long list of things to keep in mind, accessibility often gets overlooked, and there is not always resources for accessibility remediation.

So as OER creation in B.C. becomes more decentralized, how do we make sure accessibility is still prioritized? How can we empower creators to design OER that meet the diverse needs of their students? What support systems need to be in place to make this possible?

One potential area to be looking into is how we can reduce the time and cognitive load that goes into creating an accessible OER, specifically through the design of OER publishing tools. OER publishing tools can both support and impede accessible authoring. These tools can prompt authors to provide text descriptions for images, or they can hide alternative text boxes in a large menu. They can generate printable versions of H5P activities, or they can rely on manual labour. They can provide an accessibility checker that identifies potential problems, or they can leave that to external tools that authors may not know about. All of these things are design decisions, and one decision over another has the potential to really improve the overall accessibility of OER.

It is also about digital literacy, access to technology and internet, and the different formats made available. It is about equitable representation of the stories, names, people, and examples included in the text. It is about designing for flexibility and providing multiple modalities to support diverse learning preferences and needs. It is about continually being open to learning and listening and revising our practices. We are very much still learning and looking forward to supporting and working towards a more accessible and inclusive future for education.

About Josie

Josie is the Manager of Production & Publishing at BCcampus on the Open Education team. She has worked for BCcampus in various roles since September 2016. She is a white settler and currently lives and works uninvited on the territories of the Ləkʷəŋən Peoples, now known as the Esquimalt and Songhees Nations, and the territories of the W̱SÁNEĆ Peoples. She moved to these territories in 2013 to complete her undergraduate degree at the University of Victoria. Before that, she lived on the territories of the Tsimshian Nation, which is where she grew up. In 2021, Josie completed her Master’s of Design in Inclusive Design at

OCAD University, with a specific focus on equity in OER publishing. Her major project was a limited-series podcast titled Open Knowledge Spectrums, which explores epistemic justice in open education.

Attributions

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REFERENCES

Coolidge, A., Robertson, T. & Doner, S. (2015, May 22). “Can I actually use it?” Testing open textbooks for accessibility. Conference presentation. <https://docs.google.com/presentation/d/1iW00AyN5QvA-COK-nv7RT0YqTHMGPKd4yvXVa03Llg8s/edit?usp=sharing>

McGrath, T. (2019, July 10). MathJax: Now available on PressbooksEDU. *Pressbooks*. <https://pressbooks.com/2019/07/10/mathjax-now-available-on-pressbooksedu/>

Open Education Consortium. (2016). 2016 OE award winners: Projects. <https://www.oeconsortium.org/projects/open-education-awards-for-excellence/2016-winners-of-oe-awards/2016-oe-award-winners-projects/>

The Ohio State University's Racial Justice Grant Program to Increase Diverse Voices in Course Materials

By Ashley Miller, Program Manager, Affordability and Access, Office of Distance Education and eLearning at the Ohio State University.

ABSTRACT

Driven by a mission to increase access and reduce the cost of higher education for Ohio State students and families, the Affordable Learning Exchange (ALX) uses a multi-pronged approach to support faculty who wish to explore affordable alternatives to expensive textbooks. An OER grant program, inclusive access program, statewide OER authoring collaboration project and a free assessment authoring web-based tool all live under the ALX umbrella.

The Racial Justice grant was an addition to our grant offerings with implementation beginning in Autumn 2020. Winners of this grant are expected to include a racial justice component in their course, such as the inclusion of media authored by marginalized scholars, a reading list of relevant content citing Black authors, exercises prompting critical self-reflection and/or discussion, and/or the inclusion of an anti-racist framework for assessment. Grant winners are also encouraged to work closely with ALX and University Libraries staff to source content and are required to make these course materials available to students at no added cost.

Equity Dimension: Racial Justice

Coming Soon!

PART IV

RUBRIC MODELS

Inspiration Rubric Models

INSPIRATIONS

The *Equity Through OER* rubric was inspired by other rubrics and models. Below are brief descriptions of each inspiration.

- Transfer Playbook and Tools for Colleges
- VALUE Critical Thinking Rubrics
- NERCHE Self-Assessment Rubric for the Institutionalization of DEI in Higher Education
- NASH Equity Action Framework
- Northern New York Library Network (2019) Grant Proposal Scoring Rubric
- Peralta Online Equity Rubric, version 2.0
- Peralta Online Equity Rubric, version 3.0
- SUNY Sustainability Overview

Transfer Playbook and Tools for Colleges

Aspen Institute and the Community College Research Center. (2016) Transfer Playbook and Tools for Colleges. From: <https://highered.aspeninstitute.org/transfer-playbook-and-tools-for-colleges/>

Based on original research into the practices of six highly effective community college-university partnerships, The Transfer Playbook, published by Aspen and the Community College Research Center in 2016, describes how institutions can improve transfer student outcomes through three core strategies: prioritizing transfer, creating clear transfer program maps, and establishing dedicated transfer advising. The report provides concrete examples of essential strategies as well as a checklist of how to get started.

VALUE Critical Thinking Rubrics

Association of American Colleges and Universities (AAC&U). (n.d) VALUE Critical Thinking Rubrics. From: <https://www.aacu.org/initiatives/value-initiative/value-rubrics>

VALUE rubrics are open educational resources (OER) that enable educators to assess students' original work. AAC&U offers a proven methodology for applying the VALUE rubrics to evaluate student performance reliably and verifiably across sixteen broad, cross-cutting learning outcomes.

NERCHE Self-Assessment Rubric for the Institutionalization of Diversity, Equity, and Inclusion in Higher Education

New England Resource Center for Higher Education (NERCHE). (n.d.) NERCHE Self-Assessment Rubric for the Institutionalization of Diversity, Equity, and Inclusion in Higher Education. From: <https://compact.org/resource-posts/nerches-self-assessment-rubric-for-the-institutionalization-of-diversity-equity-and-inclusion-in-higher-education/>

NERCHE's Self-Assessment Rubric offers a template for gauging important indicators among the six campus dimensions: philosophy and mission; faculty support; teaching, research, and service; staff engagement; student involvement; and administrative leadership and institutional support.

NASH Equity Action Framework (word)

National Association of System Heads (NASH). (2020) NASH Equity Framework. From: <https://nashonline.org/wp-content/uploads/2021/04/NASH-Equity-Action-Framework-Summary.pdf>

With the Equity Action Framework, NASH is working intentionally to expand the equity lens that is core to its mission. Recognizing that systems and their campuses are at different stages in this work, this tool will enable higher education systems to assess their progress toward, and act on the adoption and integration of essential equity practices. The framework is designed to promote explicit and sustained engagement with equity, inviting NASH members to look deeply into the mirror in order to examine and act on the role of university systems in addressing systemic inequities that are institutionalized, however unintentionally, within our colleges and universities that so many have worked hard and long to make bastions of student access, opportunity and success.

Northern New York Library Network Grant Proposal Scoring Rubric (pdf)

Northern New York Library Network (2019) Grant Proposal Scoring Rubric. (pdf) From: <https://nnyln.org/wp-content/uploads/2019/06/Grant-Proposal-Scoring-Rubric.pdf>

The Northern New York Library Network is a regional non-profit multi-type library agency dedicated to distributing resources and services among its members in the 12,000 square mile, seven-county area known as the North Country. Member organizations include all types of libraries: academics, school (P-12), public, archives, and special libraries. The purpose of the Network is to provide collaboration and support to help members meet their individual goals, for the ultimate benefit of the library user. To that end they offer member organizations grant opportunities each year.

Peralta Online Equity Rubric, version 2.0 (pdf)

Peralta Community College District. (2019). Peralta Online Equity Rubric, version 2.0 (pdf) From: <https://web.peralta.edu/de/files/2019/05/Peralta-Online-Equity-Rubric-2.0-May-2019.pdf>

The Peralta Equity Rubric is a research-based course (re)design evaluation instrument to help teachers make online course experiences more equitable for all students. The rubric's criteria include: addressing students' access to technology and different types of support (both academic and non-academic); increasing the vis-

ibility of the instructor's commitment to inclusion; addressing common forms of bias (e.g., implicit bias, image and representation bias, interaction bias); helping students make connections (e.g., between course topics and their lives; with the other students); and following universal design for learning principles

Peralta Online Equity Rubric, version 3.0 (pdf)

Peralta Community College District. (2020). Peralta Online Equity Rubric, version 3.0 (pdf) From: <https://web.peralta.edu/de/files/2020/10/Peralta-Online-Equity-Rubric-3.0-Oct-2020.pdf>

SUNY Sustainability Overview

SUNY OER Services and rpk GROUP. (2019). SUNY Sustainability Overview. From: https://oer.suny.edu/wp-content/uploads/2021/09/rpkgroup_SUNY_OER-Sustainability-Overview6.pdf

SUNY (State University of New York) recognized that sustainability planning should occur at the beginning of OER program planning, not as a final consideration. As a result, all participating SUNY institutions are required to develop OER sustainability plans.

References

- Ashford, E. (2018). OER promotes student success. Community College Daily, Retrieved from <https://www.ccdaily.com/2018/10/oer-promotes-student-success/>
- Association of American Colleges and Universities (AAC&U). (n.d) *Making Excellence Inclusive (MEI) (pdf)*
- Bensimon, E. M. (n.d). Developing a Practice of Equity Minded Indicators. USC Center for Urban Education. Retrieved from <https://cue.usc.edu/files/2016/02/Developing-a-Practice-of-Equity-Minded-ness.pdf>
- Bensimon, E. M. (2009). A brief written for the Roundtable on Increasing the Success of Newly Emerging Majority College Students. Retrieved from https://cue.usc.edu/files/2016/01/Bensimon_Accountability-for-Equitable-Outcomes_brief_final_010709.pdf
- Bombardieri, M. (2017). Hidden in Plain Sight. Center for American Progress, 1-30. Retrieved from <https://missiongraduatenm.org/what-we-do/research/hidden-plain-sight-understanding-part-time-college-students-america/feb-20-2019>
- Clinton, V., & Khan, S. (2019). Efficacy of Open Textbook Adoption on Learning Performance and Course Withdrawal Rates: A Meta-Analysis. AERA Open. Retrieved from <https://doi.org/10.1177/2332858419872212>
- Colvard, N.B., Watson, C. E., Park, H. (2018). The Impact of Open Educational Resources on Various Student Success Metrics [pdf]. *International Journal of Teaching and Learning in Higher Education* Vol. 30, Iss. 2, pp. 262-276. Retried from <https://files.eric.ed.gov/fulltext/EJ1184998.pdf>
- Coolidge, A., Doner, S., Robertson, T. & Gray, J. (2018). BCcampus open education accessibility toolkit. (2nd ed.). BCcampus. Retrieved from <https://opentextbc.ca/accessibilitytoolkit/>
- Floe Project (n.d.). Floe: The inclusive learning design handbook. Canada: Inclusive Design Research Centre, OCAD University. Retrieved from <https://handbook.floeproject.org/>
- Griffiths, R., Mislevy, J., Wang, S., Ball, A., Shear, L., Desrochers, D. (2020). OER at Scale: The Academic and Economic Outcomes of Achieving the Dream's OER Degree. Menlo Park, CA: SRI International. Retrieved from: <https://www.achievingthedream.org/resource/17993/oer-at-scale-the-academic-and-economic-outcomes-of-achieving-the-dream-s-oer-degree-initiative>
- Hilton, J. (2016). Open educational resources and college textbook choices: A review of research on efficacy and perceptions. *Educational Technology Research and Development*, 64(4), 573-590. DOI: 10.1007/s11423-016-9434-9
- Hilton III, J., Fischer, L., Wiley, D. & Williams, L. (2016). Maintaining Momentum Toward Graduation: OER and the Course Throughput Rate. *International Review of Research in Open and Distributed Learning*, 17(6), 18-27. DOI:10.19173/irrodl.v17i6.2686 .
- Ladson-Billings, G. (1994). The dreamkeepers: Successful teachers of African-American children. San Francisco: Jossey-Bass

- Ladson-Billings, G. (2004). Landing on the wrong note: The price we paid for Brown. [pdf]. Sage Journals, 33(7), 3-13. doi: 10.3102/0013189X033007003
- Lambert, S. R. (2018). Changing our (dis)course: A distinctive social justice aligned definition of open education. *Journal of Learning for Development*, 5(3), 225-244. Retrieved from <https://files.eric.ed.gov/fulltext/EJ1197463.pdf>
- National Association of College Stores (NACS). (2018). *Student Watch: Attitudes and Behaviors toward Course Materials 2017–2018. Highlights*. Retrieved from <https://www.nacs.org/course-material-spending-declines-for-2017-18-academic-year>
- Open Society Foundations and Shuttleworth Foundation (2007). The Cape Town open education declaration. Cape Town Declaration Organization. Retrieved from <https://www.capetowndeclaration.org/>
- Schaffhauser, D. (2020). Achieving the Dream study finds OER works. *Campus Technology*, Retrieved from <https://campustechnology.com/articles/2020/02/20/achieving-the-dream-study-finds-oer-works.aspx>
- Seaman, J. E., & Seaman, J. (2018). Freeing the textbook: Educational resources in U.S. higher education, 2018. Babson Survey Group. Retrieved from <https://www.bayviewanalytics.com/reports/freeingthetext-book2018.pdf>
- Stark, I. (n.d.). Peralta equity rubric. Retrieved from https://secure.onlinelearningconsortium.org/effective_practices/peralta-equity-rubric
- Thomas, C. (2018, Oct 8). OER and Accessibility: Working Toward Inclusive Learning Open Education SPARC NEWS. Retrieved from <https://sparcopen.org/news/2018/oer-accessibility-working-toward-inclusive-learning/>
- TKI Inclusive Education. (n.d). Guide to Universal Design for Learning. Retrieved from <https://www.inclusive.tki.org.nz/guides/universal-design-for-learning/>
- USC Center for Urban Education. (n.d). Equity Mindedness. University of Southern California. Retrieved from <https://cue.usc.edu/equity/equity-mindedness/>