# 日のとと

# NCCC Journal of Teaching Innovation

Volume 2 Issue 2 Fall 2023



The aim of NCCCJTI is to provide all North Carolina Community College System faculty and staff with an outlet for publishing manuscripts of research and practice, as well as to provide open access to readers or scholars interested in higher education topics surrounding North Carolina community colleges.



### The Journal of North Carolina Community Colleges

Volume 2 • Issue 2 • Fall 2023

### **Editorial Board**

Dr. Josh Howell—Editor-in-Chief—College of The Albemarle

Dr. Grant Jolliff—Deputy Editor—Davidson-Davie Community College

Dr. Donald Carpenetti—Assignments Editor—Craven Community College

Dr. Eugene Tinklepaugh—Managing Editor—Halifax Community College

Dr. James "JW" Kelley-System Office Liaison-NCCC System Office

### **Editorial Staff**

Dr. Sylvan Allen—Randolph CC

Dr. Ryan Bradshaw—Johnston CC

Kanika Bryant—Forsyth Technical CC

Seth Buchanan—Central Carolina CC

Meret Burke-Wilkes CC

Dr. Alan Campbell—Stanly CC

Lori Dees-Wake Technical CC

Dr. Tony Emetu—Forsyth Technical CC

Dr. Kamper Floyd—Wake Technical CC

Timarie Franco—Central Carolina CC

Dr. Tarshima Hackett—Sandhills CC

Melissa Henry—AB Tech CC

Dr. Joey Hinson—Robeson CC

Dr. Melissa Jones-Nash CC

Alexandru Lefter—Fayetteville Technical CC

Julie Marciel-Rozzi-Wayne CC

Dr. Kerri Mercer-Wake Technical CC

Dr. Don Miller-Piedmont CC

Dr. Matthew Peeler—Rowan-Cabarrus CC

Dr. Bruce Pichler—AB Tech CC

Kristoffer Rixon-Central Carolina CC

Cheston Saunders—Southeastern CC

Lindsay Slavik—Wilkes CC

Tricia Staggers—Rowan Cabarrus CC

Nancy Waldrop—Rowan Cabarrus CC

Dr. Andrew Walser—Central Carolina CC

Ian Wolf—Vance-Granville CC



### Table of Contents

- **5 Editor's Note** Dr. Josh Howell
- Approach to Community College-University Partnerships

  Brian C. Gano, Kristi M. Wiley, James DeVita, Denise Henning, Deb Grimes,

  \*\*Example College String S
- **15** Examination of 1D SBCCC 400.11 Educational Services through Career and College Promise Curriculum and its Utilization in North Carolina Sarah Garrow, Carly May, Manisha Mittal, & Ian Wolf
- **18** Critical Disciplinary Literacy Within Literature Survey Courses Dr. Josh Howell, Olivia Buzzacco, and Sarah Brown
- 28 Preparing Dual Enrollment Students and Young Adults for the Workforce by Fostering Self-Regulation in the Classroom: Strategies and Applications Lane Freeman
- **39** Food For Thought

  Dr. Angelo Markantonakis
- **43** Using Virtual Reality (VR) as a Supplement to Lab Activities in Chemistry Classes: Effects on Student Self-Evaluation of Lab Skills

Donald W. Carpenetti



### Table of Contents

**49** Open Educational Resources (OER), No-cost Textbook Alternatives, and Student Success

Jeffrey William Parsons, Ed.D.

**59** School Choice or School's Choice for Early College High School Admissions

Kanika Bryant

- **64** Military-Friendliness Online Course Guide
  Brittany Hochstaetter, Kate E. Jones, Kelly Markson, Marilyn E. Terrill, and Patrick Tribble
- **69** Taking Your Time: The Slow Professor by Maggie Berg and Barbara K. Seeber

Timarie Franco

**71** Call for Submissions

Unless otherwise noted, copyrights for the texts which comprise all issues of *North Carolina Community College Journal of Teaching Innovation* (NCCCJTI) are held by the *Journal*. The compilation as a whole is Copyright © of NCCCJTI, all rights reserved. Items published by NCCCJTI may be freely shared among individuals, but they may not be republished in any medium without express written consent from the author(s) and advance notification of the NCCCJTI editorial board. For permission to reprint articles published in the *Journal*, please contact the Editor-in-Chief at journal@ncccfa.org.



### The Journal of North Carolina Community Colleges

Volume 2 • Issue 2 • Fall 2023

### Editor's Note

Editing and typesetting are critical phases in assembling a journal issue. After articles have been reviewed, revised, and proofed, a sort of puzzle begins. Typesetting requires that you ensure consistency in font, margins, and styles. For this issue I used Microsoft Publisher, but whenever I spend the two weeks on typesetting the journal (I'm the one who does it), I feel like a compositor of the past. While my hands are not covered in grease, ink, or wood shavings, I can empathize with all those who typeset before me. It is a tedious job that makes you look at text in different ways.

As such I had the opportunity to go through each of the presented articles numerous times. I feel this is our most unique issue yet, as not only have we had articles from many of our staff, former staff, and even myself submitted, the variety of articles is both at the macro level of education, and the micro. The Editor's Choice award winning article; for example, is revolutionary to the role of community college partnerships, and I applaud the educators over at UNCW for their hard work across the state.

It is an exciting time for all those researching community colleges. The future of community college research appears promising, driven by evolving educational landscapes and the growing importance of accessible, affordable higher education. Researchers are likely to explore innovative pedagogical approaches, equity and inclusivity issues, and the impact of technology on community college learning. This research will inform policies and practices, contributing to the continued growth and enhancement of community colleges as vital components of the education system.

This was a hard issue to put out to the public—both physically and mentally. After our last issue, I was notified that most of the editorial board would be leaving the journal due to their own professional and personal reasons. I want to thank John Etheridge, Brittany Hochstaetter, and Sylvan Allen for putting in so much time and energy to get this thing off the ground. However, their absence in this last issue has been felt hard. Not only is this issue a month behind last year's issue, I spent a good amount of time recruiting new editors, and new editorial board members. I am excited to have Grant Jolliff, Donald Carpenetti, and Eugene Tinklepaugh step into the editorial board, and I wish them the best as they acclimate to their new duties.

Including myself, that puts the entire editorial staff at 32 members. We felt pinched last year with the amount of submissions we had; therefore, we are actively recruiting new editorial staff from all 58 community colleges. If your college does not have an editor on staff, please, encourage an individual who would be a strong addition to apply. This journal requires two things—strong editors, and strong submissions. With both we can actively inspire the faculty, staff, and administrators across the state. I want to thank the editorial staff for reviewing articles so expediently this semester, they really put in the work this issue, and I'm glad we have such a selfless staff. Finally, I want to thank you, the reader, for sticking with us, and for being champions of higher education in this great state of North Carolina.

Happy Reading!

Dr. Josh Howell—Editor-in-Chief

Appreciative Collaborative Partnerships: A Novel
Approach to Community College-University Partnerships

Brian C. Gano, Kristi M. Wiley, James DeVita, Denise Henning, Deb Grimes, & Kim Jones



### **Abstract**

Using a narrative approach often associated with appreciative inquiry, the authors share their experiences of creating Appreciative Collaborative Partnerships (ACP) between community colleges and a four year, public university. Partnerships between community colleges and universities have often been characterized as the university proffering a new program or resource to the community college without truly inquiring into the needs of the community college. An ACP is a novel way to create a partnership that addresses the needs of all partner institutions and builds upon each other's strengths. The authors share several stories about the events and programs that have been a result of the ACP and discuss the implications of using an ACP model.

*Keywords:* Appreciative inquiry; community colleges; collaboration; partnerships

### Appreciative Collaborative Partnerships: A Novel Approach to Community College-University Partnerships

In the spring of 2019, faculty and administrators of several community colleges were invited to the campus of the University of North Carolina Wilmington (UNCW) for a meeting on *Partnerships at their Best*. Some attendees shared with the organizers that they were unsure as to why they were there; they assumed it was to discuss new articulation agreements and have lunch. This sentiment exemplified the type of relationship leaders of community colleges expect between them and a university. However, the organizers had another vision of how relationships could

be between community colleges and universities. Prior to the meeting, the groundwork had been laid to create appreciative collaborative partnerships (ACP) between UNCW and community colleges throughout the State of North Carolina. An ACP is a shift away from more widely seen approaches to universitycommunity college partnerships that often include the university proffering its status, resources, and academic knowledge to the community colleges as a way to bolster the university's reputation and community involvement. Although the community college may benefit from these relationships, it is not balanced, nor does it necessarily address the needs of the community college. At the aforementioned meeting, the community college leaders were asked something not often asked of them by the faculty and staff at a university: "What are your needs, and how can we partner with you to address those needs?"

In this article, we offer a discussion of the process and framework for creating appreciative collaborative partnerships between community colleges and universities. The framework pulls from several concepts and ways of knowing, including the asset-based approach of appreciative inquiry (Cockell & McArthur-Blair, 2012). Additionally, we explore the meaning of collaboration and partnerships with recognition of inaccurate and stereotypical views that there is a hierarchy in post-secondary education. We will use a narrative approach to share examples of how the ACP was brought to life and continues to yield impressive results.

This article is brought to you for free and open access by the North Carolina Community College Faculty Association @NCCCS. It has been accepted for inclusion in *North Carolina Community College Journal of Teaching Innovation* by an authorized editor of NCCCFA. For more information, please contact editor@ncccfa.org.

### **Defining ACP**

An ACP starts with an appreciative framework that is asset-based and uses dialogue to identify and leverage the strengths of all participants. An appreciative framework, rooted in appreciative inquiry, is not positivity for positivity's sake. The "appreciative" refers to seeking out the strengths present in an organization, group, or individual and building upon those strengths rather than focusing on the deficits. In doing so, an appreciative process adds value (i.e., appreciates in value) and progresses the entity beyond the status quo (Watkins et al., 2011). Appreciative inquiry recognizes that issues within human systems cannot be isolated to one component to be resolved; every part of a human system impacts the others. In regard to postsecondary education, we must recognize that community colleges and four-year institutions are inextricably linked. Through an appreciative lens, we recognize we are one system, and we can build upon the strengths of each institution and develop a system that is inclusive and mutually beneficial for all stakeholders.

Collaboration denotes a cooperative process where all sides work together. In ACP, collaboration describes the type of partnership we aspire to have among the participating institutions. We view a collaborative partnership as one that respects the strengths and needs of all sides. It values and appreciates all. In contrast to the types of partnerships often described in the literature (Phelps & Prevost, 2012; Strawn & Livelybrooks, 2012), the focus in an ACP is on working with and not on community colleges. The shift to working with a group is similar to the way Hurtado (2015) described the transformative paradigm and conducting research among marginalized groups. The marginalized group should be included in all aspects of the research process. Working with the group minimizes harm, empowers the participants, and reduces the pathologizing of issues onto the group. Although universitycommunity college partnerships are not necessarily framed as research, the programs and services proffered to community colleges by universities can be experimental, short-term projects, or other pilot projects that lead to publications and prestige for the university (Phelps & Prevost, 2012). We recognize that community colleges in our society have unjustly had a negative stigma associated with them and are often compared to and given less prestige than their

four-year counterparts. We reject these views. In ACP, the focus is on we; working together and seeing the immense value in all types of post-secondary education. In sum, we define ACP as an asset-based approach to working collaboratively with community colleges and universities in a way that builds upon the strengths of all and addresses and respects the needs of those involved in order to produce mutually beneficial outcomes for all.

In the following sections, we will discuss how several aspects of the ACP came to be. We first discuss how and why we use storytelling in this article and how the authors were involved in the partnership. We then describe the setting of the partners and discuss the creation of the UNCW/Community College Collaborative (UNCW/3C). Emerging from UNCW/3C, we will discuss the conferences and the Aspiring Leaders' Summit that were a product of the meeting mentioned before. Next, we will provide an overview of the Community College Undergraduate Research Experience (CCURE). In each example, the focus is on the process of creating and maintaining an appreciative collaborative partnership. Lastly, we discuss the implications of ACPs for the future of university-community college relationships.

### Storytelling and the Authors

Watkins and colleagues (2011) described storytelling as one of the central tools used in appreciative inquiry. Stories provide data that goes beyond a "list of key points or other reductionist reports of a human experience" (Watkins et al., 2011, p. 147). We use stories in this article to provide a more complete and powerful picture of how the ACP worked. Among the several points on the power of stories Watkins and colleagues shared, there are four that we feel are most present in our storytelling: stories are universal in that every culture uses stories as a way to convey knowledge and history; stories are memorable and allow us to share images and ideas with each other; stories stimulate creativity by freeing us from putting situations into categories and allowing the exploration of new possibilities; and, stories can move us forward by examining the past while imagining a new future (Watkins et al., 2011, pp. 147-148). We see the method of storytelling as a powerful tool in research and in sharing new and innovative practices that allows the reader to imagine beyond the simple presentation of figures, scores, and outcomes.

Each of the authors has been involved with

UNCW/3C in some capacity. In the following, Denise, Deb, and Kim share some of the ways they were involved in the creation and implementation of the partnership. James, the Director of High Impact Pathways at UNCW, oversees CCURE and was part of the formation of UNCW/3C. Brian worked as a graduate assistant and in a post-doctoral role with Denise, Director of UNCW/3C, to organize and implement the Aspiring Leaders Summit and Challenging the Paradigm conferences. Kristi worked as a doctoral graduate assistant with James to implement CCURE and is an alumna of the Aspiring Leaders program. For this article, each contributed by either providing their stories or supporting sections that help to frame and define appreciative collaborative partnerships.

### Setting

This article describes several programs and events associated with the University of North Carolina Wilmington (UNCW), a mid-size public research university on the coast of North Carolina, and in partnership with multiple North Carolina community colleges. Because the programs and events have occurred on various campuses, it creates a unique setting for each individual partnership. For instance, a partnership between UNCW and Wake Tech Community College, located in the county of the state's capital, faces a different set of considerations for the relationship than a partnership between Brunswick Community College, a more rural college. Many of the programs and events that will be discussed take place on one of the 58 community college campuses throughout the State of North Carolina, each with its own academic, technical, and community focus. Although UNCW is the consistent entity among each of the described partnerships and programs, the faculty and staff have made a concerted effort not to make their campus the focus of the partnerships.

### Giving Life to UNCW/3C

UNCW/3C encompasses several programs and events that are partnerships between UNCW and several North Carolina community colleges. In the following, two colleagues share their experiences with the formation and implementation of UNCW/3C and two of its programs that demonstrate the power of an ACP. Denise will share her story of how she became involved with UNCW and

the approach she took in implementing UNCW/3C, including a collaborative meeting among community colleges and the university that used appreciative inquiry to generate ideas for partnerships. Deb will discuss her involvement in the collaborative meeting and two of the major programs that emerged from the idea generation, Aspiring Leaders Summits and Challenging the Paradigm conferences. After Denise and Deb share their insights on ACP, we will discuss CCURE and Kim will offer her story of being an instructor for the partnership that created undergraduate research opportunities for community college students.

### Denise's Voice

With a career of over 25 years in higher education, I have been a university-trained scholar and senior administrator. Going through the faculty route. I held positions in the senior administration at universities and leadership positions at community colleges, including the presidency at three community colleges. After serving as president, I moved back to North Carolina and was contracted by UNCW to review and implement community college initiatives and partnerships.

Upon entering, I was presented with the results of a feasibility study that had been conducted regarding a community college leadership graduate certificate program and a goal of a partnership with the community colleges in the Eastern region of North Carolina. I reviewed the materials, including the proposed curriculum and budget allocated to recruit to the new certificate program. After the review, it was apparent, based on my successful experiences in collaborating with community colleges and working at the university level, that there was a gap in the ability of the program to be successful. The gap was the lack of an authentic partnership. Most often, the history of universities working with community colleges is because the university wanted something from the community colleges; for example, their students, their locations, their ability to reach community partners, or delivery of new programming at the community college. Community college professionals commonly reference the perception of academic snobbery experienced through the approach used by universities that enter into relationships with community colleges; this sentiment exemplifies the idea that these partnerships are about the big universities and colleges doing it to the community colleges.

This gap revealed from the feasibility study was that there was little consultation with the community colleges and their leaders within the region. I discussed the gap with the coordinator of the higher education program and asked if we could take a couple of steps back and consult with community college leaders by inviting them to a gathering. At this gathering, we could facilitate a process of collaborating, shoulder to shoulder, to develop what would be considered a Partnership operating at its best. We approached the Dean to ask if the money that had been set aside for recruiting students to the certificate program could be reallocated to conduct the facilitated gathering of community college leaders. After receiving permission, I designed an Appreciative Inquiry (AI) facilitation process using the strengths, opportunities, aspirations, and results (SOAR) model, the antithesis of a strengths, weaknesses, opportunities, and threats (SWOT) analysis. The focus of the inquiry for the gathering was to identify the needs of the community colleges, as well as best practices for partnerships that would be sustainable for the future. In developing an agenda for the facilitation and creating a presentation, our desired outcome for the day of the gathering was to create action plans to guide us to priority-setting what would meet the needs of the community colleges respectively, and through meaningful partnerships, where one plus one would equal three.

### Deb's Voice

I was serving as the Senior Vice President of Instruction and Student Services at Lenoir Community College (LCC) in Kinston, NC when I received the advertisement for UNCW's Community College Collaborative Leadership Gathering, entitled Collaborative Partnerships; I began talking with others from LCC to see if anyone wanted to attend. At the time, I was not sure what the gathering was truly about, but I knew that we were interested in partnerships with our four-year universities and I suggested to my colleagues that we attend.

As the gathering began, I could tell I was in the right place for our college. The day's workshop was very engaging. Organizers from UNCW seemed to be extremely interested in getting to know our community colleges better and were genuine in asking what we thought and what we needed for our colleges. From my experiences with other universities, I do not recall having been asked that question before. ty. From that note and others, an action plan was

It was also interesting because that is how community colleges operate with local businesses. But, with the universities, they usually let us know what they have to offer and then ask if we want to participate. In other words, here is what we are going to do, and do you want to join us?

The gathering was a great moment to learn more about our colleagues in the room. We did this by interviewing the person next to us. As a participant, we were asked to respond to two prompts. First, tell a time when you, as a leader, were at your best or when you experienced a leader that you thought was an amazing leader; what were the things that you felt made the leadership great? Then, tell about a time when you experienced, between two postsecondary organizations, a collaborative partnership; what were the aspects of the partnership that made it strong?

Next, we spoke about appreciative inquiry (AI). Although this was new to me, it made sense. We spoke about the telling of stories and quickly learned that stories are not conveyed just to make people feel good and warm. The power of the stories is their ability to remind us of what success looked like and felt like – to relive the event and remember that we can be successful and that we have the capability to bring life and energy to our work. Among other activities, the one I most remember was being asked to reflect on the day and consider, "What will we do with the results? What opportunities could we apply from today's meeting?" As the day went on and I learned what the meeting was about, I felt UNCW really wanted to know how we could walk shoulderto-shoulder to meet the needs of our community colleges.

The Aspiring Leaders program was one result of the meeting and exemplifies an appreciative collaborative partnership. Prior to the meeting at UNCW, I had just returned from the American Association of Community Colleges Conference and attended sessions that had to do with creating your own leadership training. I knew we needed this at LCC. I also knew that it was something our new President and other Vice Presidents in North Carolina had discussed many times. We would often say, how do we grow our own leaders with the competencies and experiences to lead in higher education? That was it! In the meeting, I put those words on a Post-it note and posted them on the wall during one activideveloped during the meeting.

Much to my surprise, the leader of the training, Dr. Denise Henning called me the next week to discuss my thoughts. We spoke for a while, and then she asked who else I thought might like to join our conversations based on the resulting action plan from my table group at the gathering. I suggested the Vice President from Craven Community College, and she suggested a student from her class who worked at Nash Community College. I also suggested the Vice President from Cape Fear Community College and a colleague of mine from LCC, the dean of arts and sciences. We spent the next several weeks writing a proposal and developing a concept based on the goals of the action plan. The proposal was finalized by our working group and submitted to the Dean of Watson College of Education at UNCW. The proposed program, now implemented, was titled Aspiring Leaders, Created BY community college leaders FOR Aspiring community college leaders WITH university partnership. In its third year, the two-day summit has had stellar evaluations and empowered many of its participants to either advance their degrees or move into administrative leadership roles within the community college system.

Another initiative that came to fruition from the gathering was an annual conference hosted by UNCW entitled Challenging the Paradigm; Partner-ships.... The conference was a result of the need for community colleges, particularly rural community colleges, to have professional development focused on partnerships that lead to successful results. The concept was to focus on different themes every year that came from researching student trends and best practices that lead to success. In its third year, the conference has had themes related to innovation, diversity-equity-belonging, and multi-barrier student success; each one has been highly informative and well attended. The gathering continues to grow each year.

### Denise and Deb's Voices

Appreciative collaborative partnerships (ACP) are rooted in authenticity through storytelling that identifies the groups' strengths. ACPs may be long-standing and, because they are based on authenticity, can withstand the ebb and flow of partnerships. They are energy-giving and energy-producing; as individuals from within the partnership may potentially leave, they do so with new strength, new ideas,

and a shared focus on the possibilities for their organization. The stories shared to identify strengths at the beginning lead to further generative ideas. The result of these powerful partnerships is that they release and empower innovation and ideas beyond a single person or group's imagination. As so eloquently stated by Carry and colleagues (2015), "The power of partnership is that each member uplifts the work of the others, expanding to include the voices of so many people who all have something to offer in co-creating their institutional future" (p. 38). AI accelerates the positive and co-creates a transformational future.

### Community College Undergraduate Research Experience (CCURE)

The Community College Undergraduate Research Experience (CCURE) was started as a new initiative at UNCW in the spring of 2021. Using an ACP approach, colleagues from UNCW worked collaboratively with community college leaders to design and develop CCURE as an experience that opens pathways to undergraduate research for community college students prior to transferring to a 4-year institution. CCURE was structured as a dual enrollment experience that provided community college students with an introductory-level applied research experience that was taught by a community college instructor and supported by a UNCW faculty mentor. CCURE participants earned UNCW credit for completing the experience at no cost to them as all fees were covered by UNCW.

### **CCURE** Goals

The primary goal for CCURE was to provide students with exposure to an undergraduate research experience prior to transferring to a 4-year institution in order to build confidence and experience in engaging in undergraduate research (or other high-impact practices) after transferring. In addition to helping community college transfer students succeed, CCURE was framed around a partnership model that encouraged direct engagement between community college and UNCW instructors. Thus, a secondary goal was to provide opportunities for mutually beneficial collaboration to develop among stakeholders.

### The CCURE Partnership Model

The development and implementation of CCURE

would not have been possible without the contributions of a critical network of individuals at both the community college partners and UNCW, including individuals from Admissions, the Registrar, and Honors College, among others. The primary leadership and management of CCURE was a collaborative effort between the Office of Applied Learning & High Impact Practices and UNCW's Community College Collaborative (UNCW/3C), which is housed in the Watson College of Education. The College of Arts & Sciences at UNCW also provided significant support in terms of both advising community college students and identifying faculty mentors for CCURE courses. Our approach to working collaboratively helped ensure that all partners benefited from engagement that was meaningful and reflected a true partnership.

In 2021, CCURE started with three partner institutions, Cape Fear Community College, Craven Community College, and Lenoir Community College. It has grown to include additional partners each year, growing to nine partner institutions in 2022 and 11 partners in 2023. Student participation and completion of CCURE grew concurrently with the increased partnerships, from 18 graduates in 2021 to 41 in 2022; in Spring 2023, 56 students applied to participate.

### Kim's Voice

My experience with UNCW's CCURE program has been invigorating as a Brunswick Community College (BCC) instructor of 25 years! It was life-changing for community college students to see themselves as university honors students. It was refreshing to bring something that I am very passionate about to life and see it done through the eyes of my students. In the following, I share my enthusiasm through reflection.

The BCC Vice President of Academic Affairs described the first meeting that she had participated in at UNCW and asked, as Dean of Arts & Sciences, if I knew of any ideas for an engaging research project that students could get involved in. I had been waiting for that moment. As scholarly research is often not encouraged in the community college culture, it was, and still is, an exciting opportunity for me to teach a CCURE course, listed as a UNCW Honors class. For the area of research, I have always had a keen interest in studying bottlenose dolphins along the Brunswick County coast. I was hopeful that stu-

dents would find fin photo-identification of bottlenose dolphins in the Cape Fear River region an interesting and relevant topic.

As some reference, BCC is small with just under

2,000 academic students, and was ranked #1 in the nation for 2020 and 2021 by SmartAsset. The UNCW/BCC Research & Discovery pilot course recruiting began in the late fall of 2021, and I braced for large numbers of students wanting to study dolphins. Instead, I had very little response. In speaking with students, I discovered that many did not consider themselves ready or worthy of being honors students at the university level. Brunswick Community College has so many incredible students. How could there be such a lack of confidence? My spring 2022 class began with six students and spring 2023 began with eight students. Even with anticipating the lack of confidence and changing the recruitment strategy for 2023, it did not really overcome that confidence barrier of the students. Fortunately, research shows that community college student confidence levels are not static (Bickerstaff et al., 2017). Shifts in confidence are "continually reconstructed through interactions and academic experiences. Success moments not only reframe students' academic identities but they may also be associated with increased motivation and productive academic habits and behaviors" (Bickerstaff et al., 2017, p. 507). Feedback from students in the spring 2022 sections reflects success moments with one student stating, "The CCURE program was a life-changing experience for me. It was my first 'formal' experience with research, and it confirmed for me that I could pursue a career in some form of research." Another student echoed a similar sentiment, "One important thing I gained from the course is the willingness to just go out and do something. There is a stark difference between sitting in a classroom and learning about dolphins versus actually getting on a boat and seeing them myself." One student addressed how the course shifted their perspective on trying new things:

While I enjoyed the experience overall, I felt a little bit of fear of the unknown. If anything, however, try new things even if you are not sure what they entail! This was truly one of the best decisions I have ever made, and one of the coolest experiences in my life.

Authentic partnerships are always about the integrity of the individuals involved. The UNCW team

was an awesome group of individuals who genuinely wanted to infuse high-impact practices into each unique community college culture. The appreciative framework between UNCW and BCC has been built on responsive communication, meaning that not only did each party listen, but positive action was taken toward improvement. Researchers have provided recommendations for building collaborative undergraduate research programs and described that these partnerships are built on "maintaining communication, establishing trust and common goals, and developing a plan specific to each partner institution" (Ashcroft et al., 2021, p. 14). The ACP framework embodies these best practices and seeks to add more. I cannot express enough how important it has been that UNCW has embraced BCC students, not only into a course at UNCW but considering them Honors students.

I have identified several foundational strengths of the appreciative collaborative partnership between BCC and UNCW. The strengths of UNCW were providing vision, a framework, funding, the faculty mentors, and full UNCW resources. BCC's strengths were providing administrative support, the diversity of the student body, professional enthusiasm from its faculty, the faculty instructors, and creating new experiential learning opportunities.

Two things have been made clear by the UNCW administrators of CCURE, which demonstrated the novel qualities of this Appreciative Collaborative Partnership. First, community colleges are considered to have professional faculty who can be trusted to know their campus culture. Additionally, the faculty have been allowed to make their courses their own, with academic freedom. Second, the Research & Discovery class has the full support of UNCW faculty, staff, and resources. The appreciative collaboration has been further reinforced by the opportunity to present as a partnership at the North Carolina Community College Conference. As this journey continues, I look forward to each institution uplifting the other, with the goal of student success always at the forefront.

### Implications for Practice

During the first workshop in which we used an ACP approach, one of our community college partners paused at one point and asked: "what exactly are we doing here?" The question pointed directly to a shift in intention and tone for collaboration be-

tween UNCW and our community college partners. In a follow-up discussion, several community college partners stated that their prior engagement with the institution was limited primarily to signing articulation agreements, and only rarely were they asked about their particular needs and never had they been asked to participate collaboratively in the vision setting for the partnership. Starting with an ACP approach from the beginning helped to establish our intention to be collaborative, inclusive, and seek mutually beneficial outcomes throughout our future work together. Thus, one promising practice that those seeking to develop an ACP should adopt is direct engagement with all partners from the beginning of the planning process. Direct engagement at the point of visioning or developing an initiative ensures not only that partners feel valued but also that their perspectives are integrated into the design.

A second promising practice is to intentionally design ongoing opportunities for engagement and collaboration. Indeed, one of the benefits of utilizing an ACP approach was the relationships that formed and strengthened throughout our regular engagement. For example, UNCW/3C formed an advisory board that included senior leaders from community college partners engaged in the network. The advisory board supports inter-institutional partnerships between UNCW and community colleges as well as among community college partners that provides a supportive space for discussing issues facing NC community colleges. For CCURE, regular meetings between community college instructors and UNCW mentors provided opportunities for partnerships to develop that transcended institutional and, at times, disciplinary boundaries. One of the most interesting partnerships was formed between a community college instructor of Animal Husbandry and a UNCW mentor from Sociology-Criminology. Despite the stark differences in discipline, the partnership provided a foundation for both individuals to learn from each other and to work collaboratively to support students' engagement in an applied research project. It is important to note, however, that these partnerships were not successful by accident; rather, throughout our ACP we regularly connected individuals and supported mentorship relationships. When developing an ACP, individuals should consider how they will provide support to ensure there is time and energy committed to its success and the success of the individuals who engage.

Another promising practice to utilize when developing an ACP is to provide adequate space for dialogue and reflection among participants. This space must also be intentionally designed as a part of the ongoing engagement with stakeholders. In addition to providing direct benefits to participants, regular reflection also provided critical feedback to leadership of the partnership initiatives at UNCW. Recommendations from the UNCW/3C advisory board led to the development of a "homegrown" professional development workshop series called Aspiring Leaders, which seeks to support community colleges in developing leadership capacity on their campuses by working with the members of their campus community. For CCURE, regular communication across partners allowed us to adapt practices and supports to meet specific needs of each section and partnership team. For example, we identified opportunities for supporting the professional development of instructors and mentors who were participating in the initiative through both online resources and synchronous workshops. We also identified opportunities to extend collaborations to include applications for external funding (i.e., grants and fellowships) and discussions of transfer pathways for students. Notably, dialogue and reflection was integrated in multiple ways across our initiatives, including through group discussion, 1-on-1 conversations, evaluation surveys, and informal methods (e.g., phone calls, emails, ad hoc meetings). We recommend that others find multiple ways to engage all individuals in sharing their perspectives on the success and challenges associated with the ACP so that leadership can engage in regular monitoring and evaluation of the initiative and adapt practices as needed.

One final promising practice to continue your engagement through to the celebration of successes. The collective "we" on the authorship of this article includes representation from UNCW and multiple community college partners as well as from a range of positions including practitioners, graduate students, and faculty members. Effective communication and collaboration through the entire cycle of engagement in an ACP will undoubtedly be a challenge at times, but the benefits can be equally meaningful if achieved.

### Conclusion

In this article, we used a narrative approach often used in appreciative inquiry to convey a novel ap-

proach to partnerships between community colleges and universities. The novelty of appreciative collaborative partnerships is in the dynamic of the relationship; it is based on true partnership and collaboration. Too often, the partnerships between a university and community colleges is focused on what the four-year institution can offer or do for the community college rather than what the community college needs. In an ACP, the needs of each institution are addressed by utilizing the strengths that each brings to the relationship. Our stories demonstrate the positive change that has occurred on campuses throughout the state by using the ACP model. Our hope is that other institutions use the ACP model to develop partnerships that focus on each other's needs and build upon their strengths.

### References

Ashcroft, J., Jaramillo, V., Blatti, J., Guan, S. A., Bui, A., Villasenor, V., . . . Moses, J. (2021). BUILDing equity in STEM: A collaborative undergraduate research program to increase achievement of underserved community college students. *Scholarship and Practice of Undergraduate Research*, 4(3), 47–58. https://doi.org/10.18833/spur/4/3/11

Bickerstaff, S., Barragan, M., & Rucks-Ahidiana, Z. (2017). Experiences of earned success: Community college students' shifts in college confidence. *International Journal of Teaching and Learning in Higher Education*, 29, 501-510. https://files.eric.ed.gov/fulltext/EJ1151074.pdf

Carry, S., McArthur-Blair, J., Henning, D. K., & Cockell, J. (2015). Partnerships that matter-results that count. *AI Practitioner*, *17*(3). https://doi.org/10.12781/978-1-907549-24-3-5

Cockell, J., & McArthur-Blair, J. (2012). Appreciative inquiry in higher education: A transformative force. Jossey-Bass.

Hurtado, S. (2015). The transformative paradigm: Principles and challenges. In A. M. Martínez-Alemán, B. Pusser, & E. M. Bensimon (Eds.), *Critical approaches to the study of Higher Education: A practical introduction* (pp. 285-307). Johns Hopkins University Press.

Kisker, C. B. (2007). Creating and sustaining community college—university transfer partnerships. *Community College Review*, *34*(4), 282-301. https://doi.org/10.1177/0091552107300333 Merriam-

- Webster. (2022). Collaborate. https://www.merriam-webster.com/dictionary/collaborate
- Phelps, L. A., & Prevost, A. (2012). Community college—research university collaboration: Emerging student research and transfer partnerships. New *Directions for Community Colleges*, 2012(157), 97-110. https://doi.org/10.1002/cc.20009
- Strawn, C., & Livelybrooks, D. (2012). A five-year university/community college collaboration to build STEM pipeline capacity. *Journal of College Science Teaching*, 41(6), 47-51. https://www.jstor.org/stable/43748578
- Watkins, J. M., Mohr, B. & Kelly, R. (2011). *Appreciative inquiry: Change at the speed of imagination* (2nd ed.). Pfeiffer, An Imprint of Wiley.

### Authors' Note

The authors have no known conflicts of interest to disclose. Correspondence concerning this article may be addressed to Brian C. Gano, UNC Wilmington, 601 S. College Road, Wilmington, NC, 28403. Email: ganob@uncw.edu

### **Policy Analysis**

Examination of 1D SBCCC 400.11 Educational Services through Career and College Promise Curriculum and its Utilization in North Carolina

Sarah Garrow, Carly May, Manisha Mittal, & Ian Wolf



### Context for 1D SBCCC 400.11

As a direct result of the Appropriations Act of 2011, the North Carolina State Board of Education and Board of Community Colleges created the Career and College Promise (CCP) program, ensuring tuition-free, dual enrollment opportunities for qualified high school students. This partnership program between the N.C. Department of Public Instruction, N.C. Community College System, the UNC System, and other independent colleges and universities aims to provide eligible N.C. high school students with pathways promoting the obtainment of certificates or degrees in addition to providing workforce readiness skills. This policy brief specifically focuses on the Career and Technical Education (CTE) Pathway, a component of the CCP program, designed for workforce development, providing tuition-free credits leading to a certificate or industry/occupational recognized credential.

### Multifaceted Issue

Counter to CTE program goals within CCP, accessibility and utilization consistently represent areas of concerns. Expensive tuition coupled with additional costs - materials, transportation, etc. - are sources of major equity gaps in participation among low-income students. This dashboard (Table 1) developed and maintained by the North Carolina Community College System demonstrates a significant overall decline in CCP CTE enrollment since its peak of 14,561 in 2018-19, with steady annual decreases to 6,844 students in the 2020-21 academic year.

Beyond the additional funding needs within the CTE pathway, one may notice major concerns of equity; within this pathway, White student numbers are consistently double that of Black students in the same pathway; at peak enrollment in 18-19, White students made up 4%, 9025 individuals, of the total enrollment compared to Black students' 2% share of the enrollment population, 2643 individuals. The trend persists even through the general enrollment decline within CTE dualenrollment with 20-21 enrollments showing White students at 2% of the total, 4213 individuals, compared to Black students' 1%, 1139 individuals. These discrepancies rightly raise many questions of access and awareness, but provenance aside, such unequal distribution of engagement with and access to CTE pathways is a rescinding of the titular promise CCP made to a massive population of North Carolina students; the problem is the lack of equitable engagement.

### Addressing the Problem

The best course of action is two-pronged: increase use of Federal Perkins V funding for community colleges (where applicable), and streamline information to potential CTE students through College Advising Corps programs, which are part of the broader AmeriCorps umbrella. The Perkins V Act was created to develop academic, technical, and employable skills of secondary and postsecondary students enrolling in CTE (NCCCS, 2022). Perkins V specifically is aimed at supportive services for special populations, including populations previously identified as missing from current

This article is brought to you for free and open access by the North Carolina Community College Faculty Association @NCCCS. It has been accepted for inclusion *North Carolina Community College Journal of Teaching Innovation* by an authorized editor of NCCCFA. For more information, please contact editor@ncccfa.org.

enrollments (NCCCS, 2022). The funding received from Perkins V allows for purchasing the materials already discussed as being a significant barrier, including materials, equipment, and transportation (NCCCS, 2022). As such, and in light of its sustainability, Perkins V is highly encouraged to address equity concerns. Because Perkins V funding (based on Comprehensive Local Needs Assessments) reboots every two years, CTE programs could allow students to keep the Perkins V funded equipment and materials when applicable, smoothing students' transitions into their careers. Additionally, Perkins V funding can be used for recruitment, potentially expanding current CTE program outreach (NCCCS, 2022).

In addition to addressing challenges of access, improving awareness of the program is also a salient strategy; as current data trends demonstrate, marginalized populations are underrepresented within CCP more broadly, and a lack of awareness is identified be a major obstacle at several levels, including community colleges, high schools, and students themselves. To that end, engagement with established partnerships and outreach programs, i.e. the College Advising Corps and Perkins V outreach, can democratize access through increased awareness of the program's purpose and pathways for participation at all levels.

### **Evaluating Alternatives and Tradeoffs**

In evaluating administrative robustness, policy sustainability, equity, and feasibility of both alternatives yields high odds of positive impact on the equity issues outlined above. As with any alternative, a few trade offs are worth noting. Institutions receiving Perkins V funding will have to determine how to distribute those funds internally and may have to select which initiatives to support. Institutions can also form consortiums to apply for this funding but this would limit the funds for each institution. For a college to request higher levels of funding independently, they need to demonstrate higher levels of Pell Grant eligibility and students from the Bureau of Indian Affairs. This in turn could influence recruitment (Perkins, 2022).

Given the siloed College Advising Corps Programs throughout the State of North Carolina, the availability of information and training materials vary from program to program. This tradeoff would require consistent training on and advocacy of CCP with emphasis on the CTE pathway throughout all

five programs in North Carolina. The additional capacity required to retain the CCP programmatic components could be an unintentional burden on the College Advising Corps. However this increased knowledge and collaboration would provide a foundational understanding of and aid in the selection of college or career paths for high school students. This deeper understanding would enhance the confidence of high school students in their educational journey. In addition to being a resource for students, the knowledge and professional proximity of the program aids in the professional development and marketability of College Advising Corps advisors. Considering the service constraints within the College Advising Corps Program, this expertise would aid in future professional opportunities and continued promotion of the CCP.

Significantly, while utilizing Perkins V funding is the most effective and viable option to address the precipitous and inequitable decline in CTE enrollments through CCP, there is very little net consequence in increased engagement with AmeriCorps programs instead. The dominant tradeoff of Perkins V is the potential need to choose between priority projects; however, utilizing AmeriCorps programs can serve as a different pathway toward funding and outreach with equivalent, albeit very different, challenges in staffing. Additionally, the varied types of AmeriCorps options available can provide flexibility at the institutional- or consortium-level.

### Conclusion

Ideally, these presented shifts in established policy surrounding the Career and Technical Education pathway of the Career and College Promise program strike audiences as feasible and accessible by building on the established infrastructure of Federal Perkins V funding and the College Advising Corps. However, it must be stressed that individually these systems are complex and require deep knowledge and experience to operate. Cultivating and maintaining them, while demanding of both time and energy, has profound potential for North Carolina students and the state more broadly.

Ultimately, what is of singular importance is the benefit of the community through a more expansive and inviting perspective of higher education - a recognition of the value young people hold in their communities, the services they need in order to achieve their potential, and the responsibility North Carolina educational systems hold in supporting

these young people meet the needs which have yet to surface. A dogmatic fixation on baccalaureate degrees can arguably obscure all of this, and the afore-proposed policy can make the goals of these students - all of them - that much more clear and accessible.

### References

North Carolina Community Colleges. (n.d.). Career and college promise. Retrieved March 6, 2023, from https://www.nccommunitycolleges.edu/academic-programs/career-college-promise

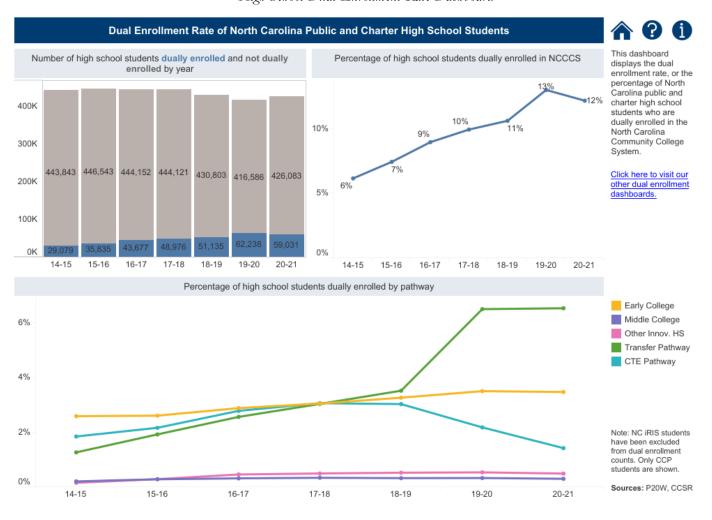
North Carolina Community Colleges. (2022, December 2). Curriculum procedure reference manual: College and career promise. Retrieved March 6, 2023 from https://www.nccommunitycolleges.edu/sites/default/files/basic-pages/academic-programs/attachments/section14\_2023sp-\_final\_version\_1 -20-23.pdf

North Carolina Community Colleges. High School
Dual Enrollment Rate. Retrieved March 17,
2023, from https://
www.nccommunitycolleges.edu/analytics/
dashboards/high-school-dual-enrollment-rate
North Carolina Community Colleges. (2022, April).
Perkins Handbook. Retrieved March 15th, 2023
from https://www.ncperkins.org/
pluginfile.php/7035/mod\_resource/content /2/
pages%201-43.pdf

### Authors' Note

The authors have no known conflicts of interest to disclose. Correspondence concerning this article should be addressed to Sarah Garrow, Orientation and New Student Programs, Appalachian State University, 228 Stadium Drive, Boone, NC 28608-2001. Email: garrowsr@appstate.edu

**Table 1** High School Dual Enrollment Rate Dashboard



### **Pedagogical Practice**

<u>Critical Disciplinary Literacy Within</u> Literature Survey Courses

Dr. Josh Howell, Olivia Buzzacco, and Sarah Brown



## Critical Disciplinary Literacy Within Literature Survey Courses

As faculty teaching community college literature survey courses, many questions exist in how to relate literature canons to students across multiple majors, backgrounds, and experiences. How can a literature faculty member utilize strategies that invoke rigor, depth, and curiosity? While the three faculty members of this study had varying backgrounds in their own degree programs, they shared similar experiences in literary theory and working with literature canons. These three faculty also understood that the canon was changing rapidly, becoming more inclusive across gender, race, religion, ability, socioeconomic status, sexual identity, and sexual orientation. Coupled with adapting teaching modalities to be more engaging through face-to-face, hybrid, and virtual learning environments, these faculty members sought to incorporate more user-friendly resources that are not typical of assigned anthologies. To understand their task at hand, these three faculty members sought to investigate critical disciplinary literacy within literature-based courses in a professional learning community.

# Disciplinary Literacy and Critical Disciplinary Literacy

The professional learning community led three faculty members to explore disciplinary literacy (DL) and critical disciplinary literacy (CDL), which allowed these individuals to apply CDL models to their own literature survey course work. Most of the work in both DL and CDL models came from

Elizabeth Birr Moje's "Doing and Teaching Disciplinary Literacy with Adolescent Learners: A Social and Cultural Enterprise," Todd Reynolds et al.'s "English Disciplinary Literacy: Enhancing Students' Literary Interpretive Moves," and Jeanne Dyches' "Investigating Curricular Injustices to Uncover the Injustices of Curricula." These three texts built the foundation for the professional learning community, as well as provided strategies for how CDL could be modeled in literature survey courses.

To begin their journey of disciplinary literacy, the literature faculty started with Elizabeth Birr Moje (2015), who asserts, "Disciplines are cultures; they have their own conventions and norms that are highly specialized to particular purposes and audiences" (p. 273). In order to incorporate disciplinary literacy, faculty must understand disciplines are "exclusive-cultural groups" which require one to learn the practices and strategies of those who have existed within these cultures. Additionally, teaching DL requires the faculty to encourage critical thinking skills as their students discover how these cultures have functioned in the past. In essence, these students are led to develop their own forms of inquiry as to how these topics have been discussed so that they too can enter the respected cultures for conversation (Moje, 2015, p. 257).

To better understand DL, students must learn the language, histories, and theories in order to confidently enter these conversations. The end goal is that these students are competent, resourceful, and inquisitive in the way these cultures have permeated a greater society. Moje (2015)

This article is brought to you for free and open access by the North Carolina Community College Faculty Association @NCCCS. It has been accepted for inclusion *North Carolina Community College Journal of Teaching Innovation* by an authorized editor of NCCCFA. For more information, please contact editor@ncccfa.org.

states, "Teachers need to teach them—to *elicit* and *engineer* the necessary knowledge, skills, and practices for students to make meaning as they engage in these practices" (p. 266). Moje found this process to include Engaging, Eliciting or Engineering, Examining, and Evaluating the subject matter in a variety of ways. Learners could work with data, use varied media, conduct critical analyses, examine and evaluate claims, communicate claims, and frame problems (Moje, 2015). A detailed heuristic of this model can be found in Figure 1.

Furthering upon this understanding of disciplinary literacy, the literature faculty then investigated the work of Todd Reynolds et al., who established an alternative heuristic which is centralized around generating, weaving, and curating. Reynolds et al. defined generating as finding patterns in the text, defined weaving as making connections within the text and outside the text, and defined curating as advancing the interpretation though selecting pieces from the text (Reynolds et al., 2020, p. 203).

This method of disciplinary literacy differs from Moje in that it streamlines investigations, boosts confidence of student analyses, and looks at the text from both micro and macro levels. Reynolds et al. (2020) state, "Asking students to develop their own curation for the text opens up the possibility that students could view it differently and could interact with it differently, creating new, credible interpretations of the text" (p. 206). Through the process of generating and weaving, comprehension is found, and through the process of weaving and curating, interpretation is made (Reynolds et. al., 2020, p. 203). This heuristic can be found in Figure 2.

Moving into Critical Disciplinary Literacy (CDL), we find an intersection between Disciplinary Literacy (DL) and Critical Theory (CT). This process is found through encouraging students to investigate new methods of interpreting the literary canon for the voices and experiences within dominant groups. Essentially, it recognizes that power has been embedded in the construction of literary canons, and provides students with the "agentitive tools to recognize, disrupt, and ultimately reconstruct new disciplinary realities" (Dyches, 2018, p. 247).

### The Literary Canon

In order to effectively situate critical discourse into a literature classroom, it is vital that an educator start by being critical of the literary canon. The traditional literary canon within a college or university was es-

tablished through critics like Harold Bloom and the editors of the Great Books. Mortimer Adler defended the Great Books program stating it, "does not aim at historical knowledge of cultural antiquities or at achieving a thin veneer of cultural literacy...it aims only at the general enlightenment of its participants, an essential ingredient in their initial liberal education and something to be continued throughout a lifetime of learning" (Adler and Doran, 1988, p. 8). Harold Bloom's The Western Canon: The Books and School of the Ages defended his own version of the canon, arguing, "The choice of authors here is not so arbitrary as it may seem. They have been selected for both their sublimity and their representative nature: a book about twenty-six writers is possible, but not a book about four hundred" (Bloom, 1995, p. 2). While both of these canons may have been strong in American classrooms for the twentieth century, a twenty-first century classroom deserves more diversity. This diversity would not only be across race and gender, but also geography, sexuality, and even disability. The days of a white, male, ivy-league, straight, able-bodied canon must be left in the past, as the majority of classrooms are no longer within this narrow demographic.

In order to diversify the literary canon, critics such as Amiri Baraka and Lillian Robinison have weighed their own criticisms of this whitewashing of literature in classrooms. Baraka states that the canon is, "a body of materials whose content supposedly is the aspired revelation and evolution of humankind, but is in reality nothing but a justification (not very convincing) for imperialism" (Baraka, 1991, p. 153). And, to that end, this residue of imperialism within our classrooms only further divides the populations of students. Baraka continues by arguing, "The attempt to restore the so-called literary canon to make political prisoners of world art and culture in the name of some self-aggrandizing superculture with neither origins nor relationship to the rest of the world is simply white supremacy returned" (Baraka, 1991, p. 155). Critical Disciplinary Literacy subscribes to models that are inclusive, diverse, and provide voices of all people, thus following traditional canons is not an anti-racist mindset.

In terms of gender and sex the idea of a malecentric canon also provides complications. While a male-centric canon persists, it leaves very little room for non-male authors to be adopted into "course syllabi, anthologies, and widely- commented upon 'standard authors' that constitutes the canon as it is generally understood" (Robinson, 1983, p. 84). Additionally, this list of standard authors is inequitable, as it excludes those who have indeed been every present voices of societal concerns. Robinson adds, "True equity can be attained, [feminist critics] argue, only by opening up the canon to a much larger number of female voices" (Robinson, 1983, p. 87). While Baraka and Robinson argue for more non-white, non-male voices in the canon, this can lead to better representation within current composition courses. With an inclusive canon, students may feel better represented by the works they are reading, and in turn, contribute more to the criticisms of the works assigned. One example of this task in practice would

be for the traditional text of *Beowulf*. While the canonized *Beowulf* is typically the translation from Seamus Heaney, assigning Maria Davanah Headley's translation provides not only a more contemporary version, but the translator is both female and queeridentified.

### **Literary Theories**

In addition to the canon, the idea of applying literary theories to the text for the sake of analyses is also a task for students. While multiple studies incorporate critical theory, literary theorists apply either one or multiple in their analyses. These theories include:

Semiotic	Psychoanalytic	Eco-Criticism	New Historicism	Modernism
Post-Modernism	Marxist	Post-Colonialism	Feminist	Queer
Reader Response	Structuralism	Meta-Modernism	Formalism	Deconstruction

By applying multiple theories to the text, a good analogy is that each theory is a lens, and applying multiple lenses provides a kaleidoscope type effect on the reading. For students, this means that there is now a buffet of interpretations that they can seek, with some of these lenses being more relevant to their own lived experiences.

### Application

This design has been implemented in both British and American literature survey courses, at a predominantly rural community college with a large population of dual enrollment students. The college is multi-campus, and offers survey courses through face-to-face, hybrid, synchronous online, and asynchronous online.

When applying Critical Disciplinary Literacy to the texts, first the instructor must introduce the text to the student. During this introduction it is vital that the instructor connect the text to students' prior knowledge of themes or the text itself. It is also important that instructors ask if the text was understood, enjoyed, and/or if the student can relate to the assigned text. Next, the instructor begins analysis of the text, by employing either the heuristic from Moje (2015), or Reynolds, et. al. (2020). Incorporat-

ing Moje's 4E Heuristic (Figure 1) can be broken down through four steps:

- Engaging Frame the text around students experiences with the themes
- Eliciting Understand the given discipline (literature) and pair the disciplinary roadmap (questions of canon and literary theory) to the text(s)
- Examining Seek meaning in words, symbols, and forms from the texts
- Evaluating Have students seek meaning in why Disciplinary Literacy assists in understanding identities of author, characters, audiences, and themselves (Moje, 2015, p. 268)

Incorporating the Disciplinary Literacy Heuristic of Reynolds et. al. (2020) (Figure 2) would be broken down in a three step process:

- Generating finding patterns and making sense of the text
- Weaving make connections and apply background knowledge
- Curating an advanced interpretation of the text (Reynolds et. al., 2020, p. 204)

By utilizing Moje or Reynolds et. al. students should be able to not only bring critical disciplinary literacy into their analysis, but will find this approach to be more modern and relevant to their own lives. While the main goal of this study is to examine a student's knowledge growth through critical disciplinary literacy, it's also important to note the instructor's learning process through the creation of assignments, the execution of the assignments, and revisions needed to further improve the assignment and learning experience for the students. To better showcase these applications, two examples of CDL are provided.

### Example 1 – The Strange Case of Dr. Jekyll and Mr. Hyde

The following was conducted during the Spring 2021 semester in a British Literature II course (ENG 242). The total enrollment for the section was nine students. The Video Game Assignment was inspired McGlinn (n.d.) assignment: by and adapted from Jeanne McGlinn and James McGlinn's A Teacher's Guide to the Signet Classic Edition unit (reviewing the 1988 video game cover). Now, of Robert Louis Stevenson's Dr. Jekyll and Mr. Hyde, found after browsing online to generate ideas for assignments/activities/questions to ask of students. The guide provides summaries of all chapters, prereading activities, during reading activities, questions for specific chapters, and after reading activities. Upon reviewing the pre-reading activities, activity #2 under Internet Resources became the main focus:

- Awaken student interest in the novel by having them look at a cover of the Jekyll and Hyde video game.
- Ask students to first brainstorm on paper their impressions of what the Jekyll and Hyde images suggest about the two personalities. Then have students share these with the whole class. As a related post-reading project, have students return to this image and work in pairs to design a video game that reflects the plot of the novel. Have them write a description of the video game and draw a series of three images showing the plot line of the game (J. McGlinn & J. McGlinn, n.d., p. 7).

While preparing for the upcoming personalized learning community assignment, the instructor reflected back on the previously found McGlinn and McGlinn resource. Thus, McGlinn and McGlinn's pre reading activity was revisited and enhanced by incorporating literary theories into the assignment. After further revisions by the instructor, the two parts of the original assignment were kept and more focus was brought into the pre-reading activity.

For the first part of The Video Game Assignment, students completed a journal. Students responded to these questions before reading the novella:

Review the cover of the Jekyll and Hyde video game (created in 1988) and answer the following:

- What are your current impressions about Jekyll and Hyde from looking at this image?
- What impressions do you get about Jekyll and Hyde's social class?
- 3. Based on this image, how do Jekyll and Hyde reflect qualities of the "typical white male"?
- This video game was created in 1988. Based on the cover, who do you think is the target audience for this game?

After finishing the novella, students moved onto the second part of the enhanced McGlinn and

Think back on the journal you completed for this it's your turn to create a video game! Your group will be assigned one literary theory that is present in "The Strange Case of Dr. Jekyll and Mr. Hyde" (psychoanalytic theory, feminist theory, or Marxist theory). With your theory, your group will design a Jekyll and Hyde video game that reflects not only the plot of the story, but also reflects your assigned literary theory.

In the original text, McGlinn and McGlinn only asked for a written description of the game and three images to show the plotline, but a more extensive project was desired by the instructor. While looking for ideas, a Fall 2018 course outline from St. Louis University was found: CSCI 1030 (Introduction to Computer Science: Game Design), taught by Jason Fritts. In his course, Fritts posted an excerpt from Scott Rogers' book Level up: the guide to great video game design (2014). The excerpt from Rogers was an example of a video game concept overview, consisting of game title, platform, target audience, rating, summary, outline, unique selling points (USP), and similar competitive products).

This example was included in The Video Game Assignment for students to refer to, so they could see how their game concept would look. To get students to think further about their assigned theory, they also needed to write a 1-2 page essay explaining how their theory was prominent in their video game design, as well as include a series of drawings, which was taken front the original McGlinn and McGlinn (n.d.) assignment:

You will complete the following:

- 1. A concept overview (25 points), which will include the following:
  - a. The name of your game
  - b. The target age
  - c. The gaming platform
  - d. A game summary (include the beginning, middle, and end of the game story, give an indication of the game play style, the player's objectives and elements. Keep it short and sweet, approx. 5-7 sentences)
  - e. A game outline (don't go into great detail, but it needs to be more in-depth regarding what actually happens in the game)
  - f. USP (unique selling points: highlight the game's cool and unique features--game play style, game modes, single or multiplayer, technology innovations, etc. There shouldn't be more than 5-7 USPs)
  - g. Similar competitive products at least three other competitive games that are successful, recent, or very well-known that are similar to yours)
- 2. A brief essay (50 points) explaining how your literary theory is prominent in your video game
  - a. 1-2 pages, double spaced
  - b. 12 pt. Times New Roman
  - MLA format (when citing the text/other sources, please provide proper in-text citations/parenthetical citations and a Works Cited page)
- 3. Draw a series of three images (25 points) showing the plot line of the game
  - a. These can be drawn by hand, or on computer (whatever mode you'd like)
  - b. If drawing by hand, ensure you take scans/ photos and upload them to your computer appropriately—these can be black and white or in color

Students were also provided the Farm Wars game concept example from Rogers (2014) as an example to refer to. Students were given two weeks to complete this assignment and used class time to do so. The assignment was completed in groups, as it was anticipated some students might not have experience with video games, which could make the assignment difficult if having to complete on their own. By this point in the semester, students were working in the

same groups every week, so they were comfortable with their group members. Since the enrollment for this section was nine students, there were three groups of three students.

To assign a theory, each group had to rank their preference—1 being the theory they wanted to work with most and 3 being the theory they least wanted to work with. After rankings were submitted, it was surprising to see each of the three groups did not conflict with preferred choices. Group A selected Psychoanalytic, Group B selected Marxist, and Group C selected Feminist. After two weeks of students working on putting their assignment together, each group presented their finished project during class time.

A few issues were encountered during the progress of this assignment. The first issue prominent in the finished products was the students' lack of literary theory knowledge, as the assignment had been reworked only a week prior to students starting the novella. During the semester, there were limited experiences with theory for students to engage with, so it was not prominent until they started this assignment. To try and ease them into understanding it, Psychoanalytic, Marxist, and Feminist theory guides were provided from Purdue OWL for students to refer to as they worked to make connections to the novella and ultimately into their game design.

The final issue was group cooperation, which was anticipated and a common factor in any group assignment for any course. Group A noted some communication issues with one group member, resulting in completing two essays for this assignment. Group B reported no issues with member cooperation. Group C had one member not participate at all, leading to this member receiving a 0 on the assignment.

### Example 2 - "What You Pawn, I Will Redeem"

This short story by Sherman Alexie is a favorite for many students, as the plot is dramatic yet easy to follow, and the main character is full of self-deprecating humor. It is easier to expose students to new ideas if there is an element of humor and fun involved. Humor breaks up the heaviness. Laughter and fun balances the serious content. As a result, this particular lesson could be used as a gateway to more complex discussion of critical disciplinary concepts using more complicated texts. It is important to remind students that this is difficult work, and if it makes them uncomfortable, that is okay. Some-

times just listening and being exposed to a new idea is enough at the beginning. The more exposure students have to new ideas and concepts, the more they will be able to weave that background knowledge into freshly curated ideas and connections.

One of the course objectives for ENG 232 (American Literature II) is to critically analyze and interpret American literature from 1865 to the present within historical and cultural contexts. Although that objective can have a broad interpretation, a goal in this course is to view American literature through the lens of different cultures. Traditionally the literature in this course has been heavily influenced by the established literary canon; however, American Literature from 1865 to the present offers a unique opportunity to study writers of multiple races, ethnicities, and genders. The schedule of readings from the Fall of 2021 and Spring of 2022 included 35 nonwhite American writers, and two of those, Zitkala-Sa and Sherman Alexie, were Native American. The lens of critical disciplinary literacy can be applied to most of the content in this course, but it was particularly interesting to apply it to the lesson involving the post-modern short story, "What You Pawn, I Will Redeem" by Sherman Alexie.

First, the students were assigned to read the story and a piece from the critic, Matthew Fletcher (2006), called "Looking to the East: The Stories of Modern Indian People and the Development of Tribal Law." When the students arrived in class, they were asked to respond to a forum prompt based on the story. The prompt asked the students to create an original eight sentence post that summarized their initial reaction to the story. They were asked to consider the following questions:

- 1. What did you think about Jackson Jackson?
- 2. What parts of the story surprised you?
- 3. How did the author keep your attention in this story?
- 4. What parts of the story were humorous?
- 5. Did you enjoy the story?

The responses to these questions helped to facilitate a class discussion. In order to apply the strategy of critical disciplinary literacy to the lesson, the students needed to find patterns and make sense of the text. They achieved this through listening and participating in the discussion. After the discussion of the story, the students were asked to consider the Fletcher article and specifically the concept of cultural property.

Next, the students were asked to make connec-

tions and apply background knowledge. This deepened their understanding and allowed them to begin to take ownership of their interpretation of the story. Finally, the students curated an authentic interpretation of the text. This was achieved by responding to the following prompt:

In the last section of the story, the pawnbroker agrees to give Jackson Jackson his grandmother's regalia in exchange for \$5. The pawnbroker asks Jackson, "Did you work hard for this money?"

Consider what you learned from the Fletcher article about "cultural property." Compose a short essay (no shorter than 1 page, no longer than 2) that compares and contrasts the Anglo-American notion of owning property with the Spokane Indian concept of cultural property. What do you think Alexie is saying about the two concepts? Support your claim using properly cited evidence.

The first time this lesson was attempted, the students were on their own to discover secondary sources to aid their understanding of cultural property. Although some students found credible sources, many did not. In order to be sure that all students were exposed to the same information, the next time the lesson was taught, the article from Matthew Fletcher (2006) was provided.

Students also experienced challenges when they were asked to fully engage in analysis that contradicted their traditional belief and value system. Additionally, a few students resisted the idea that another value system could exist. Exposure to different belief systems can feel uncomfortable to students. However, the goal of using critical disciplinary literacy as a framework for guiding lesson planning is not simply asking students to extract information from a text. At this stage in their education, students have moved beyond that lower level thinking skill. They are ready to interact with the text, and it should be the instructor's goal to use literature as a tool to build empathy and understanding in students. Instructors of literature have a unique opportunity to expose students to different thoughts, customs, and beliefs. It is through that exposure, that students will start to make connections and build empathy for people and cultures that differ from their own.

### Outcomes

The goal of CDL is not asking students to simply extract information from the text, but instead to facilitate an interaction between text and reader. This

process uses literature to build empathy in students. What follows are how both of these examples led to students comprehension of the texts through CDL analytical methods.

### The Strange Case of Dr. Jekyll and Mr. Hyde

In revising this assignment, literary theory is introduced during the first week of class as opposed to at the beginning of this assignment, so students are practicing with theories throughout the duration of the semester in various assignments completed. This can ensure a better understanding of the theory each group chooses.

From each group's results, it is noticeable how the psychoanalytic theory is perhaps the easiest to work with for the novella, as Group A's video game design worked well with the storyline and the theory itself. As a result, Group A's video game results proved to be the strongest of the three, as the group had their game focus on the idea of Dr. Jekyll racing "...against the clock to gather his materials and complete his experiments before the sanity meter fills up and he transforms into Mr. Hyde, who has his own evil agenda to attend to." In their explanation of their game choices tying into psychoanalytic theory, the group noted:

The theme of the psychoanalytic theory is prevalent in our game, and one evidence of this is conveyed through the internal presence of Mr. Hyde. Throughout the game, the player will be able to hear the inner monologues of both Dr. Jekyll and Mr. Hyde - almost as if they are having a conversation inside their head. These conversations are a direct representation of the influence that Dr. Jekyll's subconscious has over him, and they give the player an insight into the struggles Dr. Jekyll faces. This concept is further demonstrated at the end of the game when Hyde is the main persona, and Dr. Jekyll must fight against Hyde - his subconscious. In conclusion, the representation of the psychoanalytic theory in our game lies mostly within the internal conflicts of the main protagonist, Dr. Jekyll. Though the plot of our game matches up very accurately with that of the novella, the psychoanalytic theory has little relation to it. Through the dual-personality features and inner monologues contained within our game, players will be able to experience a physical example of the psychoanalytic theory, allowing for them to have a much better understanding of the concept as a whole.

Group B's take on Marxist theory was also impressive and it was clear the students spent time generating, curating, and weaving ideas and the text together to come up with a game idea. Group B's game

focused on starting the game as Mr. Hyde, "...who after finding potions at various points across the game, can temporarily transform into Dr. Jekyll." From here, the group imagined the player working through the game as both characters with distinct abilities, such as, "...Dr. Jekyll being able to blend into upper-class crowds and move past other characters better, why (sic) Mr. Hyde excels at brute strength and hiding in the shadows." In their essay explaining how Marxism works in their game, Group B mentioned:

...Marxism is the theory based on the exploitation of the working class and encourages the implementation of a better system. The game walks you through the perspectives of both sides, the working class in Hyde, and the wealthy minority in Jekyll. With these roles, you navigate the game through their eyes and use your social status to your advantage, whether it is getting into an exclusive party at Jekyll or blending into the shadows as Hyde. The ending being the ultimate choice of the viewer to call change by subscribing to the Marxist theory or rejecting the theory to become the rich and powerful, leaving the working class in the dust.

Despite Group C's struggles working together on this project, it was apparent that Feminist theory was difficult to work with for the novella. As a result, Group C's game idea did not focus on the main storyline, but rather on a moment towards the beginning of the novella:

The Feminist theory is prominent in our video game choice because the main objective is for the male character or the hero to save the girl. Our main goal in the video game was to show that women were viewed as being weaker than men by embracing that stereotype and having the little girl as our "weak woman" character. When she gets trampled by our antagonist (Hyde) she is unable to defend herself. Mr. Enfield being our protagonist and our "strong man" character takes upon himself to save her. Not only does Mr. Enfield try to save the little girl, but because our antagonist Mr. Hyde is also a strong male character, Mr. Enfield recruits an army to help him bring the little girl to safety.

### "What You Pawn I Will Redeem"

As mentioned, the summative assessment for this assignment was a two page reader response essay. Overall, the students were successful in incorporating evidence from the primary text and secondary source to support their argument. One student chose to focus on the significance of the use of tribal names in the story. He wrote:

In the story he begins by telling us about himself and Indians; this is where we can take note of Spokane Indian's cultural aspects. In the story it says 'I'm kind of suspicious of him, because he describes himself as Plains Indian, a generic term, and not by a specific tribe" (Alexie 1559). This shows us that there is significance in just the name that an Indian claims to be associated with. An anglo-American never identifies with a specific name which I believe shows a huge difference in cultural property. For the Spokane Indians the title of a tribe was very significant and meant alot when relating to the authenticity of someone or something. In this culture you could see how belongings and people were so connected to their culture just based upon the name of their tribe. This name held a lot of value and was attached to virtually everything in this tribe whereas Anglo-Americans do not have this attachment.

Despite being given the secondary source, some of the students continued to focus on the selfproclaimed alcoholic main character, Jackson Jackson instead of the concept of cultural property. The following was a typical response:

His alcoholic tendencies, however, do not overtake his kind heart, as he shared his money and wealth when he could (some would say to a fault). In the short story, Alexie states ""Thank you," I said and gave her one of the bills. "I can't take that," she said. "It's your money." "No, it's tribal. It's an Indian thing. When you win, family." "Yes, you are." She smiled. She kept the money." This speaks to the character of Jackson Jackson. I think Jackson Jackson deserved his grandmother's powwow regalia at the end of the 24 hours, although I must admit I was surprised the shopkeeper felt the same way.

After completing this module, the students were asked to discuss what they had learned about Spokane Indian culture. The students were more confident discussing the concepts of critical disciplinary literacy after they had completed the reader response McGlinn, J., & McGlinn, J. (n.d.). A Teacher's Guide to essay and received feedback from their instructor. One student stated:

There's a bit of empowerment vaguely mixed into a story full of disregard for his situation and the silence that Jackson feels he must maintain just to refrain from dealing with white people. Jackson refers to himself and his people as a "savages;" however, it is somewhat revealed the savage ways of the white people themselves. A quote I liked was in the beginning of the story when Jackson talked about the many Indians who are shunned: "...we have dreams and families" (Alexie 1558). This is a way of trying to show how everyone is equal and the Indians

deserve to be viewed as people, not savages. The quote is short, but powerful.

### Conclusion

In their exploration of disciplinary literacy and critical disciplinary literacy, the faculty were able to implement these methods to their current literature survey courses, and as a result, the students benefited from these modes of learning in various assignments. Through the application of works by Elizabeth Moje and Todd Reynolds, the three faculty members were able to facilitate a more authentic experience between the students and the literary text. As the literary canon continues to evolve towards inclusivity, there will be more opportunities to promote critical disciplinary literacy in literature courses.

### References

Adler, M. J., & Doren, G. V. (1988). Reforming Education: The Opening of the American Mind. Macmillan.

Baraka, A. (1991). Cultural Revolution and The Literary Canon. Callaloo, 14(1), 150-156. JSTOR. https://doi.org/10.2307/2931447

Bloom, H. (1995). The Western Canon: The Books and School of the Ages (1st ed.). New York Riverhead Books.

you're supposed to share with your family." 'I'm not your Dyches, J. (2018). Investigating Curricular Injustices to Uncover the Injustices of Curricula. The High School Journal, 101(4), 236-50.

> Fletcher, M. (2006). Looking to the East: The Stories of Modern Indian People and the Development of Tribal Law. Seattle Journal for Social Justice, *5*(1), 11-14.

> Kramnick, J. B. (n.d.). The Making of the English Canon. PMLA: Publications of the Modern Language Association of America, 112, 1087-101.

> the Signet Classic Edition of Robert Louis Stevenson's Dr. Jekyll and Mr. Hyde (W. G. Ellis & A. Reed, Eds.). Penguin Publishing Group. robert-louisstevenson.org/wp-content/uploads/penguinjekyll-hyde-treachers-guide.pdf

> Moje, E. B. (2015). Doing and Teaching Disciplinary Literacy with Adolescent Learners: A Social and Cultural Enterprise. Harvard Educational Review, *85*(2), 254-278.

Reynolds, T., Rush, L. S., Lampi, J. P., & Holschuh, J. P. (2020). English Disciplinary Literacy: Enhancing Students' Literary Interpretive Moves.

Journal of Adolescent & Adult Literacy, 64(2), 201-209.

Robinson, L. S. (1983). Treason Our Text: Feminist Challenges to the Literary Canon. *Tulsa Studies in Women's Literature*, 2(1), 83-98. JSTOR. https://doi.org/10.2307/464208

Scott, R. (2014). Level Up! The Guide to Great Video Game Design (2nd ed.). John Wiley & Sons.

### Authors' Note

The authors have no known conflicts of interest to disclose. Correspondence concerning this article may be addressed to Dr. Josh Howell, College of The Albemarle, 1208 N. Road St. Elizabeth City, NC 27909. Email: Joshua\_howell71@albemarle.edu

Figure 1
Moje's (2015) 4 Es Heuristic with Disciplinary Practices

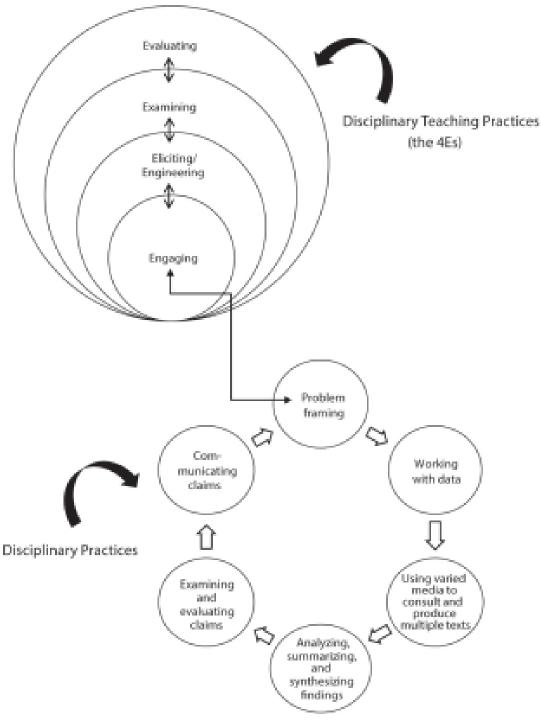
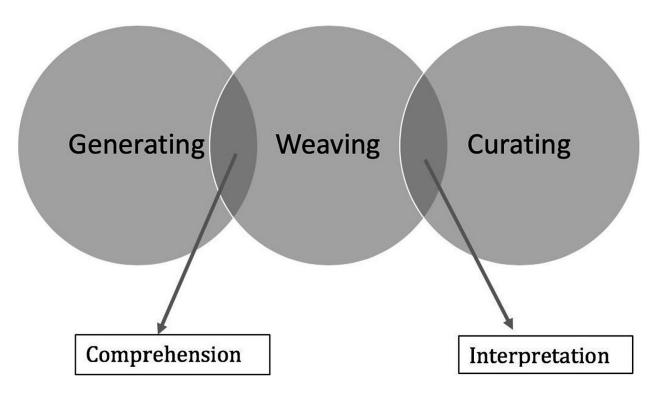


Figure 2
Reynolds et al.'s (2020) English Language Arts Disciplinary Literacy Heuristic: A Visual Representation



Preparing Dual Enrollment Students and Young Adults for the Workforce by Fostering Self-Regulation in the Classroom:
Strategies and Applications

Lane Freeman



### Preparing Dual Enrollment Students and Young Adults for the Workforce by Fostering Self-Regulation in the Classroom: Strategies and Applications

Community college educators often express concern regarding the challenges faced by dual enrollment students (ages 14-18) and young adults (ages 18-24) in adhering to academic deadlines. Traditional academic policies and syllabi often include strict rules against late submission of work, emphasizing maintaining rigorous timelines. While a score in the gradebook may serve as a motivational tool to encourage timely submissions, they do not gauge the students' competency or mastery over the subject matter. Rather, they evaluate a student's ability to self-regulate and meet deadlines. As faculty shift our focus towards preparing these students for the workforce, it is important to separate these two metrics: mastery of subject matter and self-regulation capabilities.

The role of community college educators is integral in acknowledging the significance of self-regulation as a tool to manage time and set appropriate priorities effectively. It is critical to note that self-regulation is not an inherent skill that students obtain as they enroll in college. Instead, it is a capacity nurtured gradually, often not reaching its peak until the later stages of adulthood.

Understanding early childhood development, individuals readily accept that toddlers are still learning language skills and might not communicate in grammatically correct sentences. This understanding stems from an awareness of a toddler's ongoing brain development. Adults provide

a supportive environment where they can learn and grow, correcting their errors with empathy and patience. The same principle should be applied in the context of teaching self regulation and time-management skills to community college students. Faculty should scaffold expectations and implement systems that equip students with the necessary skills to manage their time and set priorities efficiently. This scaffolding should be designed to progressively challenge the students until they reach established milestones based on their self-regulating ability.

In this way, faculty are not only preparing students for the next test or semester but equipping them with the self-regulation skills necessary for the workforce and lifelong success. These skills are not just about getting assignments in on time but about developing the capacity to manage tasks and priorities effectively in any future professional setting.

### **Defining Self-Regulation for Young Adults**

Self-regulation refers to an individual's ability to monitor, control, and direct their thoughts, emotions, and behaviors to achieve personal goals (Zimmerman, 2002). It involves setting goals, planning actions, monitoring progress, and adjusting behavior as needed (Zimmerman & Schunk, 2011).

Self-regulation is a critical skill for academic success, as it enables students to manage their time effectively, maintain focus, and persist in the face of challenges (Pintrich, 2000). It is also closely related to motivation, metacognition, and self-

This article is brought to you for free and open access by the North Carolina Community College Faculty Association @NCCCS. It has been accepted for inclusion *North Carolina Community College Journal of Teaching Innovation* by an authorized editor of NCCCFA. For more information, please contact editor@ncccfa.org.

efficacy, which are all essential for learning and achievement (Schunk & Ertmer, 2000).

Self-regulation becomes even more crucial in online learning environments, where students often have more autonomy and less direct supervision. Students must manage their time effectively, stay motivated, and seek help when needed (student agency), which can be challenging without the structure and support provided in traditional classroom settings. Student agency refers to students' autonomy, control, and active participation in their learning process. It involves students taking responsibility for their educational experiences, setting goals, making choices, and engaging in self-regulation and self-assessment (Schunk & Greene, 2018).

### Factors that Contribute to Self-Regulation Difficulties in Young Adults Developmental Factors

The prefrontal cortex, responsible for executive functions such as planning, decision making, and impulse control, continues to develop throughout early adulthood (Casey et al., 2008). As a result, young adults may experience difficulties with self-regulation due to ongoing brain maturation (Steinberg, 2005). College students' perceived reluctance to plan appropriately may not stem from a refusal to do so; rather, their planning abilities could be hindered by their brains not yet fully developed and a lack of exposure to co-regulation, which contributes to developing this cognitive function.

### **Personal Factors**

Individual differences in temperament, personality, and cognitive abilities can also influence self-regulation (Rothbart & Bates, 2006). For instance, students with attention deficit hyperactivity disorder (ADHD) may have greater difficulty with impulse control and maintaining focus (Barkley, 2015). Furthermore, the online environment provides several opportunities for distractions that do not exist in traditional classroom settings.

### **Mindset Factors**

In addition to the developmental, personal, and environmental factors discussed above, students' mindsets also play an important role in their self-regulation abilities (Dweck, 2006). Individuals with a fixed mindset believe intelligence or talent is an innate trait that cannot be changed. As a result, they are more likely to avoid challenges and give up easily when facing setbacks. On the other hand, those with a growth mindset view abilities as malleable through effort and practice. This growth mindset fosters persistence, resilience, and self-regulation in the face of obstacles (Blackwell et al., 2007).

Faculty can help cultivate a growth mindset in students by praising effort over inherent intelligence, modeling their own learning processes, and framing challenges as opportunities for growth rather than indications of fixed ability (Yeager et al., 2019). Promoting a growth mindset helps students see their skills and abilities as changeable, supporting the development of critical self-regulation competencies. Table 1 provides examples comparing the responses of students with growth and fixed mindsets when encountering various situations.

### **Environmental Factors**

The home, school, and social environments impact a dual enrollment student or young adult's ability to develop and apply self-regulation skills. Factors such as family dynamics, peer pressure, and access to resources can support or hinder self-regulation development (Masten & Coatsworth, 1998). The digital social environment in the last decade has increased the impact of environmental factors on a young college student's ability to develop and apply selfregulation skills (Greenfield, 2009). For instance, multitasking across various digital platforms can negatively affect students' focus and attention, making it more challenging for them to self regulate their learning process. A college student living in an environment with external distractions and a lack of family support may contribute to a lack of focus on schoolwork. This environment is prevalent among first-generation college students.

**Table 1**Growth Mindset versus Fixed Mindset Responses

Situation	Growth Mindset Response	Fixed Mindset Response	
Struggling to understand a concept	"I will keep trying different strategies until I master this concept."	"I'm not good at understanding concepts like this."	
Receiving critical feedback	"This feedback will help me improve my skills."	"This means I don't have the natural ability."	
Facing an obstacle	"I will look for ways to overcome this obstacle through effort and help from others."	"I want to give up because this obstacle means I can't suc- ceed."	
Seeing others succeed	"Their success inspires me to keep developing my abili- ties."	"They must be naturally smarter or more talented than me."	
Setback on an assignment	"I will learn from this experience so I can improve next time."	"I failed because I'm not good at this."	

### Faculty's Role in Co-Regulation

Faculty teaching and interacting with dual enrollment students and young adults must recognize that young students may have never had proper coregulation to develop self regulation skills. Coregulation is a concept that refers to the interactive process between an individual and their social partners (e.g., parents, instructors, peers) to support the development and maintenance of self-regulation skills. Co-regulation involves a combination of guidance, modeling, feedback, and emotional support provided by the social partner to help individuals regulate their behavior, emotions, and cognition (Hadley et al., 2015). College faculty may assume the K-12 school system has provided co-regulation, but that is often a false assumption, and faculty must be prepared to meet students where they are and guide them to where they need to be.

The concept of co-regulation highlights the importance of social contexts and interpersonal relationships in developing self-regulation. It acknowledges that self-regulation is not solely an individual skill but is also influenced by social interactions and environmental factors (Bronfenbrenner & Morris, 2006). Co-regulation emphasizes the importance of establishing relationships with students because students are more likely to develop long-lasting self-regulation skills when faculty and staff develop interpersonal relationships with students.

Building strong relationships with students is crucial for fostering self-regulation, as these connections create a supportive environment in which students can learn and grow. When faculty and staff invest time and effort into getting to know their students on a personal level, they can better understand each student's unique needs and challenges. This, in turn, allows educators to provide tailored guidance and resources to help students develop effective self-regulation strategies. Furthermore, a positive rapport between students and educators can boost motivation, engagement, and a sense of belonging, all of which contribute to the overall success of students in their academic and personal lives. By prioritizing the establishment of meaningful relationships with students, faculty and staff can play a vital role in fostering the long-lasting selfregulation skills essential for success in the workforce.

# Strategies for Supporting Self-Regulation in Dual Enrollment Students and Young Adults

Recognizing the role of self-regulation, coregulation, and metacognition in a student's ability to manage deadlines and due dates in college courses is crucial for addressing this issue in learning. Community college faculty have long appreciated that their job extends beyond simply teaching content. As such, educators should not only explain self-regulation to

students but also emphasize the importance of metacognition—the ability to reflect on and monitor one's learning process—as a critical component of self-regulation. Faculty can better support their student's growth in these areas by reframing the development of self-regulation and metacognition as essential skills. To further highlight their significance, faculty may consider identifying self regulation skill development and metacognitive awareness as secondary learning objectives on the course syllabus.

Faculty can foster self-regulation in a non-punitive way while scaffolding student behavior to meet expectations. Developing self-regulation skills is crucial for students to succeed academically and personally, particularly in online learning environments. To support students in cultivating these essential skills, educators can implement various evidence-based strategies that foster goal setting, planning, time management, self-monitoring, and reflection. These strategies not only empower students to take control of their learning process but also promote the development of critical soft skills that are invaluable in today's fast-paced, ever-evolving world. By incorporating these strategies into the curriculum and providing ongoing guidance, community college faculty can help students navigate their college courses effectively, overcome challenges, and ultimately achieve their desired outcomes.

### Goal Setting and Planning

Instruct students in creating SMART (Specific, Measurable, Achievable, Relevant, Time bound) goals and developing detailed action plans that outline steps, deadlines, resources needed, and potential obstacles. Provide examples differentiating vague goals from SMART goals. Review students' weekly SMART goals and action plans, giving feedback to ensure they meet the criteria. Ask students to regularly evaluate their progress on goals, adjusting plans as needed. End each week with self-reflection on their performance and obstacles faced. Periodically, have students analyze how their short-term SMART goals contribute to long-term definitions of personal growth and success. Implementing this scaffolded, structured model for weekly SMART goal-setting and reflection (see Appendix A) can enhance students' motivation, focus, persistence, and selfregulation.

### Time Management Strategies

Model and teach students effective time manage-

ment techniques, such as prioritizing tasks, breaking assignments into smaller parts (chunking), and using a calendar or planner to track deadlines and progress. Ask students to submit a calendar that allocates time towards their extracurricular activities and the time dedicated to an online course. This strategy helps students develop their time management skills by guiding them through the process of creating and implementing a personalized plan. By providing feedback and holding regular checkins, instructors can support students as they learn to balance their responsibilities and prioritize their time effectively. See Appendix B to apply the strategy, "Personalized Time Management Plan and Review."

### Self-Monitoring and Reflection.

Encourage students to regularly assess their progress toward their goals and reflect on their learning experiences. Self-reflection is critical to developing self-regulation skills, and students will only self-reflect if prompted by the instructor. This will help students identify areas of improvement and adjust their strategies accordingly.

The strategy, Guided Self-Monitoring and Reflection Journal (Appendix C) promotes regular self-monitoring and reflection by providing students with a structured approach to assess their progress and evaluate their learning experiences. The guidance from instructors and opportunities for peer collaboration will help students develop their self-regulation skills and continuously improve their strategies.

### Co-Regulation in Action: Late Work Application

One of the struggles for faculty in accepting late work is that it increases their workload by having to keep track of which student submitted each assignment. It also interferes with a faculty's ability to get in the proper frame of mind to grade a set of submissions, grade more efficiently, and score students' work equitably. However, faculty can invert the responsibility of tracking late work to the student. Each time a student submits a late assignment, delegate the workload to the student with an intervention strategy to build self-regulation skills.

The Late-Work Application (LWA) strategy shifts the responsibility back to the students while aiding faculty in maintaining grading efficiency and, more importantly, requiring students to reflect on why an assignment is late and how to prevent this. As with most "applications," the LWA submission can be denied. If the student does not put a good-faith effort into self-reflection, the instructor is not required to accept the late submission.

The LWA can be designed using web-based forms like Google or MS Forms. Recommended fields for this form may include (See Appendix D for a sample Late Work Application):

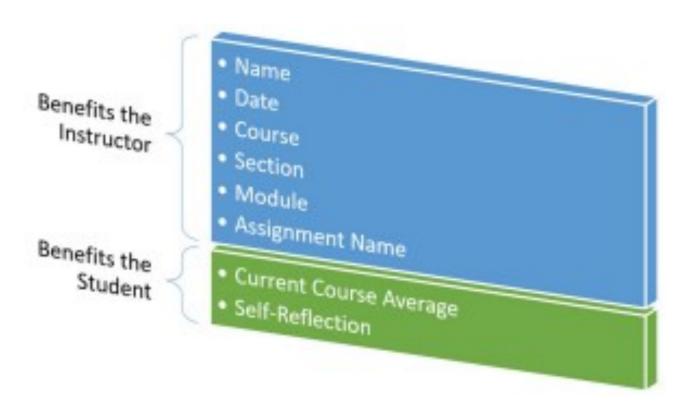
- Name
- Date
- Course
- Section
- Module
- Assignment Name
- Current Course Average
- Self-Reflection

The "Section," "Module," and "Assignment Name" fields help the instructor locate the assignment in the learning management system. In addition, web-based forms often have a "notification rule" that will email the instructor to let them know that an LWA has been submitted.

The "Course Average" field aims to train students to monitor their course progress and see the effect a missing assignment has on their overall average. The "Self-Reflection" field allows students to pause and consider why the assignment was late. The "Self-Reflection" prompt may be phrased this way: "What are the reasons for the assignment(s) being late? Be honest - your answer does not affect your ability to make up your work. What will you do to prevent this from happening again?"

The Late Work Application is one of many strategies that work as co-regulation strategies. College faculty should build a repository of time management strategies that can be leveraged to ask students to build self-regulation skills in exchange for submitting an assignment for full credit. Students who have already developed the necessary self-regulation skills, as evidenced by submitting before the due date, are excused from these co-regulation intervention strategies.

**Figure 1**Late-Work Application Fields and Purpose



### Potential Challenges and Limitations of Implementing Co-Regulation Strategies

Some students may resist adopting self-regulation strategies, especially if they perceive them as too demanding or unrelated to their immediate academic goals. Additionally, implementing these strategies may require additional time and effort from faculty, which could be challenging considering their existing workload and responsibilities. Over time, the investment in time and effort will pay dividends for faculty, but initially, this will require collaboration, development, and implementation of these new strategies. These abilities are not merely academic tools but essential competencies employers value, which can significantly impact their career progression. The process will require collaboration, development, and implementation of these new strategies to foster a workforce-ready student body.

Faculty must consider that students come from diverse backgrounds and personal experiences and may possess varying self-regulation skills. This requires a customized approach to accommodate each student's unique needs, which can only be achieved through developing rapport with students. Adopting a flexible mindset is crucial, as it allows faculty to determine whether every student should participate in all co-regulation strategies. Lastly, assessing the effectiveness of these strategies in enhancing self-regulation skills can be challenging, given that self-regulation is a complex, multidimensional construct that is difficult to measure directly. The impact on students' workforce readiness can be Barkley, R. A. (2015). Attention-deficit hyperactivity disora significant indicator of the strategies' successful implementation. By aligning these strategies with real-world applications, students can better understand the importance of self-regulation for their aca-

### Conclusion

demic success and future professional development.

Community college faculty often face challenges with students, especially dual enrollment students and young adults, in meeting deadlines and submitting work on time. This issue is not solely about academic mastery but also reflects students' selfregulation skills. Self regulation, which involves managing thoughts, emotions, and behaviors to achieve personal goals, is essential for academic suc- Casey, B.J., Jones, R.M. and Hare, T.A. (2008), The cess. Dual enrollment students and young adults may face difficulties in self-regulation due to developmental factors, personal factors, and environmen-

tal factors, such as the influence of digital social environments.

To support students' self-regulation skills, faculty must recognize the importance of co regulation, which involves guidance, modeling, feedback, and emotional support from social partners, such as instructors, to help individuals regulate their behavior, emotions, and cognition. This highlights the significance of establishing relationships with students.

To address the challenges in developing selfregulation skills in students, faculty can implement strategies such as goal setting, planning, time management techniques, self monitoring, and reflection. One example of a co-regulation strategy is the Late-Work Application, which shifts the responsibility of submitting late work to the student while promoting self-reflection on their progress and behavior.

By implementing co-regulation strategies and promoting self-regulation skill development as a fundamental soft skill, faculty can equip students with essential competencies that extend beyond the academic sphere and into their future careers. Through a focus on self regulation, educators can better prepare students for the demands of the modern workforce, fostering not just academic success but lifelong success. In a rapidly evolving world, equipping students with the ability to self-regulate their behavior, time, and priorities effectively is an invaluable investment in their future.

### References

der: A handbook for diagnosis and treatment (4th ed.) The Guilford Press.

Blackwell, L.S., Trzesniewski, K.H., & Dweck, C.S. (2007). Implicit theories of intelligence predict achievement across an adolescent transition: A longitudinal study and an intervention. Child Development, 78(1), 246-263. https:// doi.org/10.1111/j.1467-8624.2007.00995.x

Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. In R. M. Lerner & W. Damon (Eds.), Handbook of child psychology: Theoretical models of human development (Vol. 1, 6th ed., pp. 793-828). Wiley.

adolescent brain. Annals of the New York Academy of Sciences, 1124: 111-126. https://doi.org/10.1196/annals.1440.010

- Dweck, C. S. (2006). Mindset: The new psychology of success. Random House. Dweck, C. (2015). Carol Dweck revisits the growth mindset. *Education Week*, 35(5), 20-24.
- Greenfield, P. M. (2009). Technology and informal education: What is taught, what is learned. *Science*, *323*(5910), 69-71. doi:10.1126/science.1167190
- Hadley, W., Houck, C., Brown, L. K., Spitalnick, J. S., Ferrer, M., & Barker, D. (2015). Moving beyond role-play: Evaluating the use of virtual reality to teach emotion regulation for the prevention of adolescent risk behavior within a randomized pilot trial. *Journal of Pediatric Psychology*, 40(5), 564-574.
- Masten, A. S., & Coatsworth, J. D. (1998). The development of competence in favorable and unfavorable environments: Lessons from research on successful children. *American Psychologist*, *53* (2), 205-220.
- Pintrich, P. R. (2000). The role of goal orientation in self-regulated learning. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 451-502). Academic Press.
- Rothbart, M. K., & Bates, J. E. (2006). Temperament. In N. Eisenberg (Ed.), *Handbook of child psychology:* Vol. 3. Social, emotional, and personality development (6th ed., pp. 99-166). Wiley.
- Schunk, D. H., & Ertmer, P. A. (2000). Self-regulation and academic learning: Self-efficacy enhancing interventions. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 631-649). Academic Press.
- Schunk, D. H., & Greene, J. A. (2018). *Handbook of self-regulation of learning and performance* (2nd ed.). Routledge.
- Steinberg, L. (2005). Cognitive and affective development in adolescence. Trends in Cognitive *Sciences*, *9*(2), 69-74.
- Yeager, D. S., Hanselman, P., Walton, G. M., Mur-

- ray, J. S., Crosnoe, R., Muller, C., Tipton, E., Schneider, B., Hulleman, C. S., Hinojosa, C. P., Paunesku, D., Romero, C., Flint, K., Roberts, A., Trott, J., Iachan, R., Buontempo, J., Yang, S. M., Carvalho, C. M., ... & Dweck, C. S. (2019). A national experiment reveals where a growth mindset improves achievement. *Nature*, *573*(7774), 364-369. https://doi.org/10.1038/s41586-019-1466-y
- Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory Into Practice*, 41(2), 64-70.
- Zimmerman, B. J., & Schunk, D. H. (2011). *Hand-book of self-regulation of learning and performance*. Routledge/Taylor & Francis Group.

### Author's Note

The author has no known conflicts of interest to disclose. Correspondence concerning this article may be addressed to Lane Freeman, North Carolina Community College System, 200 W Jones St, Raleigh, NC 27603. Email: freemanl@nccommunitycolleges.edu

### APPENDIX A

### **SMART** Goal Setting and Reflection Activity

- 1. At the start of each week, have students develop 1-2 academic or personal SMART goals for the week:
  - a. Specific Clearly defined, straightforward, and detailed.
  - b. Measurable Quantifiable criteria for progress and achievement.
  - c. Achievable Within student's capabilities; provide support if needed.
  - d. Relevant Aligns with overall objectives; focuses effort.
  - e. Time-bound Defined timeline indicating by when.
- 2. Instruct students to create a SMART action plan for each goal detailing:
  - a. Steps to complete/progress.
  - b. Deadlines for each step.
  - c. Resources required.
  - d. Potential obstacles and solutions.
- 3. Have students track and assess progress on SMART goals and adjust plans as required.
- 4. At week's end, students self-reflect on SMART goal achievement, including:
  - a. Performance analysis
  - b. Review of effective and ineffective strategies
  - c. Identification of improvements
- 5. Periodically relate weekly SMART goals to overall growth and definitions of success.

### APPENDIX B

### Strategy: Personalized Time Management Plan and Review

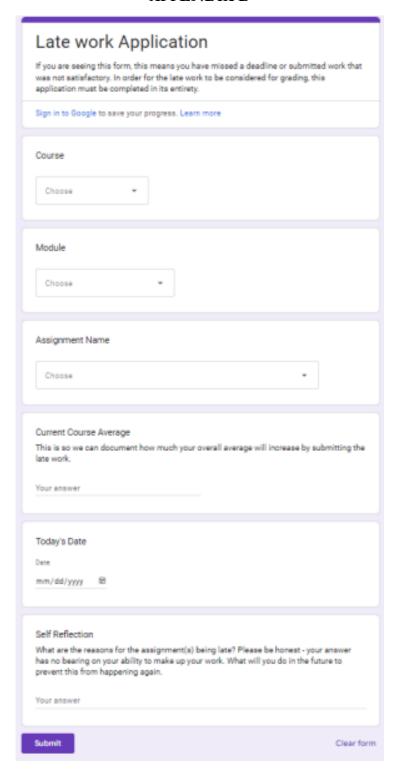
- 1. Begin by introducing students to effective time management techniques, such as prioritizing tasks, breaking assignments into smaller parts (chunking), and using a calendar or planner to track deadlines and progress.
- 2. Instruct students to create a personalized time management plan that allocates specific time slots for their extracurricular activities, online course commitments, and other responsibilities (e.g., work, family). Encourage students to use a digital or physical calendar/planner to visualize their schedule. Provide a template, if necessary.
- 3. Ask students to submit their personalized time management plan for review. Provide feedback on their plan, identifying any potential areas of concern and offering suggestions for improvement.
- 4. Throughout the semester, hold periodic check-ins with students to assess how well they are adhering to their time management plan and whether any adjustments are needed. Encourage students to reflect on their experiences and to share any challenges they are facing or techniques they have found particularly helpful.
- 5. Towards the end of the semester, have students evaluate the effectiveness of their time management plan in helping them balance their various commitments and achieve their goals. Encourage them to consider what adjustments they might make in the future to further improve their time management skills.

#### APPENDIX C

## Strategy: Guided Self-Monitoring and Reflection Journal

- 1. Introduce the concept of self-monitoring and reflection, explaining their importance in developing self -regulation skills and fostering continuous improvement.
- 2. Provide students with a structured reflection journal template that prompts them to assess their progress toward their goals, evaluate their learning experiences, and identify areas of improvement. The template should include questions that guide students to think critically about their performance, learning strategies, and any challenges they have encountered.
- 3. Instruct students to complete their reflection journal on a regular basis (e.g., weekly or biweekly) throughout the semester. Encourage them to be honest and thorough in their reflections, as this will help them gain valuable insights into their learning processes.
- 4. Periodically review students' reflection journals and provide constructive feedback on their self-monitoring and reflection practices. Offer guidance on how they can improve their self-assessment skills and make necessary adjustments to their learning strategies.
- 5. Facilitate group discussions or peer-review sessions where students can share their reflection experiences and learn from each other's insights. This will help create a supportive learning environment that fosters collaboration and continuous growth.

### APPENDIX D



## Food For Thought

Dr. Angelo Markantonakis



#### **Abstract**

This piece will discuss a variety of concerns international students encounter when acknowledging cultural differences. Student's removed from their traditional lives and looking through the lens of food within an academic setting shows an interesting concern. The author of this piece gives personal detail on why food has been chosen as a topic of interest. A summary of the most important components gleaned from research is conducted. Demonstrating the significance of food for international students from a cultural perspective sheds light on a wide variety of issues surrounding food that are not considered by academic institutions. The importance of food transcends many areas of social interaction. An awareness of food from a dining and campus culture perspective is portrayed for community colleges and educational leaders.

#### Food For Thought

There are cultural differences that must be thought through for international students. International students have a strong presence in the United States. "In 2011, there were over 4.3 million international students studying worldwide. International students attending universities in the United States accounted for the highest percentage (17%) of international students all over the world" (Alakaam et all, 2015, p.104). The diverse backgrounds of international students are starting to gain attention in relation to food consumption.

International students change many components of their food choices in pursuing an education in

another country. In a review of the challenges, international students may be exposed to changes in a variety of areas such as dietary, deviations in mealtimes and routines, and health concerns, which demonstrate to educational leaders how significantly students are impacted. The importance of how food affects the experience of an international student must be examined.

#### The Reason and Importance of Food

The author of this piece chose food as a topic due to familial upbringing. The parents of the author grew up with very little food. One parent was raised in the mountains of Greece during the German-Turkish alliance when Germany invaded Greece. One chicken egg was used to feed seven siblings. The other parent grew up in a Catholic Charities group home with minimal food choices and offerings. This led to an idea of safety and security in having an abundance of food in the pantry as a comfort to the family home. Family gatherings with a wide variety of foods were common. Weight, health, and social settings were all affected by this upbringing. This background information built the foundation for the author of reviewing how food is perceived for international students as they pursue education in an unfamiliar setting. Living and making decisions on options with contrasted possibilities for nourishment and leisure then they are accustomed to. This also ties into the community college setting and serving student populations.

The international student experience can be challenging. Food in the United States is prepared differently than an international student is familiar

This article is brought to you for free and open access by the North Carolina Community College Faculty Association @NCCCS. It has been accepted for inclusion in *North Carolina Community College Journal of Teaching Innovation* by an authorized editor of NCCCFA. For more information, please contact editor@ncccfa.org.

with. A student's health can be affected if the routine and eating habits they are used to are disrupted. International students can end up feeling isolated, skip meals, eat poorly, and pick up bad eating habits during the time they are studying. "What if you're put in a situation where you eat unfamiliar foods for all three meals every day for a year, maybe even four? That's often what it's like to be an international student and eating in dining halls" (Agrawal, 2015). The behavioral changes that occur with international students illustrate a negative acculturation. As individuals in a new setting, many changes can occur for international students surrounding the impact of food.

## **Most Important Elements**

An international student must work through many changes concerning food. Changes range from lack of familiarity, time (skipping meals), and access to ingredients. Three main changes that must be considered are an international student's geographic location (from which they are familiar with), access (food options), and dietary practices that could cause health concerns.

Cultural differences can also be geographically related. Understanding these differences may be an area educational leaders should focus on. Time frame in eating meals is a noted example with living habits due to geographic location. An example of this can be seen with students from Middle Eastern countries. "A major cultural difference has been observed where it is more common for restaurants to remain open later . . . because of the local climate – because it is cooler in the late-evening and early morning hours" (Kusek, 2015, pp.127-128). Similar examples are demonstrated with breakfast times and types of nutrition available.

International students who attempt to purchase their own groceries have limited access and options for food selection. "The only place outside of campus acknowledged by all students...was Walmart because most of them later mentioned this is where they shop for groceries" (Kusek, 2015, pp.127-128). Another factor that affects international students is overall access to transportation and proximity to restaurants with familiar food options, particularly in rural areas. For international students in dorms this can become a true concern. "It is especially hard for international students to find food over breaks due to things like lack of transportation, cold weather,

and off-campus food suppliers" (Creed, 2014). Familiar food choices may be present but out of the range of resources for an international student.

Health of students due to effects of dietary practices has been noted in research. "The food detriments that affected participants' dietary practices include food availability, price, storage (in terms of food's shelf life and space to store food), as well as food preparation issues" (O'Sullivan, 2016, p.118). Food preparation issues relate to the differences in ingredients. As noted in a survey of students, eating habits change. The amounts of foods, types, and eating patterns are all affected. Survey participants noted less and more consumption of:

Fruits and vegetables, as well as fast food. Some participants also suggested that their new diet had caused weight change. . . Almost all participants admitted that they had more regular eating patterns at home (O'Sullivan, 2016, p.111)

Added to the health concerns and dietary changes are irregular eating patterns where international students get in the habit of skipping either breakfast or lunch, sometimes both. This practice can impact the health of students.

## Recent Survey Data and the Community College Landscape

A study performed in spring 2021 by the Center for Community College Student Engagement at the University of Texas includes insight from students within three community colleges. (Weissman, 2022) discusses these findings and the drastic financial impact food has on community college students. "The report, released Wednesday, found that a fifth of students cut back on skipped meals in the month prior to the survey because of costs. Almost a third of respondents ran out of food and didn't have the money to buy more during that time" (Weissman, 2022). Other factors mentioned relative to the survey included the costs of food, housing, daycare and transportation. Community colleges can potentially build relief and services for students within their strategic plans.

Quintana (2022) discusses a survey of 80,000 community college students. The most notable challenge for community colleges seems to be communicating the availability of food and other resources to the student population. "Of the rough 50,000 students on these campuses, only about 40% of students knew their institutions provided food, and 9%

have such a resource" (Quintana, 2022). Community college settings will need to get resourceful on how the available resources could be attained. Calling on a College wide approach. "That may mean tasking a college adviser with informing students about a college's food pantry or having instructors include that information in their course materials" (Quintana, 2022).

## Impact on Educational Leaders and the Application of New Information

The implications of food could be a larger issue soon for educational leaders to address as the number of international students continues to increase. It would be in the best interest of academic institutions to be cognizant of the need to educate the international student population at their campuses. Academic institutions will recruit more students, which in turn will add more diversity. Education relative to nutrition, and the differences in foods that will be available, would benefit international students.

As academic institutions move future-forward from the COVID-19 pandemic, administrators within academic institutions must pay closer attention to the needs of their student populations. "Among food-insecure students, fewer than half said the college helped them attain food in the month prior to the survey" (Weissman, 2022).

The student dining experience should be considered by educational leadership. There are several options that would make an impact on food accessibility for international students. The first would be academic institutions creating partnerships with local ethnic food stores. "Ethnic food stores could be invited to campus" (Alakaam et all, 2015, p.116). This type of partnership would benefit the local community as well as the international student population. The second would be an international dining hall experience which involves student feedback:

Serving more international foods in dining halls is a wonderful idea, as long as the food is prepared in the most authentic way possible. Increasing the availability and authenticity of cultural food would help international students feel more at home and welcome in the residence halls. It would provide domestic students with opportunities to learn about cultures and countries. It would be food that we not only survive off of, but live with and enjoy. (Agrawal, 2015)

of respondents incorrectly said their campuses didn't The dining hall experience could be very beneficial, and generate a profit for an academic institution. If the students live in dorms, and are on meal plans there is an area of opportunity in serving students food that is familiar. Having an opportunity to give feedback, and create cultural enrichment is a positive educational experience for all the students.

> From a community college perspective, creative approaches toward meeting the needs of students may be available:

For example, Ozarks-Technical Community College in Missouri offers free breakfast to its student body five days a week, and the North East Texas Community College Care Center houses a food pantry, a mini kitchen and a closet with personal hygiene supplies, and it also offers opportunities for peer mentorship and group mental health therapy sessions. (Weissman, 2022)

Academic institutions must leave no stone unturned in seeking resources for their student populations. Exhausting all options, seeking out local partnerships and building campus culture and identity for students will build the needed bridges toward student success. Community colleges are not in a position to lose students that are motivated to seek an academic journey toward needed skill sets and future employment opportunities.

### A Local Community Colleges Perspective

Community college settings must become resourceful with their local partners and promote the resources that are available to their student populations. Within the State of North Carolina, Rowan-Cabarrus Community College publicly highlights a market style food and resource pantry. Listing detailed time frames of availability as well as the opportunity to schedule an appointment if needed. The purpose of the food pantry is to "provide temporary food assistance to Rowan-Cabarrus students at no cost. The College aims to decrease the impact of food insecurity among our students" (Rowan-Cabarrus Campus Market (Food & Resource Pantry). International students are also utilizing the colleges food and resource pantry:

The Campus Market is available to all enrolled students on an unlimited basis. We do have staff available to assist and students can make an appointment to visit by emailing studentwellness@rccc.edu . I am aware of international students visiting and seeking the food and campus

for our students directly correlates to retention factors. (Moler, M. (2023, August 15). Rowan Cabarrus Community College [Personal interview]).

Rowan-Cabarrus Community College also accepts donations for the pantry. Students may also volunteer or assist in the pantry through work study opportunities. This has created a scaffolded approach to a committed student and campus culture.

#### Conclusion

The experience of an international student is greatly impacted by food. Three main areas of concern are an international student's geographic location which they are familiar with, access to food options, and dietary practices that could cause health concerns. Within the community college setting specific, communicating available resources and seeking creative avenues for assets is paramount to serving a post COVID-19 student experience. Innovative food and resource pantries mirroring Rowan-Cabarrus Community College may be the blue print for student success and campus retention.

Educational leadership must think through methods of educating international students, creating an awareness of these changes to their food. Academic institutions continue to have an increase in international students. Thinking differently about dining hall services and food options could potentially be a beneficial educational and cultural method of positive acculturation for educational leaders to pursue.

#### References

Agrawal, A. (2015, December 10). International Students Crave Familiar, Authentic Comfort Food. The Daily Nebraskan. https:// www.dailynebraskan.com/opinion/agrawalinternational-students-crave-familiar-authenticcomfort-food/article 0a053c20-9ee6-11e5-a64a-1bf4e6dc6aa3.html.

- resources toward tutoring. This campus initiative Alakaam, A. A., Castellanos, D. C., Bodzio, J., Harrison, L., (2015). The factors that influence dietary habits among international students in the United States. Journal of International Students, 5(2), 104-120.
  - Creed, T. (2014, Dec 07). International students' food concerns. University Wire. https:// login.proxy043.nclive.org/login?url=https:// www.proquest.com/wire-feeds/internationalstudents-food-concerns/docview/1633955015/ se-2
  - Kusek, W. A. (2015). Evaluating the struggles with international students and local community participation. Journal of International Students, 5(2), 121 -131.
  - Moler, M. (2023, August 15). Rowan Cabarrus Community College [Personal interview].
  - O'Sullivan, N., & Amirabdollahian, F. (2016). Loyal tongue, liberal mind: International students' experiences on dietary acculturation in england. Journal of International Students, 6(1), 107 -127.
  - Rowan-Cabarrus Campus Market (Food & Resource Pantry). Student Wellness Center. (n.d.). https:// www.rccc.edu/wellness/food-resource-pantry/
  - Quintana, C. (2022, October 19). Eat or pay tuition? many community college students are forced to choose. but colleges can help. USA TODAY.
  - Weissman, S. (222AD, October 20). Students Who "Stand to Lose the Most." Inside Higher Ed. https://www.insidehighered.com/ news/2022/10/21/high-food-and-housinginsecurity-community-colleges.

#### Author's Note

The author has no known conflicts of interest to disclose. Correspondence concerning this article may be addressed to Angelo Markantonakis, Rowan-Cabarrus Community College, 1333 Jake Alexander Blvd S, Salisbury, NC 28146. Email: angelo.markantonakis@rccc.edu

Using Virtual Reality (VR) as a Supplement to Lab Activities in Chemistry Classes: Effects on Student Self-Evaluation of Lab Skills

Donald W. Carpenetti



#### **Abstract**

Virtual reality can offer an engaging and kinesthetic simulated laboratory experience. The player progresses through various laboratory tasks and is given a score based on their accuracy, precision, and efficiency in completing each task. The program can address many issues that are taught in introductory chemistry labs, but does so in a way that would be difficult to replicate in a face-to-face laboratory setting. The virtual environment can provide unlimited samples for students to use (the lab can be refreshed with the pull of a virtual lever), does not require professional supervision for safety, evaluates students on results (we can do this to an extent when an experiment is completed, but without the ability to trace mistakes back to each individual moment of an experiment), and is legitimately enjoyable (based on several semesters of student feedback). Students not only enjoy doing the assignment, but report increased confidence in performing lab activities.

*Keywords:* Virtual Reality, teaching/learning strategies, simulations, student experience, science education, community college

## Using Virtual Reality (VR) as a Supplement to Lab Activities in Chemistry Classes: Effects on Student Self-Evaluation of Lab Skills

My interest in using virtual reality (VR) as an educational tool began during my first ride on a virtual roller coaster through a dinosaur park (in the friendly confines of the campus library). I immediately recognized a way to connect with students

that would bring course material to them in a different way, but could fully capture their attention.

The gap between chemistry content and the potential of VR was bridged when a copy of HoloLab Champions (from Schell Games) was obtained. The HoloLab Champions (played through Steam on a Meta Oculus gaming system) program places the player in a virtual laboratory presented in a game show format and introduces many of the issues that we are teaching students in the introductory chemistry labs in a way that would be difficult to replicate in an actual laboratory. The virtual environment can provide unlimited samples for students to use as the lab can be refreshed with the pull of a virtual lever, allowing students to practice technical skills repeatedly if necessary without any loss of laboratory chemical supplies. Virtual experiments do not require professional supervision for safety and students complete the experiments individually, eliminating students copying classmates' techniques instead of coming up with their own procedure. The program can evaluate students on experimental results in a manner that is not practical for a face-to-face lab where the instructor cannot trace individual mistakes back to each moment of an experiment (for example, an instructor in a lab with up to 20 students cannot observe every individual measurement a student makes for accuracy, usually only finding out something went awry in an experiment when looking at the final calculation).

A level of assessment is built in to HoloLab Champions, since it is a game, it constantly keeps score as the player/student progresses through

This article is brought to you for free and open access by the North Carolina Community College Faculty Association @NCCCS. It has been accepted for inclusion in *North Carolina Community College Journal of Teaching Innovation* by an authorized editor of NCCCFA. For more information, please contact editor@ncccfa.org.

each set of experiments – completion of an experiment would indicate that learning objectives have been met, a numerical score could be used as a means of establishing a grading scale for the experiment. This study evaluates how student self-evaluation of their laboratory skills was improved through playing HoloLab Champions. A guide for instructors to use HoloLab Champions VR game as a supplement to laboratory instruction has been published through the North Carolina Virtual Learning Community (Carpenetti, 2022).

#### **Background and Literature Review**

Laboratory exercises have long been considered an integral part of chemistry and physical science classes (Hofstein, 2004); research has shown that active learning methods, such as laboratory exercises, are significantly more effective at increasing student performances than traditional lecture-style teaching methods (Freeman et al. 2014). The use of computer content to supplement teaching in a physical laboratory has been a reality for over two decades, but has become more relevant recently as a result of shifting away from face-to-face instruction in response to the COVID-19 pandemic (Reeves et al., 2021). In many cases, laboratory-based disciplines have been forced to find more adaptive methods to provide access to equipment and experiments that are crucial to students acquiring content knowledge related to laboratory techniques (Vasiliadou, 2020). Virtual laboratory experiments feature some form of immersive technology that simulates a physical laboratory. Ideally the interactions would closely simulate the manipulation of equipment involved in an in-lab procedure. (Stanney & Cohn, 2012, Georgiou, J et al., 2007). Studies into the use of VR have focused mainly on knowledge acquisition in comparison to physical laboratories (Reeves & Crippen, 2021, Hu-Au & Okita 2021, Heradio, et al., 2016) and not on the development of lab skills. Studies of learning outcome achievement have shown that students participating in virtual labs generally have a higher rate of outcome achievement than students engaged in a traditional lab, though available studies primarily focus on content knowledge and not practical lab skills (Brinson, 2015). A study of VR Labs with respect to knowledge, self-efficacy, and enjoyment has been published (Meyer et al., 2019) but did not document student's perceptions of the experience. This study focuses on student's perceptions of their laboratory

skills and how participation in virtual reality exercises affects those perceptions.

While there is a good amount published work relating to using virtual reality in physical science courses, there is not much research focusing specifically on community colleges. A study evaluating the use of virtual reality for presenting case studies related to workplace safety in online asynchronous classes in a community college setting showed an increase in student engagement compared to text-based case studies (Madathil et al. 2016) and an evaluation of using augmented reality for teaching skull anatomy in a community college setting found that participants who experienced the augmented reality skull application demonstrated an increase in knowledge as assessed by a post-knowledge quiz, compared to their baseline knowledge

determined by a pre-knowledge quiz; but the effect size was equivalent to participants who studied with a textbook and plastic skull model. (Duncan -Vaidya and Stevenson 2020).

#### Methods

HoloLab Champions, a virtual reality chemistry lab simulation game played on the Meta/Oculus VR system, has been used for several semesters as a supplement to laboratory exercises in general chemistry courses (CHM 151 and CHM 152, General Chemistry I and II, in the North Carolina Community College System Catalog). Student response to the assignments was very positive, prompting a study to determine whether, in addition to having fun playing the game, students were improving in laboratory skill. Craven Community College is only set up for one student to participate in the game at a time (the game requires a Steam account, a dedicated PC, and an Oculus headset all of which is located in the campus library, not in the chemistry lab) – this limitation makes it difficult to evaluate students formally, as students will, by necessity, be participating in the game at different stages of the lab progression of the course they are enrolled in. To evaluate student's experience with participating in the VR game a survey addressing confidence in various lab-related activities was developed that students could complete prior to and immediately after playing HoloLab Champions.

The survey consisted of seven questions, four relating to lab techniques, two to lab circumstances, and one relating to the assignment to play the VR game (Table 1).

#### Table 1

Survey Questions

VR	Survey	Ouestic	ns
, 1,	Duivey	Questic	1110

I am comfortable doing mass measurements in the lab.

I am comfortable doing volume measurements in the lab.

I am comfortable performing lab activities with minimal supervision (figuring things out on my own).

I am comfortable identifying how to accomplish an experimental goal without a specific procedure to follow.

I am comfortable using a volumetric pipette.

I am comfortable lighting and using a Bunsen burner.

Playing HoloLab Champions was a positive experience.

*Note.* Answer choices provided to the students were: Strongly agree (1), Moderately agree (2), Slightly agree (3), Neutral (4), Slightly disagree (5), Moderately disagree (6), and Strongly disagree (7). A version of the survey was completed before students reserved a time slot to play HoloLab Champions and after the playing experience.

The survey was administered to 67 students enrolled in either General Chemistry I or General Chemistry II in the Fall 2021 and Spring 2022 semesters.

#### Results

Numeric results of the survey are presented in Table 2 and will be described in more detail by question.

#### Measuring Mass

Mass measurements are one of the more straight -forward activities performed in a chemistry lab, generally involving setting an object on the pan of

an analytical balance and reading the display. Some complexity can arise from needing to subtract the mass of a container to arrive at the mass of a sample within that container or ensuring that the balance is 'zeroed' before the measurement is performed, but in general students were very confident in their abilities with regards to measuring mass with a preactivity score of 1.39. Even with this already very low score, student's self-evaluation after participating in the VR experiment dropped to an average of 1.18, a change of -0.21 indicating an increase in confidence with measuring masses.

**Table 2**Survey Results

Question	Pre-activity	Post-activity	Change
Mass	1.39	1.18	- 0.21
Volume	1.82	1.29	- 0.53
Working on own	2.46	1.68	0.78
Working without procedure	3.50	2.29	- 1.21
Pipette	2.04	1.46	- 0.58
Burner	1.39	1.21	0.18
HoloLab Champions?	4.00	1.39	- 2.61

### Measuring Volume

General volume measurements can be a bit more complicated compared to mass, involving reading the meniscus of a liquid sample interacting with the walls of the container and needing to evaluate position relative to lines on the measuring device instead of a digital readout. Student's initial confidence was still fairly high, a pre-activity score of 1.82, though lower than for mass measurements. After the VR activity student scores fell to 1.29, a change of -0.53, showing a larger increase in confidence relative to that recorded for mass measurements.

### Working in the Lab with Minimal Supervision

Working alone in a chemistry lab is not regarded as a safe practice, but from a teaching perspective it would be useful to isolate a student from peers so that the work they do on an experiment is truly their own. Students initially evaluated themselves as less confident in working on their own than in performing mass or volume measurements, with a preactivity score of 2.46. After playing HoloLab Champions, where the student is the only one in the virtual laboratory, their confidence improved by -0.78 to a post-activity average of 1.68, slightly better than moderately agreeing with being comfortable figuring things out on their own.

#### Working in the Lab without a Procedure

An important skill for a developing scientist is an ability to design experiments to evaluate different hypotheses, often introductory classes provide students with exact instructions to follow and do not allow students to develop this set of skills. This question had the highest (least confidence) score of the questions related to working in the physical laboratory, 3.50 pre-activity. This section also showed the biggest change among the questions related to physical laboratory skills, with the post-activity score falling to 2.29, a change of -1.21, indicating a large increase in confidence working without a specific procedure.

#### Using a Volumetric Pipette

A volumetric pipette is an instrument used to very precisely measure small amounts of liquid. It involves fine motor skills and dexterity in a way that many other introductory techniques do not and is often frustrating for students as a result. Students initially reported less confidence with the pipette than with other volume measurement techniques,

pre-activity for pipette was 2.04 (1.82 for other volume measurements). A similar change in confidence was observed after participation in HoloLab Champions with the score for using a pipette dropping by 0.58 to 1.46 (similar to the drop seen for other volume techniques).

### Using a Bunsen Burner

Lighting a burner is not a complicated activity and many students will already have similar experiences lighting gas grills, blow torches, fireworks, etc. but the springing to life of the flame can be disconcerting to some. Students began very confident in lighting a burner, pre-activity at 1.39, but some of the students who were less than completely confident did lower their scores after participating in HoloLab Champions as the post-activity score dropped to 1.21, a change of -0.18.

## Playing HoloLab Champions was a positive experience.

None of the students involved in this study had played HoloLab Champions prior to participation, so the beginning score for this question was completely neutral, pre-activity 4.00. This was the highest pre-activity score, so it did have more potential to change in the positive direction, but the results were overwhelmingly positive, with the post activity score dropping by 2.61 points to a final post activity score of 1.39.

#### Discussion

Students clearly enjoyed the assignment to play HoloLab Champions, which is not something that can be said about many assignments. In addition to enjoying the assignment, student's self-evaluations showed an across the board improvement for all categories measured. The results clearly show that virtual reality can be an effective supplement to laboratory instruction, improving student's confidence in their ability to perform measurements, their ability to work in the laboratory without help, and to figure out how to design experiments on their own.

One caveat that should be considered is the access students have to the VR system. This is an activity, at present, that requires students to reserve time in the library to play HoloLab Champions and the available equipment affords only one player at a time (a reasonable time for a novice player to complete an experiment in the game is 45-60 minutes), as such this is an activity that must occur outside of normal class or laboratory hours and any assignment should

account for a enough time for all class members to be able to find time outside of their schedule to participate. There may be some benefit to students going to play in pairs, as the computer screen can allow a spectator to see what the player is seeing inside the VR headset and help with the experiment, but this minimizes students developing the ability to work and solve problems on their own.

#### Conclusion

HoloLab Champions has lived up to my expectations for the potential of virtual reality to be effective as a teaching tool for chemistry. To date, students have been universally positive about the experience from both educational and entertainment perspectives. Many students have sought to incorporate VR while engaging in other areas of their college life post introduction to the HoloLab Champions game. Increases in the use of VR technology should lead to the development of new and better educational applications to supplement your teaching and your students' learning.

#### References

- Brinson, J. R. (2015). Learning outcome achievement in non-traditional (virtual and remote) versus traditional (hands-on) laboratories: A review of the empirical research. *Computers & Education*. 87, 218-237. DOI: https://dx.doi.org/10.1016/j.comp.edu.2015.07.003
- Carpenetti, D. (2022). VR Labs: A Guide for Instructors to Use HoloLab Champions VR Game as a Laboratory Supplement. https://opennccc.nccommunitycolleges.edu/courseware/lesson/831/overview
- Duncan-Vaidya, E. A. and Stevenson, E. L. (2020). The Effectiveness of an Augmented Reality Head-Mounted Display in Learning Skull Anatomy. *Anatomical Science Education*. 14, 221-231. DOI: https://doi.org/10.1002/ase.1998
- Freeman, S., Eddy, S. L., McDonough, M., Smith, M. K., Okoroafor, N., Jordt, H., Wenderoth, M. P. (2014) Active learning increases student performance in science, engineering, and mathematics. *Proceedings of the National Academy of Sciences of the United States of America*. DOI: https://doi.org/10.1073/pnas.1319030111
- Georgiou, J., Dimitropoulos, K., Manitsaris, A., (2007). A Virtual Reality Laboratory for Distance Education in Chemistry. *International Journal of*

- Social and Human Sciences. 1, 306-313.
- Heradio, R., de la Torre, L., Galan, D., Cabrerizo, F. J., Herrera-Viedma, E., Dormido, S., (2016) Virtual and remote labs in education: A bibliometric analysis. *Computers & Education. 98*, 14-38. DOI: https://dx.doi.org/10.1016/j.comp.edu.2016.03.010
- Hofstein, A. (2004). The laboratory in chemical education: Thirty years of experience with developments, implementation, and research. *Chemical Education Research and Practice*, 5(3), 247-264. DOI: https://doi.org.10.1039/jpm10010014
- Hu-Au, E., Okita, S., (2021). Exploring Differences in Student Learning and Behavior Between Reallife and Virtual Reality Chemistry Laboratories. *Journal of Science Education and Technology.* 30, 862-876. DOI: https://doi.org.10.1007/s10956-021-09925-0
- Madathil, K. C. C., Frady, K. K., Gramopudhye, A. K., Bertrand, J., Hartley, R. S. (2016) Integrating Case Studies in an Online Asynchronous Learning Environment: An Empirical Study to Evaluate the Effect on the Perceived Community College Student Learning Outcomes and Engagement when Case Studies are Presented Using Virtual Reality. Papers from the American Society for Engineering Education's 123rd Annual Conference and Exposition. Paper ID#16374
- Meyer, O. A., Omdahl, M. K., Makransky, G. (2019). Investigating the effect of pre-training when learning through immersive virtual reality and video: A media and methods experiment. *Computers & Education. 140*, 103603. DOI: https://doi.org/10.106/j.compedu.2019.103603
- Reeves, S. M., Crippen, K. J. (2021). Virtual Laboratories in Undergraduate Science and Engineering Courses: A Systematic Review, 2009-2019. *Journal of Science Education and Technology, 30*(1), 16-30. DOI: https://doi.org/10.1007/s10956-020-09866-0
- Reeves, S. M., Crippen, K. J., McCray, E. D. (2021). The varied experience of undergraduate students learning chemistry in virtual laboratories. *Computers & Education*, 175, 104320. DOI: https://doi.org/10.1016/j.compedu.2021.104320
- Stanney, K. M., and Cohn. J. V. (2012). Virtual Environments. In G. Salvendy (Ed.), *The Handbook of human factors and Ergonomics*. DOI: https://doi.org/10.1002/9781118131350.ch36

Vasiliadou, R. (2020). Virtual laboratories during coronavirus (COVID-19) pandemic. Biochemistry and Molecular Biology Education: A Bimonthly Publication of the International Union of Biochemistry and Molecular Biology, 48(5), 482-483. DOI: https://doi.org/10.1002/bmb.21407

#### Author's Note

The author has no known conflicts of interest to disclose. Correspondence concerning this article should be addressed to Donald W. Carpenetti, Department of Math, Science, and Social Science, Craven Community College, 800 College Court, New Bern, NC 28562. Email: carpenettid@cravencc.edu.

Open Educational Resources (OER), No-cost Textbook
Alternatives, and Student Success

Jeffrey William Parsons, Ed.D.



#### **Abstract**

Textbook prices continue to increase, affecting the cost of higher education and disproportionately impacting students from low-income backgrounds and marginalized communities (Jenkins et al., 2020). This article provides a brief review of the pertinent literature on the impact of high textbook costs on student success metrics and the potential solution offered by Open Educational Resources (OER). High textbook costs are found to be a major source of stress for low-income students, affecting their performance in college classes (Collins et al., 2020). OER has the potential to address this issue by providing students free access to course materials from the beginning of the course. Most research studies indicate that students perform at least as well and sometimes better with OER materials than with traditional textbooks, although OER resulted in performance losses in a few studies (Hilton, 2016). Both students and faculty generally view OER materials favorably and feel the flexibility they provide allows faculty to better match the course materials to the course learning objectives (Fischer et al., 2015). Faculty have noted that switching to OER materials requires considerable time and effort to vet the materials and to create the supplementary materials that would have been provided by a traditional publisher. Nevertheless, many faculty who have designed and taught courses using OER materials would be willing to redesign other courses to utilize OER (Delimont et al., 2016)...

Keywords: Open Educational Resources, OER, textbook costs, textbook prices, equity, course rede-

sign, student success, successful completion rate, free textbooks, textbook alternatives

## Open Educational Resources (OER), No-cost Textbook Alternatives, and Student Success: A Literature Review

College education costs have increased significantly in recent years. Tuition, fees, and housing costs have increased exponentially, doubling the percentage of higher education costs paid out-of-pocket by students over the last 3 decades. Scholarships and government aid have not kept pace, resulting in tripling student debt between 2004 and 2012 (Martin et al., 2017). Textbook prices are one significant aspect of the rising cost of a college degree, with price increases that have outpaced the rate of inflation since at least the 1980s (Jenkins et al., 2020). On average, college students now pay over \$1,200 yearly for their textbooks (Cozart et al., 2021). In certain parts of the country, this exceeds the annual cost of community college tuition (Martin et al., 2017).

The high cost of textbooks can negatively affect student performance, retention, and completion. In one study, high textbook costs resulted in over half of the students failing to purchase a required textbook, and many students reported taking fewer courses because of textbook costs (Martin et al., 2017). Failure to purchase a textbook around which the course is designed likely results in lower grades or the need to repeat the course altogether (Nipa & Kermanshachi, 2020). The impact of textbook costs on student performance is magnified among those students with low family incomes, particularly those

This article is brought to you for free and open access by the North Carolina Community College Faculty Association @NCCCS. It has been accepted for inclusion in *North Carolina Community College Journal of Teaching Innovation* by an authorized editor of NCCCFA. For more information, please contact editor@ncccfa.org.

from historically marginalized communities (Jenkins et al., 2020).

Open Educational Resources (OER) are a potential solution to the increasing cost of textbooks, with the potential to help close equity gaps for those students who are most vulnerable (Nusbaum et al., 2020). OER consists of textbooks, e-books, and other digital media with open licenses permitting low or no-cost access, customization, and redistribution (Nkwenti & Abeywardena, 2019; Valentino, 2015). OER tends to lend itself to better customization by instructors and is often more up-to-date and relevant to local educational needs than books published pand the availability and quality of OER. Chief by traditional publishers (Cozart et al., 2021). Students and faculty favorably view OER's reduced cost and relevance (Fischer et al., 2015). Multiple studies have shown that student performance in many courses redesigned using OER has been equal to or better than performance in the same course using traditional textbooks (Cozart et al., 2021; Jenkins et al., 2020). However, other studies have shown no significant increase in student performance with OER, while a few studies have shown that student performance dropped with OER materials compared to traditional textbooks (Clinton & Khan, 2019; Smith et al., 2020). Large-scale OER course redesigns can be costly and time-consuming for colleges to undertake, so it is important to determine if they are effective.

The literature on the topics of high textbook costs, OER, and textbook-free courses has been extensive, particularly over the past 20 years. This review will explore the history of OER and consider its potential to address issues of equity and justice as they relate to high textbook costs. Maslow's theory of motivation and hierarchy of needs is applied to textbooks and course design as the theoretical framework for understanding the effect of OER on student performance. Literature on OER's impact on student performance and student and faculty perceptions of OER-based courses is also reviewed.

#### **Definition and History of OER**

The term Open Educational Resources (OER) was first coined in UNESCO's (2002) forum report on the Impact of Open Courseware for Higher Education in Developing Countries. The forum, convened in partnership with the William and Flora Hewlett Foundation and other non-profit and educational organizations, discussed the need for contextualized,

open resources that could serve the need for equitable, affordable, and relevant educational resources around the world (UNESCO, 2002). The forum recommended the following definition for OER: "The open provision of educational resources, enabled by information and communication technologies, for consultation, use, and adaptation by a community of users for non-commercial purposes" (UNESCO, 2002, p. 24).

### **OER Expansion**

Since then, numerous groups have worked to examong those groups has been the William and Flora Hewlett Foundation, which is frequently mentioned in the research literature (Choi & Carpenter, 2017; Clinton & Khan, 2019; Doan, 2017; Farrow et al., 2015; Fischer et al., 2015; Hassan et al., 2019; Jenkins et al., 2020; Jones & Nyland, 2020; Ozdemir & Hendricks, 2017; Phillips et al., 2021; Valentino, 2015). In addition, the Foundation has worked over the past 20 years to provide grants, resources, and leadership to the increased development of classroom technology, the creation of educational and distribution networks, and the development of OER content (DeBarger & Casserly, 2021). While proud of its accomplishments, the Foundation acknowledges that additional work is required to ensure that OER continues to become more diverse, inclusive, and accessible (DeBarger & Casserly, 2021).

The Achieving the Dream (AtD) organization launched a multi-year project in 2016 to research and expand the use of OER in community colleges nationwide. Funded by the William and Flora Hewlett Foundation, the Bill and Melinda Gates Foundation, Ascendium, and others, AtD sought "not only an opportunity to significantly scale OER but also try to answer important questions about the academic and economic impacts of broad institutional adoption of openly licensed materials" (Griffiths et al., 2020, p. iv). A 2020 AtD report found that "students who enrolled in OER courses earned significantly more credits with roughly the same cumulative GPA," with savings averaging "\$65 or more per OER course" (Griffiths et al., 2020, p. 42). Furthermore, AtD found that "instructors increasingly reported that use of OER prompted changes in pedagogy, suggesting that the OER programs can influence the quality of instruction as well as affordability" (Griffiths et al., 2020, p. 42).

#### Equity, Justice, and High Textbook Costs

Textbook prices are one significant aspect of the rising cost of a college degree, with price increases that have outpaced the inflation rate since at least the 1980s (Jenkins et al., 2020). On average, college students pay over \$1,200 yearly for their textbooks (Cozart et al., 2021). Collins et al. (2020) attribute the steep increases in textbook costs to the rising cost of healthcare and assert that similar factors are to blame. For example, students are required to purchase a product they did not have input in selecting and which was likely designed by a publisher with features geared primarily toward meeting the instructor's needs. Publishers are also updating textbook editions at an increasing rate, often with price increases associated with the new edition(Collins et al., 2020).

Furthermore, publishers often entice faculty members by bundling textbooks with supplemental resources like online access codes, workbooks, and study guides, increasing the total cost to the student. Faculty surveys indicate that less than half frequently use the bundled resources (Collins et al., 2020). Publishers have reacted by producing online textbooks to reduce the cost of printing and, therefore, the cost for the student. However, this is not without problems because the access typically expires after a year, and students are left without a tangible product to resell (Collins et al., 2020).

The increasingly prohibitive cost of textbooks is perceived to negatively impact student performance, retention, and completion. Martin et al. (2017) report on multiple studies of negative student perceptions of textbook prices, including one Florida study that found that high textbook costs prevented 63% of students from purchasing a required textbook. Over one third of students in the study took fewer courses than they wanted because of textbook costs. Cozart et al. (2021) suppose that high textbook costs could determine whether students choose to complete a course. Additionally, failure to purchase a textbook around which the course is designed likely results in lower grades or the need to repeat the course altogether (Nipa & Kermanshachi, 2020). The impact of textbook costs on student performance is magnified among those students with low family incomes, particularly those from historically marginalized communities (Jenkins et al., 2020). Students from marginalized communities were more likely to drop a class, register for fewer classes, or

not register at all because of high textbook costs (Nusbaum et al., 2020).

#### Theoretical Framework

Maslow's theory of motivation is relevant to the problem of high textbook costs and their negative impact on student success. Maslow's (2021) theory asserts that before higher needs like self-esteem and self-actualization can be met, a person must feel that their more basic physiological and safety needs have been satisfied. Physiological needs can include, among other things, food, water, sleep, and shelter. These are fundamental to life and can become all-consuming desires for the individual who is lacking or feels she may soon lack one of these needs (Maslow, 1943). Safety needs are harder to define but relate to having a sense of security, stability, and familiarity (Maslow, 1943).

#### **Basic Needs**

In an article published in the middle of the Covid-19 pandemic, Ansorger (2021) related the struggles of students from marginalized groups and those with financial difficulties to Maslow's motivational theory. She points out the stress of the pandemic resulted in the inability of many of these students "to attend to physical, mental and emotional health [and, therefore] these students are not going to be able to maintain focus in a remote setting" (Ansorger, 2021, p. 13). The same can be said for those students who struggle to purchase food for themselves, pay rent, or provide healthcare for their children. These basic needs override the need to purchase a costly textbook, even if it is a requirement for an online course. Students in this situation start their course significantly disadvantaged, not only because of their external situation but also because of a growing sense that they are unprepared and unable to succeed academically.

In a similar vein of thought, Milheim (2020) adapts Maslow's theory specifically to distance education and makes the acquisition of a textbook, class materials, and high-speed internet equivalent to Maslow's basic physiological needs category. Milheim's (2012) suggestion to address this issue is to have instructors provide "clear, concise checklists of essential items that should be obtained by students ahead of the date when classes are scheduled to begin" (p. 131). While this is a reasonable suggestion for some students, it does not solve the problem for students,

it does not solve the problem for students whose access to the textbook is limited by their access to financial resources. Milheim's argument does, however, indicate the importance of the textbook to the prospect of successful course completion.

#### Safety and Security

The need for a sense of safety and security—the second need in Maslow's hierarchy—also applies to textbook access. A sense of loss or impending loss is the greatest threat to security and, according to Milheim (2012), can affect a student's performance in an online course. The lack of textbook access and the potential for poor grades on assignments until a textbook is acquired can lead to a sense of uncertainty and impending failure. Even if the textbook is acquired before the course ends, the student is already behind, and the sense of loss could continue to plague the student's performance. "Predicting these issues and attending to them in advance of as well as during an online course can aid in mitigating negative student emotion and enhance[e] the [student] experience" (Milheim, 2012, p. 162).

### Maslow's Theory Applied at HBCUs

The application of Maslow's hierarchy to college student performance is further supported by comments made in the study by Collins et al. (2020) of OER textbook usage at Historically Black Colleges and Universities (HBCUs). According to the researchers, major concerns for HBCU students include affordability of and prompt access to course materials that are portable. The use of OER materials can "reduce the anxiety and frustration related to not being able to purchase course materials or having to make tough choices between academics and basic needs" (Collins et al., 2020, p. 115). The study also indicated that "OER use helped to reduce worry and stress [among students] related to the financial burden of course materials, while also improving their attention, participation in the course and confidence in their abilities" (Collins et al., 2020, p. 120). These same concerns and opportunities are likely applicable to other college students at non-HBCU institutions, particularly those from economically challenged backgrounds.

## Impact of OER and Textbook-free Courses on Student Performance

Multiple studies have shown that student perfor-

mance in many courses redesigned using Open Educational Resources has been equal to or better than performance in the same course using traditional textbooks (Cozart et al., 2021; Jenkins et al., 2020). However, other studies have shown no significant increase in student performance with OER, while a few studies have shown that student performance dropped with OER resources compared to traditional textbooks (Clinton & Khan, 2019; Smith et al., 2020).

#### **Focused Studies**

A study of a required teacher certification course at the University of Georgia found no statistically significant difference between end-of-course grades for students using OER versus those using a traditional textbook (Cozart et al., 2021). Researchers conducted the analysis using a standard t-test, with the results t(208) = -1.195, p = 0.233. The same study found no significant difference between failure and withdrawal rates for the two cohorts (Cozart et al., 2021). Cozart et al. (2021) concluded "that student outcomes in the OER condition ...were not negatively affected using OER, thus supporting the equal quality of OER to traditional textbooks" (p. 8).

A similar study of nearly 300 students in two introductory art class sections was conducted at Boise State University in Idaho, with approximately half the students in a section using a traditional textbook and half in a section using OER. The study compared the results of student responses to a Likertscale survey asking how often they utilized the textbook, with possible responses of always, most of the time, about half the time, sometimes, and never. The researchers found that students using OER were more likely to read their text than those in a course using a traditional textbook (Jones & Nyland, 2020). This determination was based on an evaluation of the survey results using a Wilcoxon Signed-Ranks Test (Z = -5.604, p < 0.001). Approximately 40% of students using the traditional textbook indicated they read the textbook "always" or "most of the time" compared to over 80% of students using the OER text. Surprisingly, even though students said they were more likely to read OER, there was still no statistically significant difference in the mean end -of-course grade as determined by a Welch Two Sample t-test, also known as a Welch unequal variances t-test (t - 1.011, p = 0.3129) (Jones & Nyland, 2020).

Choi and Carpenter's (2017) study of students in Human Factors and Ergonomics course sections at Georgia Tech also found no significant difference in end-of-course grades after the course was redesigned using OER. The study based its assessment on class grades from the midterm and final exams and the final course average. Data from courses taught in the two semesters before the redesign was collected and compared to data from 3 post-redesign semesters. The mean of final grades in the two semesters prior to the OER-based redesign were 90.45 (SD = 3.49) and 88.08 (SD = 4.18). For the three semesters following the OER-based redesign, the mean of final grades was  $88.54 \text{ (SD} = 4.39), 87.41 \text{ (SD} = 3.64),}$ and 88.48 (SD = 3.64). An unfortunate and significant shortfall in the published results is the study's lack of indication of the statistical tests used to determine the statistical significance of its results (Choi & Carpenter, 2017).

A smaller-scale study of students in American Government and Social Problems courses at a Texas HBCU compared exam grades and final grade distributions before and after the adoption of OER materials (Collins et al., 2020). Using t-test comparisons of exam scores in the Social Problems course, the study found that students using OER materials performed consistently higher on all four course exams than students using the traditional textbook. The tstatistic was 2.59 with p = 0.001 for a comparison of the average exam grades before and after the course was converted to use OER. Students in the OERbased section had an average score of 83 on the exams, compared to an average score of 77 in the section using a traditional textbook (Collins et al., 2020). In the American Government course, t-tests confirmed that students using OER materials performed better on the first two course exams than those using the traditional textbook and performed neither better nor worse on exams 3 and 4 (Collins et al., 2020). In both courses, the study used t-tests to confirm that students using OER materials were more likely to have final course grades of A or B and less likely to score a C or D. For the American Government course, the overall success rate increased from 73% to 81% once the course was redesigned using OER materials. In the Social Problems course, the success rate increase was even more dramatic, increasing from 68% to 86% (Collins et al., 2020). The study confirms that well-designed OER-based courses have the potential to make significant im-

provements in student performance.

#### **Broad-based Studies**

A wide-ranging study involving data from over 16,000 students by Fischer et al. (2015) looked at results from four different 4-year colleges and six different community colleges across the United States. Unlike the studies mentioned above, this study was not limited to students in a particular course or even a particular subject area. Instead, it looked at 15 different courses, including courses in business, math, biology, psychology, and English. It was also a more diverse study, with minority students making up 57.5% of the sample and female students making up 59.8% (Fischer et al., 2015). The study utilized propensity score matching to "create subsets of students who were statistically similar across...age, gender, and minority status" to "reduce variance associated with covariates" (Fischer et al., 2015, p. 165). In an introductory business course, students using traditional textbooks outperformed those with OER in both pass rates and overall grade distributions. Pass rates were analyzed with chisquare tests of independence, while overall grade distributions were analyzed using an Independent Samples t-test. Approximately two thirds of the courses analyzed showed no statistically significant differences in either of those metrics. Approximately one-third of the courses found an improvement in both the course pass rate and overall grade distribution after being converted to OER (Fischer et al., 2015). The study also found that students enrolled in OER-based courses took higher credit loads—"an indicator of student progress toward graduation" as determined using an analysis of covariance (ANCOVA; Fischer et al., 2015, p. 168). While the study is wide-ranging and provides a broad look at OER's potential to reduce textbook costs while supporting student success, a limitation of the report is its failure to provide the numerical results of its statistical analysis for some of the outcomes.

A meta-study of OER-related literature indicated that the use of OER generally results in either a slight improvement in student performance or the differences between OER and traditional textbooks are statistically insignificant (Hilton, 2016). Hilton, however, does report that students using OER in a particular business course received "on average almost a full grade lower than their peers" (Hilton, 2016, p. 579). Similarly, students in an "OER vers-

ion of [a] psychology course...received a half-grade lower for their final grade" compared to students using a traditional textbook" (Hilton, 2016, p. 579). It is clear from these studies that the impact of OER on student performance can vary from course to course and college to college. Whether or not the difference in results is dependent on the student population, faculty buy-in, the quality of the OER material, or a combination of factors remains to be determined.

A more recent study by Marsh et al. (2022) examined the impact of Open Education North Carolina (OENC) grants on the closing of equity gaps between White and non-White students. OENC grants were awarded to many colleges within the North Carolina Community College System (NCCCS) for the purpose of redesigning courses to use OER. Specifically, the study compared student success rates in introductory biology courses at colleges receiving OENC grants to the success rates at similar colleges that did not receive the grant (Marsh et al., 2022). Student success was defined as a final grade of C or above in the biology course. A propensity matching algorithm was used to "identify colleges [in the control group] that were most similar to the treatment group" (Marsh et al., 2022, p. 9). Equity gaps were measured in the pre-OENC year and the OENC implementation year. The study found that the average equity gap between White and Black students increased 3.06% in the control group but declined 6.00% in the treatment group. A two-sample t -test confirmed that the change in gaps was significant, with t = -2.265, p = 0.04 (Marsh et al., 2022). Additionally, the equity gap between White and Hispanic students increased 7.17% within the control group but decreased 5.17% in the treatment group. Again, a two-sample t-test found the gap difference to be statistically significant, with t = -2.192, p =0.05 (Marsh et al., 2022). The researchers concluded that while "OER implementation is not a panacea for student success gaps, it is a reasonably inexpensive approach to addressing equity issues at both the institutional level and at the classroom level" (Marsh et al., 2022, p. 11)

## Student Perceptions of OER and Textbook-free dents felt that OER materials helped them improve or increase their participation, interest, satisfaction,

OER is typically viewed favorably for cost and relevance by both students and faculty (Fischer et al., 2015). Cozart et al. (2021) performed a study of un-

dergraduate education students' perceptions of OER and no-cost course materials. Students in a course section using a traditional textbook were surveyed, as were students in a section of the same course that used OER materials. Open-ended questions on the survey were evaluated using a qualitative analysis (Cozart et al., 2021). Their findings suggest that many students in the study did not purchase a traditional textbook even when it was available, and some who did purchase it used it rarely (Cozart et al., 2021). Those students who used OER and other no-cost materials appreciated "the cost savings, easy access, and relevant content" the materials provided (Cozart et al., 2021, p. 13). While some students stated they would have preferred having a traditional textbook, the majority "felt a traditional textbook would not have helped them be more successful in the course" (Cozart et al., 2021, p. 13).

In a similar study, surveys were sent to over 2000 students enrolled in Fall 2014 OER-based courses at the University of Massachusetts to assess student perceptions of their courses (Delimont et al., 2016). The authors report that the majority of students supported this type of course design because of the cost reduction and used the OER material "somewhat more than a normal textbook" (Delimont et al., 2016, p. 6). A minority of students still supported OER-based courses but for different reasons like ease of access and the customization of resources to fit the course instead of the other way around (Delimont et al., 2016). Those few students who did not like the OER-based courses indicated that they would have preferred to have a physical textbook or preferred reading from paper rather than a screen. Less than 5% of respondents had technical issues with the resources or felt they were of lower quality than traditional textbooks (Delimont et al., 2016). Unfortunately, this study fails to consider the financial status of the student, which could greatly influence their appreciation of OER.

To determine the perception of HBCU students utilizing OER materials, an important study by Collins et al. (2020) used surveys containing quantitative and open-ended qualitative questions. Quantitative "yes-no" questions were used to determine if students felt that OER materials helped them improve or increase their participation, interest, satisfaction, performance, confidence, engagement, collaboration, and study habits related to the course. The results of the quantitative survey questions were over-

whelmingly one-sided, with nearly 90% of the more than 200 respondents indicating OER improved or increased each of the course-related categories mentioned above (Collins et al., 2020).

A single open-ended question in the study by Collins et al. (2020) provided an opportunity for qualitative responses focused on whether students felt that free course materials impacted their course mastery. Using content analysis, the researchers identified two main themes—mental health and course success—and also identified a few student critiques (Collins et al., 2020). Students indicated that the reduced stress resulting from free course resources allowed them to have improved attitudes toward the course and a greater interest in learning. Students also indicated that the ease of digitally accessing OER materials increased their learning by increasing their ability to study while on the go. Improvements in course success were also attributed to having access to course materials beginning with the first day of class, increasing students' confidence when interacting with the instructor and other classmates (Collins et al., 2020). Critiques of the OER-based courses included a lack of a physical textbook when desired, inconsistencies in phrasing between exam questions and the OER materials, and a perceived lack of depth in some parts of the OER textbooks (Collins et al., 2020).

## Faculty Perceptions of OER and Textbook-free Courses

OER tends to lend itself to better customization by instructors and is often more up-to-date and relevant to local educational needs than books published by traditional publishers (Cozart et al., 2021). Surveys of faculty in the study by Delimont et al. (2016) provided Likert-scale questions with open-ended follow-up questions. The study indicated that most

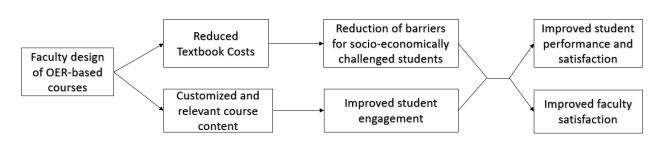
faculty felt students performed at least as well using OER as with traditional textbooks (Delimont et al., 2016). Many faculty also felt student learning was better because OER-based courses "were more up to date," and some felt more "confident referring students to [OERs] to learn outside of classroom time" (Delimont et al., 2016, p. 8). Interestingly, even though most faculty felt there was some difficulty in creating or adopting OER, the vast majority surveyed enjoyed teaching with OER because of the ability to customize the content (Delimont et al., 2016).

A survey of faculty who had been involved in stipend-funded OER course designs at Central Washington University was designed to determine the level of difficulty in identifying OER materials (Valentino & Hopkins, 2020). Of the 23 faculty completing the survey, most "found the materials easy to find, while only two rated the difficulty a 7 out of 10 (10 being most difficult)" (Valentino & Hopkins, 2020, p. 508). Sources of difficulty for these two respondents included the need to search through multiple Internet sites. Some of the most common materials utilized by faculty in OER redesigned courses included "open textbooks, articles from the library, open access articles, e-Books from the library, websites, and government sources" (Valentino & Hopkins, 2020, p. 508). The majority of the 23 faculty participating in the survey indicated they would consider redesigning another course using OER materials (n = 15) or that they had already participated in additional OER redesigns (n = 3; Valentino & Hopkins, 2020).

#### Synthesis Graphic

Figure 1 illustrates the expected relationship between the design of OER-based courses and positive outcomes for both students and faculty.

Figure 1
Expected Effects of OER-based Course Designs



### Gaps in the Literature

A study by Jenkins et al. (2020) indicates that additional research on the impact of OER on underserved and marginalized communities is needed, along with research on other social justice-informed approaches to course design and pedagogy. The research literature has also failed to focus specifically on the impact of OER and textbook-free course designs at rural community colleges. Most studies have taken place at larger, more urban institutions. Naturally, most OER studies are limited in scope to specific courses or specific types of institutions. As a result, additional studies are required to further determine the effectiveness of OER course designs on student success metrics.

#### Summary

This paper has presented a review of the scholarly literature related to the use of OER resources to address inequities by reducing textbook costs, improving student performance, and engaging faculty. The literature review has shown that textbook costs are a barrier to student success, particularly for students from traditionally marginalized and economically disadvantaged communities (Jenkins et al., 2020). OER has been proposed as a potential solution to this problem and has extensive support from organizations like Achieving the Dream and the William and Flora Hewlett Foundation. Maslow's theory of motivation and the accompanying hierarchy of needs has been shown to be a theoretical framework that relates the ready availability of course materials to student success metrics (Milheim, 2012). Previous research on the impact of OER-based courses on student performance has generally shown that students perform as well or better with OER materials compared to traditional textbooks. However, some studies indicate that OER-based courses could result in decreased student performance, indicating the need for further study (Hilton, 2016). Students and faculty generally have positive perceptions of OERbased courses, but there are still potential factors to be addressed. However, additional research on the impact of OER on underserved and marginalized communities is needed, along with research on the impact of OER on college students in rural communities.

#### References

- Ansorger, J. (2021). An analysis of education reforms and assessment in the core subjects using an adapted Maslow's hierarchy: Pre and post COVID-19. *Education Sciences*, *11*(8), 376. https://doi.org/10.3390/educsci11080376
- Choi, Y. M., & Carpenter, C. (2017). Evaluating the impact of open educational resources: A case study. Portal (Baltimore, Md.), 17(4), 685–693. https://doi.org/10.1353/pla.2017.0041
- Clinton, V., & Khan, S. (2019). Efficacy of open textbook adoption on learning performance and course withdrawal rates: A meta-analysis. *AERA Open, 5*(3), 233285841987221. https://doi.org/10.1177/2332858419872212
- Collins, M. E., Mitchell, N. K., & Nojeim, M. J. (2020). Removing the excuse: Using free course materials to improve student success in general studies courses. *Journal of Higher Education Theory and Practice*, 20(5), 110–125.
- Cozart, D., Horan, E. M., & Frome, G. (2021). Rethinking the traditional textbook: A case for open educational resources (OER) and no-cost learning materials. Teaching & Learning Inquiry, 9(2). https://doi.org/10.20343/teachlearningu.9.2.13
- DeBarger, A., & Casserly, C. (2021, October 7).

  Twenty years of Open Educational Resources:
  Building robust networks for innovation.

  Hewlett Foundation. https://hewlett.org/twenty-years-of-open-educational-resources-building-robust-networks-for-innovation/
- Delimont, N., Turtle, E. C., Bennett, A., Adhikari, K., & Lindshield, B. L. (2016). University students and faculty have positive perceptions of open/alternative resources and their utilization in a textbook replacement initiative. *Research in Learning Technology*, 24(1), 29920–13. https://doi.org/10.3402/rlt.v24.29920
- Doan, T. (2017). Why not OER? Portal (Baltimore, Md.), 17(4), 665–669. https://doi.org/10.1353/pla.2017.0039
- Farrow, R., Pitt, R., de los Arcos, B., Perryman, L.-A., Weller, M., & McAndrew, P. (2015). Impact of OER use on teaching and learning: Data from OER research hub (2013-2014). *British Journal of Educational Technology, 46*(5), 972–976. https://doi.org/10.1111/bjet.12310

- Fischer, L., Hilton, J., Robinson, T. J., & Wiley, D. A. (2015). A multi-institutional study of the impact of open textbook adoption on the learning outcomes of post-secondary students. Journal of Computing in Higher Education, 27(3), 159–172. https://doi.org/10.1007/s12528-015-9101-x
- Griffiths, R., Mislevy, J., Wang, S., Shear, L., Ball, A., & Desrochers, D. (2020). OER at scale: The academic and economic outcomes of Achieving the Dream's OER degree initiative. SRI International. https://achievingthedream.org/wp-content/ uploads/2022/05/ atd\_oer\_at\_scale\_academic\_economic\_outcome s\_feb\_2020.pdf
- Hassan, Q. K., Rahaman, K. R., Sumon, K. Z., & Dewan, A. (2019). Lessons learned from the development of open educational resources at post -secondary level in the field of environmental modelling: An exploratory study. Education Sciences, 9(2), 103. https://doi.org/10.3390/ educsci9020103
- Hilton, J. (2016). Open educational resources and college textbook choices: A review of research Research and Development, 64(4), 573–590. https:// doi.org/10.1007/s11423-016-9434-9
- Jenkins, J. J., Sánchez, L. A., Schraedley, M. A. K., Hannans, J., Navick, N., & Young, J. (2020). Textbook broke: Textbook affordability as a social justice issue. Journal of Interactive Media in Education, 2020(1), 3. https://doi.org/10.5334/ jime.549
- Jones, M., & Nyland, R. (2020). A case study in outcomes on open-source textbook adoption in an introduction to art class. Frontiers in Education, 5, 92. https://doi.org/10.3389/feduc.2020.00092
- Marsh, C. C., Marsh, J., & Chessnut, K. (2022). Exploring OER as a Mediator for Equity Gaps in Student Course Success Rates for Introductory Biology Courses in the NCCCS. NC Community College Journal of Teaching Innovation, 1(1), 6–17.
- Martin, M. T., Belikov, O. M., Hilton III, J., Wiley, D., & Fischer, L. (2017). Analysis of student and faculty perceptions of textbook costs in higher education. Open Praxis, 9(1), 79. https:// doi.org/10.5944/openpraxis.9.1.432
- Maslow, A. H. (1943). A theory of human motivation. Psychological Review, 50(4), 370–396.
- Milheim, K. L. (2012). Toward a better experience: Examining student needs in the online class-

- room through Maslow's hierarchy of needs model. MERLOT Journal of Online Learning and Teaching, 8(2), 159–171.
- Nipa, T. J., & Kermanshachi, S. (2020). Assessment of open educational resources (OER) developed in interactive learning environments. Education and Information Technologies, 25(4), 2521–2547. https://doi.org/10.1007/s10639-019-10081-7
- Nkwenti, M. N., & Abeywardena, I. S. (2019). OER mainstreaming in Cameroon: Perceptions and barriers. Open Praxis, 11(3), 289. https:// doi.org/10.5944/openpraxis.11.3.981
- Nusbaum, A. T., Cuttler, C., & Swindell, S. (2020). Open educational resources as a tool for educational equity: Evidence from an introductory psychology class. Frontiers in Education, 4, 152. https://doi.org/10.3389/feduc.2019.00152
- Ozdemir, O., & Hendricks, C. (2017). Instructor and student experiences with open textbooks, from the California open online library for education (Cool4Ed). Journal of Computing in Higher Education, 29(1), 98–113. https://doi.org/10.1007/ s12528-017-9138-0
- on efficacy and perceptions. Educational Technology Phillips, L. A., Piechota, S. J., & Fogle, C. D. (2021). Implementation and evaluation of open educational and free resources to replace textbook in program evaluation course. Scholarship of Teaching and Learning in Psychology, 7(3), 228–236. https:// doi.org/10.1037/stl0000253
  - Smith, N. D., Grimaldi, P. J., & Basu Mallick, D. (2020). Impact of zero cost books adoptions on student success at a large, urban community college. Frontiers in Education, 5, 579580. https:// doi.org/10.3389/feduc.2020.579580
  - UNESCO. (2002). Forum on the impact of open courseware for higher education in developing countries (Final report). https:// unesdoc.unesco.org/ark:/48223/pf0000128515
  - Valentino, M. (2015). Donor funded open educational resources: Making the case. The Bottom Line: Managing Library Finances, 28(4), 112–118. https://doi.org/10.1108/BL-07-2015-0016 Valentino, M., & Hopkins, G. (2020). No textbook cost general education pathway: An effort to increase retention at Central Washington Universi-ty. Reference Services Review, 48(3), 503-522. https://doi.org/10.1108/RSR-03-2020-0015

## Author's Note

The author has no known conflicts of interest to disclose. Correspondence concerning this article may be addressed to Jeffrey William Parsons, Ed.D., Stanly Community College, 141 College Drive, Albemarle, NC 28001. Email: jparsons7694@stanly.edu

School Choice or School's Choice for Early College High School Admissions

Kanika Bryant



## School Choice or School's Choice for Early College High School Admissions: A Literature Review

Over the past few decades, public K-16 education has seen a vast movement centered on school performance, accountability, and centralized standards. Schools are expected to perform well and operate under similar standards. Despite this push, many school reform measures, policies, and practices directly conflict with the expectation for incremental growth in student and school performance as well as standardized policies and regulations. This is directly evident in the differing state and local education policies for alternative high school programs.

A multitude of options for students to earn college credit while in high school have developed over the past few decades. These include traditional dual enrollment programs, advanced placement, International Baccalaureate (IB) courses, and other collegetransitional and transfer opportunities. The most radical on this spectrum are Early College High Schools (ECHSs), which are self-sustained high schools, dedicated to the efforts of offering collegelevel courses to high school students (Edmunds et al. 2020). ECHSs and community colleges or universities often partner to offer services. Longitudinal studies on the ECHS model indicate that most students who attend ECHSs are indeed obtaining college credit, and many are also able to graduate high school with an associate degree (Berger et al. 2014; Edmunds et al. 2020); however, what remains underexplored is how students get into these programs. These small high schools were designed to make higher education more accessible to

"underrepresented populations in higher education" such as ethnic minorities, students from low socioeconomic backgrounds, English language learners, and first-generation college students (Berger et. al, 2014). While the model has proven to be an effective reform method to offer historically marginalized students support resulting in degree completion, little is known about the specific policies, procedures, and practices that ECHS leaders and policy-makers use to recruit and select this target demographic that is historically underrepresented in higher education. This text provides a review of relevant literature on Early College High Schools and the known recruitment, selection, and admissions policies and procedures at the institutions, with a focus on North Carolina. Due to the lack of empirical research or standardization across institutions, further transparency, data collection, and research into these processes is recommended to conduct a critical policy analysis of current policies and procedures for recruiting and selecting students into these schools.

## School Choice and Secondary Education Reform

One of the most significant reform measures in public education is the establishment of school choice. Lubienski (2005) maintains that twenty-first century parents and students have become consumers of education as the educational policy environment continues to increase in marketization. In this market, every child is viewed as a financial investment. In most states, including North Carolina, parents and students can choose what they deem to be the best type of education from various options, in-

This article is brought to you for free and open access by the North Carolina Community College Faculty Association @NCCCS. It has been accepted for inclusion in *North Carolina Community College Journal of Teaching Innovation* by an authorized editor of NCCCFA. For more information, please contact editor@ncccfa.org.

cluding traditional public high schools, magnet or vocational programs, charter schools, early and middle colleges, or private high schools sometimes with the use of vouchers (Chubb & Moe, 1990). School choice proponents assert that specialized curricula, such as those that allow students to take college courses, benefit at-risk populations (Bast & Walberg, 2004; Chubb & Moe, 1990). Others underscore that such a choice comes with a penalty as these initiatives could increase segregation by race, class, ability, and language proficiency (Bifulco & Ladd, 2007; Böhlmark et al., 2016; Brown & Makris, 2018; Duncheon, 2020; Frankenberg et al., 2017). For example, many parents are more likely to select schools with students from similar racial and ethnic backgrounds as their own children (Duncheon, 2020).

Delving further into school choice scholarship, parents are identified as the most prominent stakeholders who find the school choice process to be both arduous and important with an impact on both their child and their own personal identity expression and political empowerment (Cucchiara & Horvat, 2014; Pattillo et al., 2014). Because of this, many parents employ resources such as school-choice consultants, residential relocation, and transportation, for favored school options (Phillipo et al. 2021). Hence, parents who are more educated, from higher income brackets, and who are more engaged in their child's formal education are more likely to know about and exercise the school choice options available (Duncheon, 2020).

Consequently, a phenomenon known as creamskimming has emerged wherein students who are higher-performing and higher-income are more largely represented in choice schools (Duncheon, 2020; Jabbar, 2015). Another potential cause of this is the bottom line. Choice schools, particularly early colleges, receive ratings, interest, and state or donor funding based on completion rates. Further, various factors contribute to the demographics of choice schools. Although public, charter, early college and most other alternative high schools cannot handselect students, each institution can alter the potential pool of applicants through their marketing strategies and location (Lubienski et al., 2009). Research on charter schools' marketing teams, for example, often send messages about race, culture, and academic achievement on their websites to signal fit in order to incentivize parents to select their institution (Wilson & Carlsen, 2016). Location is another factor that contributes to college choice as lower-income parents may not have access to resources to transport their students to schools that are not in close proximity to their home. Other factors that could impact a student's potential to apply to a school or be selected include access to information about the schools, ability to satisfactorily complete an application or application process, as well as auxiliary requirements including but not limited to a student's academic records and testing scores or interviews (Duncheon, 2020). For schools with mandated target populations such as ECHSs, the aforementioned challenges of school choice could influence who applies to enter these schools.

The American Institute of Research has contributed some of the most comprehensive long-term studies on ECHS programs. According to AIR's national data, despite the disadvantages, in 2013, ECHSs were successfully enrolling high percentages of their target demographic—minority and low-income students (American Institutes for Research, 2013). As a testament to this, Berger et al. (2010) contended that 70% of early college students were students of color and at least 59% receive free or reduced-price lunch. Based on this data, it would seem that Early College High Schools were indeed effective in their pursuit to ensure equitable access to higher education for the designated underserved populations. However, a look at North Carolina's ECHSs demographics for racialized minorities conveyed a different account. Drawing from data from the North Carolina Department of Public Instruction (NCDPI), the N.C. General Assembly reported that in the 2010-2011 school year, the racial and ethnic demographic totals for NC ECHSs were: 57.7% White, 23.6% Black, 10.8% Hispanic, 1.5% Native American, 2.6% Asian, and 3.7% two or more races ("North Carolina General Assembly Report", 2011). The 42.3% minority representation in NC ECHSs is a drastic difference from the 70% national average. Socioeconomic and other background factors were not measured.

The most recent General Assembly Report documenting student demographics for Cooperative Innovative High Schools during the 2021-2022 school year were: 48% White, 19% Hispanic, 17% Black, 8% unknown, 4% Asian, 3% Multiple, and 1% American Indian/Alaskan ("Report," 2023). According to the NCDPI, Cooperative Innovative High Schools "target students who are at risk of dropping out of high school, first-generation college students,

and/or students who would benefit from accelerated early colleges employ essays and interviews in the learning opportunities," ("North Carolina Department," 2021). Examples of such schools include ECHSs, middle colleges, and other specialized high schools. Although the demographics denote an increase in participation by racialized groups since 2011, the lack of data disaggregation by school type leaves it impossible to discern ECHS demographics specifically.

## ECHS Recruitment, Admissions, and Selection

Although general guidelines are mandated by the state of North Carolina for Early Colleges, much of the day-to-day functioning and policy-making is left to the school's leadership, governing board, and partner institution. North Carolina statutes do not specify eligibility requirements for students seeking admission to an early college; however, it does indicate that schools should target: "(1) High school students who are at risk of dropping out of school before attaining a high school diploma. (1a) High school students with parents who did not continue education beyond high school. (2) High school students who would benefit from accelerated academic instruction" (Cooperative Innovation High School Programs). Similarly, Jobs for the Future (2022) indicates that the ECHS initiative's commitment to serving underrepresented students is adapted into the governance policies of ECHSs at the state and district levels. Yet, Duncheon (2020) maintains that ECHS admission practices and target groups often vary greatly across localities. The scant literature available on the recruitment processes of these institutions indicates that ECHSs distribute materials to middle schools for recruitment (Muñoz et al., 2014). Subsequently, school counselors are able to disseminate information to parents and students (Fischetti et al., 2011).

In regard to selection, many ECHSs utilize a lottery system (Edmunds et al., 2012; North, 2011; Song & Zeiser, 2019; TEA, 2020). Before students are entered into the lottery, oftentimes, institutions utilize a screening process to determine eligibility. This process can vary between schools (Edmunds et al. 2020). While some districts have academic requirements for enrollment, others are prohibited from using academic records for enrollment purposes (TEA, 2020). It is assumed that this may be because often a student's previous academic records may not reflect their future abilities. Over 75% of

admissions process (Berger et al., 2010). Extant literature reveals variance in the characteristics of the ECHS student populations in comparison to the surrounding district's public high schools-with reported higher proportions of students of underrepresented students of color at ECHS (Berger et al., 2010). Inversely, other studies find that, on average, ECHS populations are similar to that of the surrounding districts when considering reduced or free lunch and race/ethnicity (Edmunds et al., 2017). Most notably though, ECHS students tend to have higher achievement rates than their non-ECHS peers (Berger et al., 2014; Duncheon, 2020; Edmunds et al., 2017).

The specific student populations that are targeted, how they are targeted, and why remains underexplored. Duncheon (2020) uses qualitative methods to explore the recruitment and selection practices at five ECHSs in the Texas borderlands. The findings from the study indicate that ECHS staff did invite all applicants from target groups; however, the admission processes favored students who were higher achievers academically and relatively privileged compared to other students in their district. The findings also suggest that ECHS staff had socially constructed ideals of the target populations based on their assumption of which students were more likely to succeed and were therefore deserving of admission.

#### Discussion/Implications

Because there are limited existing studies regarding the current recruitment or selection processes at North Carolina Early Colleges, researchers must rely on state eligibility requirements and individual ECHS resources. Concerning the former, there is a stark difference between eligibility requirements and selection. Selection procedures across many domains including hiring, politics, research and athletics often function under the assumption that the bestqualified candidate will be chosen (Merry & Arum, 2018). Within education, selection practices are often met with skepticism as traditional policies at elite higher education institutions, for example, often base acceptance on numerous non-academic factors including but not limited to legacy status, familial employment with the institution, athleticism, or the school's interest in managing gender, race, or ethnic composition (Fullinwider and Lichtenberg, 2004; Karabel, 1972; Merry & Arum, 2018). Such practices are, to many, unfair. Further, Merry and Arum

(2018) maintain that a number of factors contaminate the integrity of selection procedures including subjectivity and internal, unobservable elements that are considered in deliberation and final decision-making. Such elements include interviews without objective scoring rubrics or blind faculty recomendations. Selection policies for secondary schools are met with even more contention as these institutions and institutional leader's play a significant role in either expanding or restricting opportunities for youth (Merry & Arum, 2018). The same issues with selection are apparent in Duncheon (2020)'s findings within Texas early colleges.

The available literature on admissions and selection policy in Early College High Schools indicates a need for further inquiry and analysis. A large field of literature known as critical policy analysis aims to critique policy to aid in reform. Critical policy scholars look to review, make public, and challenge policies that are often the result of unquestioned ideological visions of what schools should do and who they should serve (Apple, 2019). The study of school admissions and selection practices through a critical frame may "allow for a more nuanced, holistic understanding of the complexities associated with education policy, from creation through implementation to evaluation" (Apple, 2019, p. 277).

At the forefront of all educational research should be the students. Based on the research, ECHSs may be falling short of the mark in attracting or selecting students from target populations. For many of these students, access to higher education is not only a means to access their desired career, but a gateway to disrupt generational poverty through economic mobility. Therefore, the acquisition of information and opportunity for many of these students is dire to their success. It is therefore imperative for further inquiry into outreach, admissions, and selection practices at ECHSs is warranted to further increase participation by historically marginalized groups thereby aligning with the mission and values of these institutions.

#### References

AIR. (2021). Evaluating the Impact of Early College High Schools. https://www.air.org/project/evaluating-impact-early-college-high-schools Apple, M. (2019). On Doing Critical Policy Analysis. *Educational Policy.* 33. 276-287. https://doi.org/10.1177/0895904818807307

- Bast, J. & Walberg, H. (2004). Can parents choose the best schools for their children?. *Economics of Education Review. 23. 431-440. https://doi.org/10.1016/j.econedurev.2003.08.003*
- Berger, A., Adelman, N., & Cole, S. (2010). The Early College High School Initiative: An overview of five evaluation years. *Peabody Journal of Education*, 85(3), 333-347. https://doi.org/10.1080/0161956X.2010.491697
- Berger, A., Turk-Bicaki, L., Garet, M., Knudson, J., & Hoshen, G. (2014). Early college, continued success: Early college high school initiative impact study. http://www.air.org/resource/early-college-continued-success-early-college-high-school-initiative-impact-study-2014
- Bifulco, R., & Ladd, H. F. (2007). School choice, racial segregation, and test-score gaps: Evidence from North Carolina's charter school program. *Journal of Policy Analysis and Management, 26*(1), 31-56. https://doi.org/10.1002/pam.20226
- Böhlmark, A., Holmlund, H., & Lindahl, M. (2016). Parental choice, neighbourhood segregation or cream skimming? An analysis of school segregation after a generalized choice reform. Journal of *Population Economics*, 29(4), 1155-1190. https://doi.org/10.1007/s00148-016-0595-y
- Brown, E., & Makris, M. V. (2018). A different type of charter school: In prestige charters, a rise in cachet equals a decline in access. *Journal of Education Policy*, 33(1), 85-117. https://doi.org/10.1080/02680939.2017.1341552
- Chubb, J. E., & Moe, T. M. (1990). *Politics, markets, and America's schools*. Brookings Institution Press.
- Cooperative Innovative High School Programs. § 115C-238.50 (2015). https://www.dpi.nc.gov/cihs-legislation-fall2015pdf/download? attachment
- Cucchiara, M. B. & Horvat, E. M. (2014). Choosing selves: The salience of parental identity in the school choice process. *Journal of Education Policy*, 29(4), 486-509, DOI: 10.1080/02680939.2013.849760
- Duncheon, J. (2020). What students do early college high schools serve? Unpacking social constructions of the target population. Education Policy Analysis Archives, 28(173), 1-26. https://doi.org/10.14507/epaa.28.4706
- Edmunds, J. A., Unlu, F., Furey, J., Glennie, E., & Arshavsky, N. (2020). What happens when you combine high school and college? The impact of

- the early college model on postsecondary performance and completion. Educational Evaluation and North, C. (2011). Designing STEM pathways Policy Analysis, 42(2), 257-278. https:// doi.org/10.3102/0162373720912249
- Fesler, L., Furey, J., & Arshavsky, N. (2017). Smoothing the transition to postsecondary education: The impact of the early college model. Journal of Research on Educational Effectiveness, 10, 297-325. https:// doi.org/10.1080/19345747.2016.1191574
- Fischetti, J., MacKain, S., & Smith, R. (2011). Mr. Watson, come here: The performance of early college students in their first year at the university and the challenge to P-16 education. Improving Schools, 14(1), 48-64. https:// doi.org/10.1177/1365480211398232
- Frankenberg, E., Kotok, S., Schafft, K., & Mann, B. (2017). Exploring school choice and the consequences for student racial segregation within Pennsylvania's charter school transfers. Education Policy Analysis Archives, 25, 1-34. https:// doi.org/10.14507/epaa.25.2601
- Fullinwider, R. K. & Lichtenberg, J. (2004). Leveling the playing field: Justice, politics, and college admissions. Rowman & Littlefield Publishers.
- Karabel, J. (1972). Community Colleges and Social Stratification. *Harvard Educational Review*, 42(4), 521–562. https://doi.org/10.17763/ haer.42.4.46m2826725l7k642
- Jabbar, H. (2015). "Every kid is money": Market competition and school leader strategy. Educational Evaluation and Policy Analysis, 37(4), 638-659. https:// doi.org/10.3102/0162373715577447
- Jobs for the Future. (2022). Early college. JFF. https://www.jff.org/what-we-do/impactstories/early-college/
- Lowenhaupt, R., Spillane, J. P., & Hallett, T. (2016). Education policy in leadership practice: "Accountability talk" in schools. Journal of School Leadership, 26(5), 783–810. https://doi-org.ncat. idm.oclc.org/10.1177/105268461602600503
- Lubienski, C. (2005). Public schools in marketized environments: Shifting incentives and unintended consequences of competition-based educational reforms. American Journal of Education, 111 (4), 464-486. https://doi.org/10.1086/431180
- Merry, M. S., & Arum, R. (2018). Can schools fairly select their students? Theory and Research in Education, 16(3), 330–350. https://

- doi.org/10.1177/1477878518801752
- through early college: Ohio's Metro Early College High School. Jobs for the Future.
- Edmunds, J. A., Unlu, F., Glennie, E., Bernstein, L., North Carolina Department of Public Instruction. (2021). NC cooperative innovative high schools and school districts. https://files.nc.gov/dpi/ documents/advancedlearning/cihs/2019-cihscurrent-list-of-schools.pdf
  - North Carolina General Assembly Report. (2011). Early college high school (Learn and Earn). https://ncleg.gov/documentsites/committees/ JLEOC/Reports%20Received/Archives/2011% 20Reports%20Received/Learn%20and%20Earn -Early%20College%20High%20Schools.pdf
  - Pattillo, M., Delale-O'Connor, L, & Butts, F. (2014). High-stakes choosing. In Choosing Homes, Choosing Schools edited by A. Lareau and K. Goyette. Russell Sage Foundation.
  - Phillippo, K., Griffin, B., Del Dotto, B.J., Lennix, C. & Tran, H. (2021). Seeing merit as a vehicle for opportunity and equity: Youth respond to school choice policy. The Urban Review, 53, 591-616. https://doi.org/10.1007/s11256-020-00590-y
  - Report to the North Carolina General Assembly. (2023). Career and College Promise. https:// www.dpi.nc.gov/documents/advancedlearning/ cihs/2022-ccp-cihs-annual-report/download? attachment
  - Texas Education Agency (TEA). (2020). The Early College High School Blueprint. https:// tea.texas.gov/sites/default/files/2020-21% 20ECHS\_Blueprint\_6.8.20\_Final.pdf
  - The UNC Policy Manual. Regulation for the establishment of an early college on UNC campuses. https:// www.northcarolina.edu/apps/policy/doc.php?id=199
  - Wilson, T. S., & Carlsen, R. L. (2016). School marketing as a sorting mechanism: A critical discourse analysis of charter school websites. Peabody Journal of Education, 91(1), 24-46. https://
    - doi.org/10.1080/0161956X.2016.1119564

#### Author's Note

The author has no known conflicts of interest to disclose. Correspondence concerning this article may be addressed to Kanika Bryant, 309 B Allman Building, Forsyth Technical Community College, 2100 Silas Creek Parkway, Winston-Salem, NC 27103. Email: kabryant@forsythtech.edu

Military-Friendliness Online Course Guide

Brittany Hochstaetter, Kate E. Jones, Kelly Markson, Marilyn E. Terrill, and Patrick Tribble



#### **Abstract**

The Military-Friendly Online Course Guide is a course evaluation and resource tool created to support instructors who wish to make their online and hybrid course experiences more inclusive of and successful for Veteran-affiliated students. The term "Veteran-Affiliated Students" will refer to students who are Veterans, active-duty, and eligible family members. The guide was designed by experienced elearning educators and Veterans program administrators using feedback from student Veterans and is organized into competency tiers.

Keywords: Online Course Design, Military-Friendliness, Veterans, Course Guide

#### Military-Friendliness Online Course Guide

As institutions increase emphasis on inclusiveness, consideration for the military-friendliness of higher ed campuses is increasing in parallel. "Military-Friendliness" has been defined as a campus that "... identifies and removes barriers to the educational goals of veterans, creates a smooth transition from military life to college life, provides information to veterans about available benefits and services, creates campus awareness of the student veteran population, and creates proactive support programs for student veterans based on their needs" (Vacchi & Berger, 2014, p. 124). In 2018 over 650,000 Veterans used their military benefits to enroll in institutions of higher learning (PNPI Factsheets 2021). Considering the complex factors of reacclimating to civilian life, Veterans who face returning to a classroom may require multi-faceted support. In their review of the

literature regarding student Veterans and community college experiences, researchers Evans, Hoggan, and Pellegrino write, "Considering the large influx of veteran students into the community college and their characteristics as a particularly vulnerable student population, there is a need to provide support mechanisms to help them succeed" (2015). Typically, support is associated with on campus Veteran centers. However, many community colleges lack the necessary infrastructure and funding to support centers (McBain, Kim, Cook, & Sneak, 2012). Even without institutional assistance, instructors who desire to support Veteran-affiliated students may choose to do so through their own course design. Features, links and/or announcements would signal empathy and understanding from instructor to student. Communication with faculty and all that might include has been shown to play a significant role in the ways Veteran students adjust to their campus (Rumann, Rivera, & Hernandez, 2011). Additionally, a syllabus that emphasizes belongingness and inclusion can be instrumental in creating connection between the instructor and students (Harnish & Bridges, 2011; Ishiyama & Hartlaub, 2002). Currently, there is no comprehensive guide that views the best practices of online course design through the lens of Veteran-affiliated students. This guide is designed to bridge that gap.

According to the book, Straight Talk for Veterans: A Guide to College Success, "As veterans transition their identities, accommodating spaces and services, along with supportive personal relationships enhance campus veteran-friendliness and by extension student veteran success" (Vacchi, et al, 2019, p. 163).

This article is brought to you for free and open access by the North Carolina Community College Faculty Association @NCCCS. It has been accepted for inclusion in *North Carolina Community College Journal of Teaching Innovation* by an authorized editor of NCCCFA. For more information, please contact editor@ncccfa.org.

Since the spring of 2020, colleges have been attuned to the necessity and ever-increasing demand for e-learning. Even traditionally seated courses have become hybrid or at least must be prepared to hold class online with little notice. Although militaryfriendliness is a worthy goal for any modality, it is most effective to design a guide for online courses in a post-pandemic culture. It is worth noting that Veteran-affiliated students may be more at risk in online environments potentially separated from their communities but may also find solace by being one step removed from the bias associated with military culture. As writer Ragan Sweeney writes, "Although the switch to online classes left many veterans without their close support systems, it also improved the higher education experience of others as they did not have to manage others' preconceived notions of their personalities and past" (HigherEdMilitary.com, 2022). This complex context requires additional consideration on the part of the instructor and institution.

## Using the Course Guide

The Military-Friendliness Online Course Guide has been organized into competency tiers. The tiers are designed to afford maximum flexibility for instructors interested in creating or enhancing militaryfriendliness in their classrooms. Within those tiers, instructors will find actions to take within their course(s) and associated resources/tools to support those actions. Actions range in ease of implementation from the insertion of military-friendly syllabus language to more in-depth application of inclusivity principles. There are a broad range of Veterans support services that may be available at a particular college or university. Some institutions have designated Veterans Programs departments, while others have limited support, focused primarily on processing educational benefits. This guide is intended to provide suggestions for creating a military-friendly learning environment regardless of the level of Veteran services available at an institution.

## Tier One: Commendable Military-Friendliness in Online Instruction

- Course includes a Military-Friendly Syllabus Statement
- Course includes Military-Friendly Student Resources and Links

## Tier Two: Advanced Military-Friendliness in Online Instruction

Course includes Tier One Military-Friendly elements, plus:

- Instructor shares Up-To-Date Events, Scholarships, and/or Affinity Group Meeting Information specific to Student Veterans/Veteran-Affiliated Students
- Instructor Records Synchronous Virtual Class Meetings for Delayed Viewing.
- Instructor has completed Professional Development focused on Supporting Veteran-Affiliated Students.

### Tier One Examples and Tools

Course includes a Military-Friendly Syllabus Statement
The syllabus is a foundational document in each
course- one that sets a tone and makes a first impression to the learner. While some institutions have
chosen to include statements regarding deployment
in their syllabi, an inclusive lens asks instructors to
consider how deployment might be only one part of
a Veteran-affiliated students' experience.

## Military-Friendly Syllabus Statements Often Include:

- A Supportive and Inclusive Tone
- Proper Terminology When Referring to Veteran-Affiliated Students
- Capitalization of the word "Veteran"
- Contact information for Campus Veteran Support Services
- Clarification on Course Attendance Policy and Potential Training/Deployment
- An Invitation to Contact the Instructor about Concerns or Extenuating Circumstances

## Examples of Military-Friendly Syllabus Language:

Some of the wording from the examples have been adapted from external sources such as the work of Lydia Wilkes in the Journal of Veterans Studies (2017) and "Tips for Making Your Syllabus Military-Friendly" (U.S. Dept. of Veteran's Affairs). Faculty should feel comfortable using the examples "as is" or adapting with the appropriate consultation of colleagues and/or administrators.

#### Example #1

Veterans and active-duty military personnel with special circumstances (e.g., upcoming deployments,

drill requirements, and/or disabilities) are welcomed and encouraged to communicate these, in advance, if possible, to the instructor.

### Example #2

To my Veteran-Affiliated Students, thank you for your service. Please contact me if your present or prior service makes it difficult for you to fulfill the requirements of this course. Examples may include, but are not limited to, upcoming deployments, drill requirements, family obligations, and disabilities. I am committed to assisting you on your academic journey.

### Example #3

If you are deployed, active-duty military, and/or National Guard personnel and require accommodation please contact me as soon as possible after the first day of class or as soon as possible after you receive notice of a deployment. Together, we can create a customized plan for any absences that will follow our policies and position you for success.

Course includes Military-Friendly Student Resources and Links

For faculty with on-campus Veteran services, it is important to share local resources as soon as possible. Some students experience long wait times for their benefits including textbooks. Connecting them with advocates early in the semester may be critical to their confidence in completing the course. For faculty without the advantage of on-campus services, student services specialists may be contacted to determine the nearest local resources.

## Types and Examples of Military-Friendly Student Resources

There are a multitude of resources available to Veteran-affiliated students that range in scope from local to national, each of which provides specific types of support Veteran-affiliated students may need. However, students may not be familiar with the range of resources. Therefore, listing and linking some key resources in the syllabus is an effective strategy for increasing awareness and access to these services.

#### Veterans Mental Health Resources

This type of resource focuses specifically on mental health care for Veteran-affiliated students.

• Example: Veterans Crisis Line Link: https://

www.veteranscrisisline.net/

#### Peer Networks

This type of resource focuses on the value of shared experiences by bringing Veteran-affiliated individuals together in various contexts.

- Example: Student Veterans of America Link: https://studentveterans.org/
- Example: Salute Veterans National Honor Society Link: https://salute.colostate.edu/
- Example: Veteran Wellness Alliance-Peer Networks Link: https://www.bushcenter.org/veteran-wellness/peer-networks.html

### **Veteran Job Support**

This type of resource provides job opportunities and skills training for Veteran-affiliated students.

- Example: U.S. Dept. of Labor- Veterans Services Link: https://www.dol.gov/agencies/vets/veterans/veterans-employment-services
- Example: Military Skills Translator Link: https://www.military.com/veteran-jobs/skills-translator?ESRC=welcome6.se

#### **National Resource Sites**

This type of resource provides timely information to Veteran-affiliated students across many areas, including national benefits, initiatives, and services.

- Example: U.S. Dept. Of Veterans Affairs Link: https://www.va.gov/
- Example: Gary Sinise Foundation's Honor Roll Name Wall for Veterans Link: https:// www.garysinisefoundation.org/honor-roll

#### **Local Resource Sites**

This type of resource provides information to Veteran-affiliated students that is specific to their geographic area.

- Example: American Legion Find a Post Link: https://mylegion.org/ PersonifyEbusiness/Find-a-Post
- Example: AMVETS- Find a Post Link: https:// www.amvets.org/find-a-post
- Example: Marine Corp League- Detachment Locator Link: http://www.mclnational.org/find -a-detachment.html

#### **Options for Providing Resource Links:**

Links may be hyperlinked within syllabus statement.

- Links may be organized within a "Student Support" section of the course LMS page.
  - Links may be listed (with description) as simple text.
  - Links may be organized in a more creative or visually pleasing fashion through collaborative cloud-based software programs such as Wakelet or Padlet.
  - Links and relevant information should follow Universal Design for Learning guidelines.

#### Tier Two Examples and Tools

Instructor shares Up-To-Date Events, Scholar-ships, and/or Affinity Group Meeting Information specifically for Veteran-Affiliated Students. While links to Veteran resources that "live" in the online course are the first step in sharing information specific to the Veteran-affiliated community, sharing current events and new opportunities shows a present and on-going commitment to military-friendliness.

## Examples of Seasonal Events and/or Opportunities to Share

- 9/11 Day of Service Events
- Campus Veterans Day and Memorial Day Events
- Conferences
  - *Example:* NatCon Link: https://web.cvent.com/event/796c176a-97bb-4de2-994e-c47592a4a4df/summary
- Military, Veteran, or Veteran-Affiliated Scholarship Opportunities

**Example:** AMVETS Scholarships Link: https://amvets.org/scholarships/Instructor Records Synchronous Virtual Class Meetings for Delayed Viewing.

One of the greatest challenges Student Veterans students face in synchronous online classes may be missed virtual meetings or class sessions due to training, deployment, or other life circumstances. Additionally, Student Veterans may be in a time zone that is incompatible with a scheduled class meeting time. Instructors are encouraged to record any virtual meetings or class sessions and post the links for students to review at their convenience.

#### Tools for Recording Virtual Class Meetings

- **Zoom** Link: http://support.zoom.us/hc/en-us/articles/360059781332-Getting-started-with-Recording
- *Skype* Link: https://www.skype.com/en/blogs/2018-09-call-recording/
- *MS Teams* Link: https:/ ssupport.microsoft.com/en-us/office/record-ameeting-in-teams-34dfbe7f-b07d-4a27-b4c6de62f1348c24

Instructor completes Professional Development focused on Supporting Military, Veteran, or Veteran -Affiliated Students.

Green Zone Training offers campus-specific training for faculty members who wish to better understand the military, Veteran, or Veteran-affiliated student experience. If Green Zone training is not available, other virtual courses are offered at no cost. Such courses assist educators in understanding terminology, culture, and designing and implementing optimal instructional strategies. Examining personal biases associated with Veteran-affiliated students and their experiences is an example of the higher-level training provided and can prove an invaluable tool in DEI efforts.

## **Professional Development Examples**

- Green Zone Training and Certification
- PsychArmor Institute Courses and Learning Badges Link: https://psycharmor.org/services
- ColumbiaX Course "Supporting Veteran Success in Higher Education." Link: https:// tinyurl.com/mr29xfu3

#### References

Harnisch, R., & Bridges, K. (2011). Effect of syllabus tone: students' perceptions of instructor and course. *Social Psychology Education*, 14, 319-330.

McBain, L., Kim, Y., Cook, B., & Snead, K. (2012). From soldier to student ll: Assessing campus programs for veterans and service members. (No. 2). Washington, DC: American Council on Education

Post Secondary National Policy Institute. (2021, November 9). Factsheets. PNPI. Retrieved March 27, 2023, from https://pnpi.org/veterans-in-highereducation/

Rumann, C., Rivera, M., & Hernandez, I. (2011). Student veterans and community colleges. *New* 

- Directions for Community Colleges, (155), 51–58.

  Student Veterans of America®. (2020, October 28).

  NVEST Student Veterans of America®. Retrieved March 27, 2023, from https://studentveterans.org/research/nvest/
- Sweeney, R. (2022, August 2). Understanding the Challenges of the Veteran Community Navigating Online Life. HigherEdMilitary. https://www.higheredmilitary.com/news/articleDisplay.cfm?ID=3138
- Vacchi, D.T., Berger, J.B. (2014). Student Veterans in Higher Education. In: Paulsen, M. (eds) Higher Education: Handbook of Theory and Research. Higher Education: Handbook of Theory and Research, vol 29. Springer, Dordrecht. https://doi.org/10.1007/978-94-017-8005-6\_3
- Vacchi, D., Jones, K., Wert, J., Fullerton, A., Young, S., Jones, S., Kirchner, M., Minnis, S. E., Phillips, G., & Diamond, A. (2019). *Straight Talk for Veterans: A Guide to College Success*. BookBaby.

- Wilkes, Lydia. (2017). An Earned Accommodation: Framing a Veterans Syllabus Statement for Resistant Faculty. *Journal of Veterans Studies*. 2. 113. 10.21061/jvs.32.
- U.S. Dept. of Veterans Affairs (n.d.). Tips for Making Your Syllabus Veteran Friendly. Retrieved March 28, 2023, from https://www.mentalhealth.va.gov/student-veteran/docs/VAM-061-VITAL-Tips-for-Making-your-Syllabus-Veteran-Friendly-1-0\_508.pdf

#### Authors' Note

The authors have no known conflicts of interest to disclose. Correspondence concerning this article may be addressed to Brittany Hochstaetter, Wake Technical Community College, 9101 Fayetteville Rd, Raleigh, NC 27603. Email: bwhochstaetter@waketech.edu

Taking Your Time: The Slow Professor by Maggie Berg and Barbara K. Seeber

Timarie Franco



# Taking Your Time: *The Slow Professor* by Maggie Berg and Barbara K. Seeber

As an educator and advisor, the amount of times that I have thought "There is just not enough time to get everything done!" are innumerable. Between grading, curriculum planning, personal research, and meeting student needs, it feels as if the work is never finished. Add in administrative duties, attending meetings, serving on committees...it's no wonder that instructors and professors report lack of time, and related issues such as burnout and increasing workload, to be one of the top issues affecting job satisfaction (Flaherty, 2022). In response, some may be tempted to turn to one of the many time management books on the market. Suggestions vary from accounting for every moment of your day using an hourly calendar, combining similar tasks, or standing up when people come to your office so you can politely usher them out before they overstay their welcome. While I'm certain these suggestions come from those with the best intentions, they are not always achievable or sustainable for the average faculty member. With that, how do professors meet all the expectations placed on them while keeping their sanity?

In their book *The Slow Professor* (2016), Berg and Seeber suggest these so-called time management strategies are a Bandaid: a short-term solution to a symptom of a larger issue. They propose the constant pressure felt by faculty to meet unending deadlines can be attributed to a larger problem present across the academy; the corporatization of higher education has led to extreme pressure on faculty and staff to be more productive, more effi-

cient, and more competitive. In turn, faculty are experiencing the burden of too many tasks and not enough time to complete them. Berg and Seeber assert this burden affects all other aspects of faculty life including teaching, research, and professional development. They propose the solution may lie in the slow professor approach. Inspired by the slow food movement, which was developed to counter the rising issues of prioritizing speed over quality in food production in the 1980's, The Slow Professor seeks to challenge the push for faculty to sacrifice their professional ethics and wellbeing for the benefit of corporate academia.

Each chapter of The Slow Professor discusses how the parameters placed on professors and instructors have negatively impacted their work as educators and proposes possible solutions to alleviate the burden they experience. Chapter One focuses on time management, suggesting that current methods often presented for improving time management fall short. It goes on to propose that professors acknowledge the systemic issues that stem from prioritizing speed over quality, and suggests several ways to disrupt the system. Chapter Two explores how pressure to overperform affects pedagogy, demonstrating the connection between professor stress and student dissatisfaction. Berg proposes specific suggestions for professors to address their emotions and get back to enjoying teaching by employing the tenets of the slow professor movement. Chapter Three delves into how professors are expected to conduct research in a culture that prioritizes studies that guarantee the most funding and produce the most "useful" re-

This article is brought to you for free and open access by the North Carolina Community College Faculty Association @NCCCS. It has been accepted for inclusion *North Carolina Community College Journal of Teaching Innovation* by an authorized editor of NCCCFA. For more information, please contact editor@ncccfa.org.

sults. Seeber proposes ways professors could fight back against this push and engage in a combination of self-care and thoughtful, deliberate research practices. Chapter Four closes out the book by observing how this corporatized culture has affected collegiality within higher education, and highlights that there is often an air of competition between colleagues as opposed to collaboration. The advice is light in this chapter, as creating community requires more than personal effort, but the authors provide some food for thought related to the slow professor tenets. The authors conclude with a demonstration of how they used said tenets in the creation of the book as a joint venture, and provide a hopeful endnote for those looking to embrace the slow professor movement.

While the authors do openly criticize the unattainable expectations placed on faculty through the corporatization of higher education, the experiences of marginalized faculty members are glaringly absent. Berg and Seeber do touch on the perceived benefits of tenured staff, indicating they experience benefits that others do not, as well as the gendered biases present within research and collegiality. While Berg and Seeber discuss the issues with exploiting nontenured faculty, staff, and graduate students, they stop short of critiquing the inequity experienced by professors of color, professors who identify as women, and professors who belong to the LGBTQIA+ community. These populations often carry the invisible burden of expectations from their departments and superiors that they will engage in diversity-based work such as special committees and student mentoring (Social Sciences Feminist Network Research Interest Group, 2017), adding to the already inflated workload. Should there be future editions, I believe it would be beneficial to explore the experiences of marginalized faculty more thoroughly. This would provide a full picture of how corporatization affects members of the academic community and suggest ways in which the system can be adjusted to better serve everyone, not just those who have the power and privilege to challenge it without fear of repercussion.

While this book is seven years old, its arguments are still pertinent to modern faculty. With the effects of the COVID-19 pandemic still looming, many faculty members report significantly reduced work-life balance and increased dissatisfaction with their performance in the workplace (McClure et al., 2023). The authors' comments regarding difficulties in pedagogy, including the move to online education and

virtual classrooms, are even more relevant today than they were at the time of the book's publication. With that being said, this quick read of just 90 pages may not propose failsafe methods of raging against the corporatized academic machine but it does provide a spark of hope. Challenging the systems we live and work in is intimidating, and often feels overwhelming or fruitless. It feels unlikely that we can change the capitalist drive to produce the best product (in this case education) with the least amount of time and resources, but The Slow Professor suggests that system-wide change is more possible if we engage in personal change. We may not always have the ability to decline a project or extend a deadline, but we can "...shift our thinking from 'what is wrong with us?' to 'what is wrong with the system?"' (p. 2), leading to the prioritization of ourselves, our practice, and our students.

#### References

Berg, M., & Seeber, B. K. (2016). The slow professor: Challenging the culture of speed in the academy. University of Toronto Press.

Flaherty, C. (2022). Calling it quits. Inside *Higher Ed.* https://www.insidehighered.com/news/2022/07/05/professors-are-leaving-academe-during-great-resignation

McClure, K. R., Salle, M.W., Ford, J., Gonzales,
L.D., Griffin, K., Jenkins, T., Marquez Kiyama,
J., Martinez, M. Martínez-Alemán, A.M., Miao,
S., Perez, R.J., & Porter, C.J. (2023). The Impact of COVID-19 on Faculty, Staff, and Students:
Using Research to Help Higher Education Heal through the Pandemic and Beyond. Association for the Study of Higher Education.

Social Sciences Feminist Network Research Interest Group. (2017). The Burden of Invisible Work in Academia: Social Inequalities and Time Use in Five University Departments. *Humboldt Journal of Social Relations*, 39, 228–245. http:// www.jstor.org/stable/90007882

#### Author's Note

The author has no known conflicts of interest to disclose. Correspondence concerning this article may be addressed to Timarie Franco, Central Carolina Community College, 1105 Kelly Drive. Sanford, NC 27330. Email: tfran108@cccc.edu



### The Journal of North Carolina Community Colleges

Volume 2 • Issue 2 • Spring 2023

#### Submit to our next issue of the North Carolina Community College Journal of Teaching Innovation

The vision of NCCCJTI is to provide publishing opportunities for NC community college faculty, staff, and those interested in pedagogical practices within NC community colleges. If you have manuscripts related to (but not limited to) Student Success and Retention, Pedagogical Practice, Dual Enrollment, Economic and Workforce Development, Campus Free Speech, Social Mobility Program Evaluation, Leadership, Discipline-focused Research, Lesson Plans, Opinion Pieces, Book Reviews, or Graduate Research Projects, please submit them to journal@ncccfa.org. Our next call for submissions closes on December 8, 2023. Submissions are reviewed by editors on a continuous basis in a double blind, peer reviewed fashion, so we encourage you to submit at any time.

#### Manuscripts are solicited in the following categories:

Research Papers (3000-6000 words)

Book Reviews (1000-1500 words)

Opinion Pieces (500-700 words)

Graduate Research (1000-2000 words)

Note: All manuscripts are to be prepared according to the Publication Manual of the American Psychological Association (APA), Seventh Edition, including title page, abstract, keywords, in-text citations, pagination, headings, tables, figures, and reference list. Tables and figures should be included as appendices. Title page, references, tables, and figures are not included in the word count.

If you have any questions, please contact Dr. Josh Howell, Editor-in-Chief, at journal@ncccfa.org.

## Follow us online!



ncccfa.org/nccciti



linkedin.com/company/ncccjti



facebook.com/ncccjti