

## ***“POP THE CAP!” Pathways of Possibilities for Transforming Higher Education***

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### **Abstract**

Institutions of higher education are seeking different ways to address declining enrollment, weak graduation completion rates, and increasing concerns with widening equity gaps. In response, initiatives targeting affordable learning solutions have been gaining traction for reducing instructional material costs, while simultaneously improving retention rates and closing equity gaps. In this panel presentation, we will address the use of Open Educational Resources (OER) to enhance student learning with inclusive and immediate access, and provide data related to student success with our POP THE CAP courses. As part of our Department of Education Funds for the Improvement of Post Secondary Education (FIPSE) grant award, our presentation will focus on our collaborative pipeline from the California Community College (CCC) to the California State University (CSU) system, in establishing pathways of possibilities for transforming higher education. We address how we “POP THE CAP” with the use of OER adoptions for our 8 Curriculum Alignment Project (CAP) courses, highlighting challenges and successes with this intersegmental project for underrepresented and underserved student populations in our local region.

Keywords: Open Education Resources, Equity Gaps, Student Retention Rates

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## Introduction

Across the USA, institutions of higher education appear to be seeking different ways to address declining enrollment, weak graduation completion rates, and increasing concerns with widening equity gaps while administrators attempt to reframe and extol the benefits of securing university degrees. Several institutions have recognized the importance of changing their approaches by adopting basic needs funding models, offering internships, dual certification courses recognizing high school and community college credits, as well as focusing on service-learning opportunities that promote high impact teaching practices to address potential employability concerns of students (Leavitt & Leigh, 2023). At the same time, university advancement units continue to create rebranding campaigns that shift the focus from a traditional model of philosophical teaching and learning in education to emphasizing marketability with greater attention to competency and skill-based training (Sturgis & Casey, 2018). As these shifts continue to target enrollment concerns and focus on the value of higher education in a high paced, technology enhanced, digitally driven working environment, the ongoing challenge for institutions of higher education continues to remain the issue of affordability.

As part of a Department of Education Funds for the Improvement of Post Secondary Education (FIPSE) grant award, our “POP THE CAP” project focuses on creating a collaborative pipeline from the California Community College (CCC) to the California State University (CSU) system, by establishing educational pathways of possibilities for transforming higher education for students in our region. We address the use of Open Educational Resources (OER) to enhance student learning with inclusive and immediate access to course materials on or before the first day of classes.

We examine how the use of OER adoptions can reduce the excessive burden on underrepresented and underserved student populations in our local region that negatively impacts them from reaching the finish line to earn their degree. In response to these concerns, Affordable Learning Solutions initiatives have been gaining traction for reducing instructional material costs, while simultaneously improving retention rates and closing equity gaps (Colvard et al., 2018; Hilton et al., 2014). Our focus on the eight Curriculum Alignment Project (CAP) courses in Child Development (outlined in CSUB’s Pathways for Success) serve as the foundational transfer-bearing courses that are aligned between the Community College and CSU system in California that students must complete for their associate’s degree, leading to their bachelor’s degree. In this paper, we highlight the challenges and successes with this intersegmental project for underrepresented and underserved student populations in our local region. We provide data related to student success with our POP THE CAP curriculum alignment courses and offer qualitative feedback from student surveys.

We believe that students should not be burdened with excessive debt because of the soaring costs associated with completing an undergraduate degree. Furthermore, the opportunities and benefits from successfully completing a degree should ensure that students can advance in the workforce, eventually changing the trajectory of their lives through education. For students in our region, education is a vehicle for mobility and socio-economic stability (UC Davis Center for Regional Change, 2017). Therefore, affordability and ease of access to course materials are imperative for student success.

Our attention and focus on integrating Open Educational Resources in lieu of textbooks were further endorsed with the active collaboration of our Community College partners on a Department of Education FIPSE grant. Our project is entitled Pathways of Possibilities for Transforming Higher Education Curriculum Alignment Project, better known as "POP THE CAP". This project has California State University, Bakersfield serving as the lead investigators with 4 sub-awardee partners: Antelope Valley College, Bakersfield College, Porterville College and Taft College. The structure of how our institutions operate enables our community college partners to offer the CAP aligned courses for transfer credit towards an undergraduate degree. As several of the students who enter university are transfer students, having earned an associate's degree that will count towards the first two years of a four-year degree, it was imperative that consistency across these transferable courses was achieved. To meet alignment and consistency in course content and materials, our collaboration focuses on trying to create a pipeline of OER from the community college to the California State University system.

### **Local Context**

Our institutions are located within the interior of California, in more rural and desert areas. For example, California State University, Bakersfield is the only 4-year public institution of higher education within a 100-mile radius. Porterville College and Taft College share a similar positioning as institutions in rural areas, with Antelope Valley College located in the western Mojave Desert. Bakersfield College is the largest Community College in Kern County, serving over 40,000 students (Bakersfield College Educational Master Plan, 2023). At all five institutions of higher education, there are large numbers of first-generation students (students who are the first in their family to attend college and/or university). All the institutions are designated as Hispanic-serving institutions (HSIs) and Minority-serving institutions (MSIs) (UCOP, 2024). Given the regional context and local industries of agriculture and oil, there are large pockets of migrant workers earning minimum or less than minimum wage, contrasting with large groups of people working within the oil industry, where high salaries can be earned with limited education. It is worth noting that while the State of California is considered politically liberal, there remain pockets of places within the state, such as the Central Valley, and rural outlining areas that are politically very conservative. Despite the regional industries, the population demographics reflect higher rates of individuals categorized as low income with limited resources, encountering food insecurity, and housing instability (US Census Bureau, 2023).

### **Open Educational Resources (OER) and Student Learning**

Open Educational Resources consist of openly licensed and distributed learning materials that are free of charge (UNESCO, 2019). Zero Cost Course Materials consist of materials that are free and have no cost to access or obtain and are available to all students (CSU AL\$, n.d.). Some examples of OER are open electronic textbooks, open access journal articles, faculty-created course readers, and even materials that are created by students that are openly accessible. It is important to define the parameters around what constitutes and what would not be classified as OER. For example, photocopying from books or journal articles is not OER, even if these materials are distributed to students with no charge. Additionally, materials that have not been vetted but are available on the internet for free are not automatically designated as OER. While there may be concerns around the number of individuals required to assess materials that are designated as OER, the primary focus of the OER designation is that there has been a scholarly level of review of the materials by

qualified individuals in the field to ensure that the content has been verified, and that copyright and ADA compliance of OER materials have been thoroughly checked and/or vetted.

### **Theoretical Framework: The 5R's of OER**

Outside of the cost savings that students enjoy with the integration of OER in lieu of textbooks, are the benefits of OER as an overall philosophy in teaching and learning. The 5 R Framework of OER demonstrate what individuals can do with OER (Wiley, 2014) and serves as our theoretical framework. For example, 1) Retain – Make and own copies of materials, 2) Reuse – Use material content in a wide range of ways, 3) Revise- Adapt materials by modifying, and improving on the originals, 4) Remix – Combine two or more pieces together, and 5) Redistribute – Share new materials with others. This philosophy of OER starts with the premise of an open shared space for learning to move forward by working with others to advance the educational enterprise by ensuring that education is open and accessible to all. In this way, the focus of OER is not ‘ownership of knowledge’ but rather a shared process of contributing to and enhancing our funds of collective knowledge.

Specifically in California, the attention to reducing educational costs with affordable learning initiatives has rendered additional funding support through the California Compact with the California State University system. As the largest system of higher education in North America, the initiatives that are identified in California pertaining to cost saving measures for students have also generated interest by other states across the USA. Governor Newsom’s Compact with the California State University system requires the 23 universities within the CSU system to reduce educational costs by 50% by 2025. With adherence to the compact, the CSU will receive additional public funding as promised. This initiative has been central to the establishment of an Affordable Learning Solutions Initiative (AL\$) at each of the 23 CSU campuses to address ways to reduce educational costs for students to meet the compact agreement. Several of the university initiatives have creatively worked to reduce costs through free or low-cost course materials, along with basic needs initiatives intended to drive down educational costs.

The value of OER for reducing costs must also be considered in terms of access to materials, especially when dependent on digital devices. The Digital Equity Act helps close the digital divide to ensure everyone in the United States, including the covered populations (i.e., racial/ethnic minorities, people with disabilities, aging populations, veterans, people with language barriers, low-income, incarcerated, and inhabitants in rural areas) have access to affordable, reliable internet services (Digital Equity Act, 2021). Digital divides were further illuminated and exacerbated during the pandemic with millions of Americans not using the internet at broadband speeds, and/or having any access to the internet (Internet for All, n.d.). We consider how OER assists to reduce textbook costs, with instructors and students developing OER materials to increase retention to graduation and reduce equity gaps by focusing on ensuring inclusion through access, and equity, which fosters justice for all students through learning and use of new rapidly evolving technologies.

Critical discussion for the use of OER to generate viable and sustainable solutions are needed. We must consider the context of inequities when thinking about what we mean when we refer to learning with OER as “open”. How “open” is open? For example, the cost of access remains a central issue of concern. While practitioners are beginning to shift their educational paradigms from utilizing traditional textbooks to embracing Open Educational

Resources (OER) for supporting course instruction, some inequities continue to persist. For example, the context of inequities needs to be examined. Two specific areas that require review are the type of digital access that is available, and the how access is used (Pinsent-Johnson & Sturm, 2020).

One way to illustrate the impact of inequities with digital access and use is highlighted in this infographic.

Figure 1: Equity in Digital Access



Pinsent-Johnson, C. & Sturm, M. (2020). Ontario's Digital Divide: A Spotlight on the Differences in Online Connection, Activity and Benefits [Research Brief]. AlphaPlus. <https://alphaplus.ca/resources/the-impact-of-ontarios-digital-divide/> [alphaplus.ca]

Source: Pinsent-Johnson, C. & Sturm, M. (2020). Ontario's Digital Divide: A Spotlight on the Differences in Online Connection, Activity and Benefits [Research Brief]. AlphaPlus. <https://alphaplus.ca/resources/the-impact-of-ontarios-digital-divide/> [alphaplus.ca]

























As indicated, typically, those with fewer resources, and limited finances encounter greater delays and less time to avail of the benefits of digital services. The differences in a day for an individual with seamless access are significantly more imposing and inconvenient on those with less financial means to access and use digital services. It is therefore important to consider what seamless access means, compared to limited access. In higher education, we have effective policy levers to remove many barriers that historically close doors to students like those served by institutions in rural or low-income areas. As indicated, we must first understand the role of faculty with new technologies in enhancing educational equity, and secondly, learn practical strategies for implementing zero-cost courses.

For faculty, while OER might be considered valuable, there remains resistance due to time constraints, no additional pay, workload concerns, limited guidance and or support, and continued skepticism about the quality of OER materials (Green, 2018). Whereas for students, the three most pressing concerns remain affordability, academic quality, and degree completion rates (Colvard et al., 2018).

As an example of the practical benefits of OER, here are 25 benefits that address justice, access, equity and inclusion with the use of OER.

Figure 2: Why OER/ZCCM

**WHY OER/ZCCM?**  
**25 Benefits to Consider!**

21 Faculty  Intellectual Ownership	22 Faculty  Recognition	23 Teaching  Innovation	24 Institutional  Savings	25 Student  Success
16 Saves  Trees	17 Quality  Assurance	18 Worldwide  Audience	19 Multiple  Perspectives	20 Global  Exchanges
11 Student  Savings	12 Reduced  Stress	13 Fewer  To Carry	14 Lighter  Load	15 Portable 
6 Access  For All	7 Equity Gaps  Reduced	8 Retention  Increased	9 Learner  Success	10 Diverse  Resources
1 Start  First Day	2 Quality  Content	3 OPEN 24/7	4 ADA  Compliance	5 Copyright  Compliant

Why OER/ZCCM? © 2023 by Dr. Elaine Correa is licensed under [CC BY-NC-SA 4.0](https://creativecommons.org/licenses/by-nc-sa/4.0/)

Source: Correa, E. (2023). Why OER/ZCCM? CC BY-NC-SA 4.0

Concerns about the lingering residual impact of structural inequities as simultaneously technological advances continue to soar invoke questions of: What does it mean to be truly OPEN for the use of Open Educational Resources (OER) and Open Educational Practices (OEP)? Institutional survey data is examined with a focus on improving how faculty seek, curate, expand, and promote OER/OEP adoption of free, culturally relevant, digitally inclusive affordable instructional materials and pedagogies. Educators must be mindful to avoid solely replicating Eurocentric content and pedagogies in their OER/OEP selection. Geographical location of the first author in open education articles can reveal the demand and use of which OER's are used and how often diversity in the selection of OER is considered (Ramírez-Montoya & Lugo-Ocando, 2020). Through reflective exploration of collaborative opportunities and challenges of influential technologies we explored how changes have impacted our goals and approaches to justice, access, equity, and inclusion. We engaged actively with our partners to gain insights into the complexities of adapting to transformational shifts in teaching and learning. Candid discussion on lessons learned navigating innovative pathways with the intersection of new technologies and OER were discussed.

Practitioners are beginning to shift educational paradigms to address equity, access, justice, and inclusion as seen by shifting educational paradigms from utilizing traditional textbooks to embracing Open Educational Resources (OER) for supporting course instruction and Open Educational Pedagogies (OEP). Often OER and OEP are aligned as strategies to help encourage and increase student engagement (Varma & Ren, 2023).

We ask the broad question of what does it mean to be OPEN? By interrogating the following areas, practitioners can reflect on the nature of open as it pertains to their OER materials.

Questions:

- 1) What are the current Policies for OER? – Do these policies make OER Open to everyone?
- 2) Is the OER SPACE really OPEN?
- 3) Are there barriers to ACCESS? Is Access OPEN?
- 4) Are Faculty and Administrators open to new ways of thinking and using diverse resources and materials?
- 5) How open is your institution to different values and different ideas?
- 6) How open is your institution to change and finding new spaces outside the defined contexts?
- 7) How open is the space to individual identities and differences?
- 8) How open are institutionalized practices to different experiences and alternative pathways?
- 9) How open is your institution to teaching and learning differently?

When thinking about the concepts of OPEN, we must not lose sight of the realities for those with limited resources, as they endure the financial crunch of trying to make ends meet. In terms of obtaining what is needed, we cannot automatically assume that everyone and every home has a digital device and programs (Reid & Correa, 2021). Not all students have digital literacy skills to navigate online access seamlessly. Also, those who have multiple working commitments will experience limited time to be able to access and navigate resources they need and have obtained. As discussions continue about reducing equity gaps and increasing retention to graduation rates, the revolutionizing power of OER and OEP is undeniable. However, we must recognize that three layers of digital divide must be considered for underserved and/or underrepresented populations. We must consider how they will “Get connected”, what their “regular use” would entail, and “how they will obtain what is needed” (Ragnedda & Ruiu, 2017). For example, To get connected – is there stable WIFI and appropriate broadband speed? Cost cannot be ignored when considering regular use. Also, what is needed for students in terms of time, and use must be considered at the forefront of any discussion related to the terms of “Use”, - how will use be paid for by those on fixed or limited incomes? Educators must continue to have expectations and advocate for high quality, efficiency and speed, along with lower costs as these are all fundamental components to OER that must be examined to ensure that the concept of OER as truly OPEN.

### **Conclusion: Practical Strategies**

Based on the work of David Wiley, the use of OER in teaching and learning can encourage the production of increased scholarship with students taking ownership over their own production of OER materials. Wiley and Hilton’s (2018) suggestions are helpful in addressing different ways faculty can create assignments that engage students in assignments that serve as “living works” that extend beyond the timeframe of the course or classroom. Additionally, increasing attention to the importance of equitable access to educational resources greater participation of students from underserved and underrepresented populations can increase.

These are a couple of ways in which students contribute to creating an educational pathway that is innovative, increasing opportunities for justice, access, equity, and inclusion for all. For example, have students contribute to OERS that are already available, including course readers and open-source articles (Wiley & Hilton, 2018).

Another strategy that can be employed is creating non-disposable assignments. The value of providing students with opportunities to complete non-disposable assignments enables students to contribute to discussions that can be built upon in the next semester as these discussions are written by students from the previous term/semester, serving as a building block for the next new student cohort. Additionally, students can work on Wikipedia pages or contribute to existing OERs. The message is clear, that anything is possible.

In conclusion, OER and OEP can level the playing field, when the concept of OPEN extends beyond simply using open-source materials, and actively including students into their own learning, by seeking materials, including diverse perspectives and engaging global content that reflects an array of knowledge. As institutions are faced with declining enrollment, graduation completion rates, and equity gaps, the implementation of OER and OEP serves as an effective strategy to enhance accessibility, affordability, and inclusivity. Through our "POP THE CAP" initiative, we have demonstrated how strategic partnerships between community colleges and universities can foster curriculum alignment, ensuring a seamless transfer pathway that reduces financial and academic barriers for students.



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