



Culturally Sustaining Pedagogy & Open Educational Practices in K–8 Amidst High-Stakes Testing

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Scholarship on open educational practices (OEP) and culturally sustaining pedagogy (CSP) challenges long-held dominant beliefs about what a classroom should look like. While OEP views knowledge as a public good that students ought to be a part of shaping, CSP situates its critique within a socio-political awareness of racial inequality. As the use of open educational resources (OER)—defined as materials with an open license that allows free use and adaptation—increases in K–8 education, there is an opportunity to implement OEP and CSP to enact a more equitable education for students. Through case studies of four full-course K–8 OER programs dedicated to inclusivity, this brief explores how the principles of OEP and CSP are mobilized in tandem to transform education.

Specifically, this brief discusses the complexities of leveraging the affordances of OER amidst the backdrop of nationwide standards and high-stakes testing that—in being used to inform students’ grade advancement, graduation requirements, teacher evaluation, and school funding—narrowly dictate the content taught in schools. The study found that the OER feature of adaptability is a promising vehicle for culturally sustaining OEP, whereby teachers can customize lessons to empower students to critique and address local sociopolitical issues that affect their communities. However, the need to adhere to standards creates apprehension toward teachers’ ability to customize materials. The study also found that the programs’ feature of student-centered collaborative learning contributes to positive changes in classroom culture but presents challenges with changing teacher practices away from primarily teacher-centric approaches such as lecturing and practices that position students as passive learners.

Theoretical background: Culturally sustaining pedagogy (CSP) and open educational practices (OEP)

Even as students of color now comprise a majority of U.S. public school enrollments, their communities’ ontologies, or ways of being and knowing, are too often excluded from the classroom. Culturally sustaining pedagogy (CSP) is a theory in education that demands the de-centering of white middle-class norms¹; that is, norms that permeate curricular content, definitions, and measures of success and behavioral expectations. In building on Ladson-Billing’s (1995) original conception of culturally responsive practices, CSP views marginalized students’ cultures not only as a *means* for delivering educational content but rather, the very content that should be taught and sustained through schooling (Paris & Alim, 2017). In this definition, culture is both the longstanding practices and belief systems of communities of color, as well as youths’ contemporary reworkings of that knowledge “to meet their current cultural and political realities” (Paris & Alim, 2017, p. 8). CSP further asserts that schools should develop

¹ Examples of white middle-class norms include favoring individualism over collectivism, indirect versus direct communication styles, and written traditions over oral traditions to reproduce knowledge.

students' ability to critique dominant discourse about real-world contemporary issues that affect them; a concept that Ladson-Billings (2014) refers to as sociopolitical consciousness.

CSP can be used to understand cultural norms even at the highest levels of the American education system: for example, the U.S. Department of Education's "mission is to promote student achievement and preparation for global competitiveness." Scholars of CSP document how this notion of competitiveness is a feature of individualistic culture common in white societies where individual achievement and independence are emphasized (Hammond, 2015). As a contrasting example, "traditional education from Indigenous centers strives toward the whole and ethical development of the person situated within the collective" (Holmes & González, 2017, p. 219). Collectivism is a common feature in cultures that value connections to communities, people, and histories. Collectivism supports community building through an understanding of the cultures within them; in the classroom, this entails strong relationships between teachers and students. Too often, the dominant culture values competition over collectivism (Hammond, 2015) which diminishes opportunities for teachers and student relationships in an increasingly diverse student population. A classroom using CSP to center collectivism might have students collaborating to respond to test questions, whereas individualistic culture could label the same practice as cheating.

Scholarship on OEP has a natural affinity for the theoretical underpinnings of CSP. The OEP movement grew from OER, which are instructional materials with an open license that can be reused and adapted without permission from, or the need to pay royalties to, the copyright holder (Butcher, 2011). With the increased awareness and use of OER, OEP is now pushing to expand definitions of openness beyond materials and content, toward practices and processes (Bali et al., 2020; Ehlers, 2011). Conceptualizations of OEP are expansive; however, most hinge on centering students as knowledge generators who shape the knowledge commons (DeRosa & Jhangiani, 2017). OEP often include the usage, adaptation, and creation of OER, as well as collaborative pedagogies between students, between teachers, and between students and teachers (Ehlers, 2011).

While OEP is not inherently focused on centering diverse racial/ethnic and linguistic cultures, some scholars are pushing to explicitly reframe OEP through a social justice lens (Bali et al., 2020; Brown & Croft, 2020; Lambert, 2018). Lambert (2018) proposes a definition that states OEP should be "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" (p. 239). Bali et al. (2020) suggest a social justice framework whereby OEP address economic, cultural, and/or political injustice.

As this literature is emerging, CSP offers a critical lens to OEP outside of dominant white perspectives, which can in turn expand conceptions of the knowledge commons. CSP situates many concepts of equitable education present in OEP within a socio-political understanding of how and why academic settings aren't "open" to begin with. For example, OEP espouses a shift from teachers as the "dispensers of knowledge" to facilitators of student-centered learning (Geser, 2012, p. 40); CSP contextualizes that within a "legacy of genocide, land theft, enslavement, and various forms of colonialism," this top-down system of education serves to assimilate communities of color to dominant ways of thinking (Paris & Alim, 2017). Why do most Americans learn about Westward expansion as "manifest destiny" and not about the genocide of Indigenous peoples through this process? If Indigenous perspectives were honored as part of the knowledge commons, these lessons would include a more expansive account of U.S. history. OEP, in viewing knowledge as a public good, relies on collaboration and open sharing; CSP situates this collaboration as a natural component of communities of color's lifeways that are denied by hyper-individualism in the U.S. OEP encourages the constant updating of materials to ensure relevancy; CSP offers an understanding that culture is not static,

but is being constantly re-defined by youth in real-time and should be circularized in academic settings. Why then is standardized Dominant American English (DAE) considered “academic language” while Latine and Black youth’s linguistic practices are considered “inappropriate” (Rosa & Flores, 2017)? If students were centered as knowledge generators, their linguistic practices would contribute to how we define the English language.

The K–8 context: Standards and high-stakes testing

In the 1980s, state legislators across the country began promoting standards-based education in K–8 through policy changes. Over time, this policy evolved to hold teachers and schools accountable to standards using individual student performance on state standardized tests. In 2002, the Bush administration codified accountability through testing into federal law through the No Child Left Behind (NCLB) Act (Gonzalez & Vasudeva, 2021). NCLB was eventually replaced by the Obama administration’s Every Student Succeeds Act (ESSA) in 2015, which is still in effect today. While ESSA reduced test-based accountability requirements, it still requires states to set academic standards and test students annually in math and literacy during grades 3–8, as well as once in science during grades 3–5, and once during grades 6–9² (Lee, n.d.). These state standardized tests are often referred to as “high-stakes” because scores are used for students’ grade advancement, graduation requirements, teacher evaluation, and school funding (Gonzalez & Vasudeva, 2021).

CSP scholars have identified the many ways in which the system of high-stakes testing, and its effects on teacher practices, disadvantage students of color. Dr. Gloria Ladson-Billings (2017) asserts, “educational research has shown that standardized tests are narrowly normed along white, middle-class, monolingual measures of achievement” (p. 143). Further, standardized exams are content-based and fail to measure “students’ reasoning ability, problem-solving skills, and moral development” (Ladson-Billings, 2017, p. 143). Even more, high-stakes testing “undermine[s] teacher’s autonomy, and de-professionalize[s] the teaching field” as educators are forced to tailor teaching to test preparation (Love, 2019, p. 101).

Research on OEP, being grounded in principles of student-centered learning, also discusses the limitations of this learning environment from the perspective of OER use. Ehlers (2011) describes that “the pure usage of OER in a traditional closed and top-down, instructive, exam-focused learning environment is not open educational practice” (p. 5). Indeed, a narrow focus on test preparation means that subjects that are not tested—such as social studies, art, and foreign languages—get devalued. This becomes especially troublesome considering that “evidence suggests, on average, schools that serve disadvantaged students engage in more test preparation” (Koretz, 2018, p. 23). Using OER in a high-stakes testing environment that forces teacher-centered instruction “will have little effect on equipping teachers, students, and workers with the competencies, knowledge, and skills to participate successfully in the knowledge economy and society” (Geser, 2012, p. 12).

² At the high school level, states are required to test students once in math, literacy, and science.

Observations from 4 case studies: Culturally sustaining OEP features of adaptability and collaborative learning face challenges amidst standards and testing

In the context of the current ESSA policy, researchers worked in close collaboration with four participating non-profit organizations that develop OER to understand how they integrate CSP in their materials. The programs create full-course curricula that are standards-aligned and collectively span English language arts, mathematics, and science. The OER materials were originally developed through foundation grant funding; each organization now uses several methods to generate revenue. These methods include paid professional learning, digital tools for accessing content, and district partnerships that offer additional benefits and specialized support. Through in-depth case studies of the four programs described, researchers conducted focus groups with material developers, teachers, and students, and reviewed samples of the curriculum.

The OER program's adaptability of materials and student-led collaborative lesson design are two features with great potential to lead to culturally sustaining OEP. The following section describes findings observed through the case studies related to these features: both developers and users described challenges given the ongoing role of standards and high-stakes testing. They described being apprehensive of the OER feature of material adaptability at the classroom level because of a need to adhere to standards and identified challenges in changing teacher practice toward collaborative learning in an environment of high-stakes testing. By situating these learnings within the theory of CSP and OEP, this brief explores OER use in the larger systemic context of standards and high-stakes testing in grades K–8.

Attitudes toward material adaptations

The feature of adaptability in OER offers a promising vehicle for culturally sustaining OEP: what would K–8 curricular materials look like if they were adapted for students of color to drive learning and shape the public knowledge commons? Instead of a static textbook written by a publishing company, a teacher could use their own pedagogy to customize online materials to incorporate their students' cultures. In alignment with OEP, these adaptations could then be shared between classrooms to strengthen materials based on user experience. For example, if students were working on a unit about poetry using OER materials found online in a Word document format, it may be that all the poetry examples used to teach meter and rhyme came from Shakespeare's work. Teachers could then create an activity where students searched for spoken word poets that discussed themes that impacted their communities. Together the class could adapt the materials with pieces from their favorite poets to re-share for other classrooms to use.

Researchers identified varying attitudes toward adaptations within and across OER program developers. Because the OER programs take great care in sequencing their materials to be standards-aligned, some material developers were apprehensive about teachers' ability to change materials while still maintaining standards. For example, one developer noted concern with "making sure that teachers understand where students are supposed to be coming from, understanding the progression of standards, the progression of learning, understanding prerequisite standards." In contrast, developers from a different program were concerned that teachers would abandon innovative elements of the material design which encourage student

curiosity and learning through exploration in favor of the standards portion of the materials. Some programs release materials as editable text documents while others release them as HTML documents or PDFs—making adaptations significantly more cumbersome. Still, multiple developers said they “believe in teacher autonomy and their ability to make the best decisions for the children in their classroom.”

The need to adhere to standards drives a top-down method of developing curricula that leaves little room for student-level input. The greatest resistance to material adaptations comes at the district level, where many decisions about curricula adoption are made. According to one curriculum developer, many districts “don’t want to message to their teachers that they can change anything . . . they want the teachers to use the materials consistently” to ensure adherence to standards. In some instances, districts request customizations that incorporate their local communities’ context directly from the OER programs; however, they avoid active messaging that encourages teachers to change materials. With the exception of the teachers from one school, all other teachers interviewed in the study adapted the way certain activities were implemented but did not make changes to the materials themselves. The school where teachers described making material adaptations builds all course curricula around interdisciplinary real-world projects that are intentionally grounded in addressing local inequities. A teacher from this school shared that “at our school, we’ve been given the freedom and the confidence to make our own decisions.” Another teacher said, they “modify some of the tasks to make sure that every child’s culture has some sort of entry point. . .we modify based on the year, based on who we have in front of us.” However, teachers still center standards when making modifications. One teacher said they stick to the standards for the lesson and then “add our own spice.”

Collaborative learning

In alignment with culturally sustaining OEP, the four OER programs are dedicated to moving from traditional lecturing to student-led collaboration; however, changing teacher practice has proven to be a difficult task within a testing environment. In this model, teachers noted that they find themselves walking around the room to different student groups and asking them questions, as opposed to standing at the front of the room and lecturing for a full period. One of the programs has teachers maintain a space where students post questions that they are curious about related to the unit; students then work together to investigate these questions as part of the class. This practice is designed to allow students’ natural curiosity to drive learning. In exploring these ideas by discussing them with their peers, students learn in a collaborative manner that resembles communication in many collectivist cultures.

Some teachers expressed concern with students’ content knowledge in their ability to score highly on exams but universally agreed that this learning style leads to increased critical thinking and the development of practical skills for students. One teacher described, “It’s taken a long time for me to realize that just because I’m up there standing doesn’t mean the students are going to learn.” Through collaborative methods, students spend more time on a given unit and can explore materials at a deeper level. Students explicitly identified that they are learning how to listen to others’ ideas and enjoy problem-solving together through collaboration. For example, a student shared “sometimes we have to work together to find an answer, one group has paper A, and another group has paper B, and we have to ask questions to get the answer from them.” Students also express that they are learning more than in previous years of the same subject because they are more motivated and pay attention in class.

Standardized testing creates a culture of assessment where teachers constantly assess students on their learning progress against standards. Several material developers noted that this practice takes up limited class time and leads teachers away from collaborative learning.

Because many teachers have become accustomed to a drill style of delivering content, and often see success in this method through higher test scores, changing this culture is difficult. Teachers implementing one of the programs expressed discomfort in abandoning traditional written assessment, even though it doesn't measure the critical thinking and practical skills that students are acquiring through collaboration. Developers from the program are working on expanding teachers' conception of formative assessment so that they can assess students' thinking by listening to them verbally problem-solve. Developers from another program have observed that the practice of constant assessment becomes especially problematic with students who are "below grade level" (often, these are students of color). When students are academically "behind," teachers more easily abandon the collaborative model and rely on a constant cycle of assessment and review of old material through drilling, which means students perpetually miss out on grade-level content.

Focus groups with teachers across 6 different districts revealed that the emphasis on standardized exams and "teaching to the test" is stratified by school resources and student demographics. The curriculum lead from a wealthier district with a relatively high concentration of white students explicitly noted being ok with lower standardized test scores because she believes in the curriculum. A teacher from a different white and wealthy district said, "Standardized tests don't affect my use of the materials; our students are high performing, so tests are something that we don't emphasize." The teacher further described that "there's really not a standardized test that aligns to the philosophy of student discovery . . . but unfortunately that's where money talks, is the tests." In contrast, a teacher from a rural district with lower resources and a relatively high percentage of Black students expressed that "all that's stressed is the state test, you're teaching to the test." This teacher then noted that their school is struggling to change teacher practice from traditional lecturing to student-led learning. A teacher from a school with a high percentage of students with disabilities said, "Yeah, we're basically instructed to teach to the test." Another teacher who also has a high percentage of students with disabilities said, "Our state testing and our standards are just jammed down our throats all the time . . . it is just data-driven test test test."

Discussion

As state politicians and local school boards are increasingly restricting the knowledge that is considered acceptable in schools,³ CSP and OEP offer frameworks for envisioning a transformative education. Scholars from both fields have documented how top-down systems of education with restrictive testing requirements disadvantage students of color and restrict the generation of new knowledge. The programs studied present innovative approaches to address these challenges through OER by offering free materials with an open license and designing lessons to feature student-centered collaborative learning models, but their full implementation is hindered by high-stakes testing systems.

The need to be standards-aligned drives a top-down process for creating curriculum whereby districts and OER developers are resistant to teachers adapting materials; both because of a worry that standards won't be properly addressed and that teachers will abandon innovative design elements in favor of teaching standards. This creates a rigid structure within which student input and knowledge outside of what is tested on standardized exams gets devalued. High-stakes testing encourages traditional models of teachers as lecturers which limits student-centered collaborative learning. Teachers are concerned with students' abilities to score highly on exams despite evidence of their growth as curious learners. This study illustrates how

³ See [book bans](#) and [anti-critical race theory laws](#).

standards and high-stakes testing in K–8 are major impediments to OER’s ability to be implemented with culturally sustaining OEP. Dr. Gloria Ladson-Billings (2017) reminds us that, “The (r)evolution will not be standardized” (p. 141). How might we then imagine an *open* understanding of diverse students’ brilliance?

References

- Alim, H. S., & Paris, D. (2017). What is culturally sustaining pedagogy and why does it matter? In D. Paris, & H. S. Alim (Eds.), *Culturally sustaining pedagogies: Teaching and learning for justice in a changing world* (pp. 1–21). Teachers College Press.
- Bali, M., Cronin, C., & Jhangiani, R. S. (2020). Framing open educational practices from a social justice perspective. *Journal of Interactive Media in Education*, 2020(1), 1–12.
- Brown, M., & Croft, B. (2020). Social annotation and an inclusive praxis for open pedagogy in the college classroom. *Journal of Interactive Media in Education*, 2020(1), 1–8.
- Butcher, N. (2011). *A basic guide to open educational resources (OER)*. Commonwealth of Learning (COL) & United Nations Educational, Scientific, and Cultural Organization (UNESCO).
- DeRosa, R., & Jhangiani, R. (2017). Open pedagogy. In E. Mays (Ed.), *A guide to making open textbooks with students* (pp. 7–20). The Rebus Community for Open Textbook Creation.
- Ehlers, U.-D. (2011). Extending the territory: From open educational resources to open educational practices. *Journal of Open, Flexible, and Distance Learning*, 15(2), 11–10.
- Geser, G. (Ed.). (2012). *Open educational practices and resources: OLCOS roadmap 2012*. Salzburg Research; EduMedia Group.
- Gonzales, D., & Vasudeva, A. (2021). *Looking back to accelerate forward: Toward a policy paradigm that advances equity and improvement*. Carnegie Foundation for the Advancement of Teaching; The Aspen Institute Education & Society Program.
- Hammond, Z. (2015). *Culturally responsive teaching & the brain: Promoting authentic engagement and rigor among culturally and linguistically diverse students*. Corwin.
- Holmes, A., & González, N. (2017). Finding sustenance: An indigenous relational pedagogy. In D. Paris, & H. S. Alim (Eds.), *Culturally sustaining pedagogies: Teaching and learning for justice in a changing world* (pp. 207–224). Teachers College Press.
- Koretz, D. (2017–2018, Winter). Moving beyond the failure of test-based accountability. *American Educator*, 41(4), 22–26.
- Ladson-Billings, G. (2017). The (r)evolution will not be standardized: Teacher education, hip hop pedagogy, and culturally relevant pedagogy 2.0. In D. Paris, & H. S. Alim (Eds.), *Culturally sustaining pedagogies: Teaching and learning for justice in a changing world* (pp. 141–156). Teachers College Press.
- Ladson-Billings, G. (2014). Culturally relevant pedagogy 2.0: a.k.a the remix. *Harvard Educational Review*, 84(1).
- Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal*, 32(3), 465–491.
- 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.
- Lee, A. M. I. (n.d.). *What is the Every Student Succeeds Act (ESSA)?* Understood for All Inc. <https://www.understood.org/en/articles/every-student-succeeds-act-essa-what-you-need-to-know>
- Love, B. (2019). *We want to do more than survive: Abolitionist teaching and the pursuit of educational freedom*. Beacon Press.
- Rosa, J., & Flores, N. (2017). Do you hear what I hear? Raciolinguistic ideologies and culturally sustaining pedagogies. In D. Paris, & H. S. Alim (Eds.), *Culturally sustaining pedagogies: Teaching and learning for justice in a changing world* (pp. 175–190). Teachers College Press.

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