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Currents in Teaching and Learning is a peer-reviewed, open-access electronic journal that fosters exchanges among teacher-scholars across the disciplines. Published twice a year since 2008, *Currents* seeks to improve teaching and learning in higher education with short reports on classroom practices as well as longer research and theoretical articles related to pedagogy.

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EDITORIAL

What We Make of What Students Make

—Riley McGuire and Cassandra Xavier

Signs are small measurable things, but interpretations are illimitable...

—George Eliot, *Middlemarch* (1871–72)

Dear *Currents in Teaching and Learning* readers,

If hallway chats among instructors are any indicator, anxieties about how to assess learning are eclipsing considerations about what to teach. The first quarter of the twenty-first century witnessed a surge in the development and adoption of so-called “alternative” grading practices—labor-based grading, specifications grading, ungrading—that interrogated the utility and equity of “traditional” assessment strategies. More recently, however, that momentum has not stalled so much as dispersed across a host of pedagogical concerns both familiar and novel: grade inflation, academic integrity, the use of generative artificial intelligence, workplace preparation—not to mention the *raison d’être* of higher education.

The resulting cross-disciplinary furor over assessment has prompted a flurry of course redesigns. At its finest, this work has entailed interrogating what we want students to gain from our respective fields and how best to reflect those aims in our methods of evaluation. Is our goal to impart information? Cultivate skills? Shepherd research? Ready them for the professional world? Help them grow as individuals and community members? Some combination? At its most realistic, our contemporary assessment reckoning has involved tweaking pre-existing assignments to either lean into or retreat from technology, to opt for LLMs or blue books. Other times, it has simply meant trying something new and hoping for the best.

Unsurprisingly, neither revising nor experimenting are without their challenges.

For one, a renewed emphasis on process and routine in-class writing and testing has shown promise in making authentic student thinking palpable, but also risks establishing a culture of over-assessment (Rowse, 2025), one that increases the workload for students and faculty alike. For another, many instructors are finding themselves assigning work they have neither experience nor training in evaluating. In some cases, as we seek to revamp our teaching, we are grading experiential learning or oral examinations or other assessments that we never encountered as students.

Of course, this is only the latest drop on the roller coaster of assessment familiar to all educators. I still remember the exhilaration I felt over eight years ago while reviewing a student submission for an open-ended final project in the first class I taught, a literature seminar focused on disability studies. The student wrote and illustrated an original children’s book called *Can I Play? A Book about Inclusion and Access (and Cats)*. It lived up to its subtitle, telling the story of a colorful cast of felines learning to respect each other’s different ways of moving, communicating, and thinking. The narrative was written in the Roman alphabet and embossed in braille. The student provided image descriptions of each illustration. She included both an audio recording of the story and a video of her signing it in American Sign Language. The book itself featured a built-in mini sandbox, a key location in the story, for sensory engagement. The goal was to ensure there were multiple ways to interact with the narrative: visually, aurally, and haptically. In short, it was an accessible book about accessibility. I remember, too, a few markedly less thoughtful submissions that tempered the joy of reading *Can I Play?* And so the ride continues. Whenever demoralizing student assignments begin to outweigh thrilling ones, the scholarship of teaching and learning

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offers both solidarity and suggestions for how to tip the balance toward the latter.

This ebb and flow reflects assessment's central difficulty. At its core, assessment is an act of translation: of rendering effort, knowledge, skill, and other qualities into abstracted numbers and letters. As such, it is a durably imperfect practice in need of routine reconsideration. There are productive insights about student evaluation within the following seven articles, including those not explicitly focused on assessment. Collectively, they remind us that assessment is also a triadic relationship among instructor, student, and course materials, a relationship buoyed by the important though challenging care work performed by faculty (Kimmel & Krile) and nuanced by strategies that invite students to co-curate their learning (Dwivedi). These relationships can also extend beyond the immediate classroom, as some of the most meaningful assignments emerge when students are invited to engage in research projects (Nelsen et al.) or work with international collaborators (Szecsi et al.).

Such outward-facing forms of assessment are especially timely in light of a report released just days ago by the Massachusetts Institute of Technology on AI use in higher education. The report guides faculty away from the often-futile pursuit of "AI-proof" assignments and instead toward other strategies, including the recommendation that "instructors need to increase the role of experiential and project-based learning" in their courses (Ad Hoc Committee on AI Use, 2026, p. 12). Those seeking models of how to do this work well in the classroom, on campus, and within the broader community can find instructive examples in the pages that follow (Nielsen; Caola & Jenkins; Waity & Vanderminden). Taken together, the contributors remind us that assessment is only a piece, albeit a crucial one, of the holistic project of teaching; as Clay Shirky (2025) puts it, "While the output of any given *course* is student assignments—papers, exams, research projects, and so on—the *product* of that course is student experience."

Issue 18.1 begins with Krista M. Kimmel and Mary Jo Krile's "Caring after COVID: Faculty Perceptions of Care Toward Students in the Post-Pandemic Climate," which uses interviews with faculty across disciplines to investigate their perspectives on the practice of caring for students. Kimmel and Krile examine how instructors recognize care as essential to building relationships with students and, in turn, helping them achieve their learning goals. They find that faculty view these relationships as necessarily reciprocal: it is professors' responsibility to make themselves accessible and curious, and students' job to communicate and put in the work. Interviewees note that after the COVID-19 pandemic, students seem to have greater needs than before, both emotionally and academically—and that it can be difficult for faculty to meet those needs while also caring for themselves. Kimmel and Krile conclude that institutions need to provide instructors with more support, including professional development and other resources, to address these and related challenges.

Amitabh Vikram Dwivedi discusses one route for establishing reciprocally beneficial relationships between faculty and students: curricular collaboration. In "The Negative Space Syllabus: Inverting Course Design to Promote Autonomy and Collaborative Learning," he presents a method for organizing courses via the Negative Space Syllabus (NSS). Dwivedi aims to reinvigorate student investment in learning by leaving negative space in a syllabus, thereby granting students the agency to decide collaboratively on certain readings, assignments, activities, and assessments. He discusses the challenges and opportunities presented by the NSS, wherein time constraints and the need for administrative buy-in are counterbalanced by enhanced learning outcomes and student engagement. Dwivedi also provides tools and resources for facilitating students' democratic selection process, as well as guidance on implementation across disciplines.

Bolstering student engagement is also central to "Librarians Igniting Research Journeys: A First-Year Experience Course on Undergraduate

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Research” by Kat Nelsen, Stephanie Sparrow, Molly Bostrom, Kate Peterson, Lacie McMillin, and Kim Clarke. The authors outline an existing first-year course focused on giving students an early start with faculty-sponsored research. Designed and taught by librarians at their institution, the course is meant to both teach students research skills in the process of designing a project (identifying a topic, narrowing its scope, formulating effective research questions, and presenting findings) and to encourage them to reach out to faculty to sponsor these projects. The authors argue that librarian instruction helps students and faculty make otherwise elusive connections while demystifying the research process for first-year students.

Tunde Szecsi, Debra Giambo, Marianela Rivera, and Flavia Stara move us from intracampus to intercampus partnerships in their investigation of collaborative online international learning (COIL). Their article “Meaning-Making about a Sustainable Society through Collaborative Online International Learning (COIL) Projects in Higher Education” discusses a COIL project that connected students in Florida, United States, with students in Marche, Italy. The project paired students from the two countries and asked them to create a shared presentation discussing a social issue important to each partner. The authors found that hearing their partners’ perspectives deepened and broadened students’ understanding of cross-cultural social issues, while the use of narrative, visual, and auditory modalities further enriched their learning.

In her article “Synthesizing Project-Based Learning and Universal Design for Learning to Enhance Student Success: A Review and Reflection,” Danielle Nielsen discusses how the combination of project-based learning (PjBL) and Universal Design for Learning (UDL) can enable active learning, build metacognition, and empower students by involving them in the project-design process. As an example, Nielsen offers an open-ended final assignment for a literature course in which students choose their own project format rather than follow a prescribed one. Among the student-designed

projects were a comparison of course texts with various musicals, a fantasy baseball team composed of characters from the texts, and a role-play legal defense of “misunderstood characters.” Nielsen notes that the connection between students’ interests and course material is central to the effective synthesis of PjBL and UDL.

Branching out into their campus community, Lindsey Caola and Isabelle Jenkins designed a community-based learning model described in “Cultivating Connection: On-Campus Community-Based Learning (CBL) Projects.” They sought to address two things students often report lacking: job readiness and a sense of belonging. By working with their own college as a community partner, Caola and Jenkins argue that students are able to make a tangible impact while engaging more deeply with their institution and preparing for life after graduation. The project paired students with campus offices ranging from Student Wellness to the AI Task Force and asked them to perform meaningful work, including collecting student feedback on various initiatives, providing their own input, and assisting understaffed departments. Students and campus partners found the project mutually beneficial, and Caola and Jenkins provide a range of materials for others to craft CBL projects on their own campuses.

In a related vein, “Community-Engaged Learning for Student Success: Strategies for Implementation” closes the issue by positioning community-engaged learning (CEL) as a method to empower students academically and professionally. Approaching CEL as a combination of undergraduate research and community engagement, Julia Waity and Jennifer Vanderminden describe three different avenues for implementation: in an individual course, throughout the curriculum, and in a lab setting. They helpfully enumerate the affordances and limitations of each so instructors can determine which model best suits their circumstances based on time constraints, scale and duration of potential projects, relationships with off-campus partners, administrative support, student interest, and other factors. Across the three

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models, Waity and Vanderminden found that CEL opportunities allowed students to develop research skills, work with faculty and community partners, and join cohorts grappling with shared projects.

I'd be remiss not to acknowledge my fantastic collaborators who make editing *Currents* both possible and pleasurable. Julie Habjan Boisselle's administrative dexterity and interpersonal generosity are boundless; thank you, in particular, for the recent walk and talk and for surfacing assessment as this editorial's focus. The behind-the-scenes support of Drs. Hank Theriault, Jamie Remillard, Noah Dion, and the members of the *Currents* Operations Advisory Committee is much appreciated. Shawn Needham not only designed this issue but also ensured it would be accessible to folks using assistive technologies to read it. Our peer reviewers continue to enrich the journal through their acuity. My thanks to the dynamic duo of recent WSU graduates, Caroline Lacy and Andrew Winston, for their help. It's been a particular joy working with student intern Cassandra Xavier over the last several months: to enumerate her talents fully would require a bonus issue of the journal. Lastly, I'm immensely grateful to have Dr. Hardeep Sidhu as a colleague. He was an invaluable partner in completing this issue and, luckily for *Currents*, will serve as interim editor while I'm on sabbatical. I look forward to seeing the journal thrive under his deft guidance.

Happy reading,



Riley McGuire

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ARTICLE

Caring After COVID: Faculty Perceptions of Care Toward Students in the Post-Pandemic Climate

—Krista M. Kimmel and Mary Jo Krile

Krista M. Kimmel, Eastern Kentucky University, krista.kimmel@eku.edu

Mary Jo Krile, Eastern Kentucky University, maryjo.krile@eku.edu

Abstract

Prior research demonstrates that instructors' care toward students has a meaningful influence on students' success. However, as higher education navigates an ever-evolving climate following the COVID-19 pandemic, how instructors perceive and express caring behaviors merit further study. Employing Noddings's ethic of care framework, this article aims to explore how college instructors understand and practice care toward students in the aftermath of the COVID-19 pandemic. The findings from phenomenological analysis of interview data reveal that instructors conceptualize care as a negotiated relationship between teacher and student, which entails significant emotional labor. Findings further indicate that the exceptional needs of the current college student and often-demoralizing campus climates complicate the practice of providing care. Implications for both faculty and higher education administrators are discussed.

Keywords:

teacher-student relationship, ethic of care, COVID-19 pandemic, college faculty

In the early 1980s, care ethics began to emerge as a moral philosophy, with scholars Nel Noddings (1984) and Carol Gilligan (1982) publishing seminal works on caring. Interest in care ethics has grown substantially since then, and care ethics is now studied across a variety of contexts, including philosophy, education, political science, nursing, and business (Noddings, 2012). Within higher education, research shows that instructors' demonstrations of care toward their students have a positive influence on student learning (Guzzardo et al., 2021; Miller & Mills, 2019). Furthermore, scholars have suggested that instructor caring behaviors are crucial in the development of instructor-student relationships (Strachan, 2020). Such relationships are essential components of the college experience and critical to student success (Felten & Lambert, 2020).

The COVID-19 pandemic highlighted how instructors' caring behaviors were instrumental in supporting students during an unprecedented time (Graham et al., 2022). Despite the acknowledged significance of instructor care in higher education, few studies have investigated care from the instructor's perspective. In addition, much of the extant scholarship on instructor caring either originated in disciplines traditionally associated with care, such as nursing (Post et al., 2017; Sitzman, 2016), or was conducted prior to the COVID-19 pandemic (Mariskind, 2014).

Employing phenomenological inquiry, the present study aims to address these gaps in the literature by exploring how instructors from varied disciplines perceive and conceptualize their own expressions of care. Through this

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investigation, a more robust understanding of care in the post-pandemic climate emerges.

Literature Review

Although teacher caring behaviors are widely explored in the P-12 literature, research on care in higher education is limited (Anderson et al., 2020). However, scholarly interest in care has grown in recent years, with an emphasis on the role of care in fostering instructor-student interactions (Strachan, 2020). During the pandemic, researchers explored student perceptions of instructor caring behaviors (Graham et al., 2022; Hensley et al., 2022), as well as the emotional stress experienced by faculty at the time (Ray et al., 2023). As academia continues to navigate the post-pandemic era, instructor caring behaviors will likely attract further scholarly attention.

Care in Higher Education

A majority of the scholarship on care in higher education explores students' perceptions of instructor caring behavior. Specific instructor behaviors, such as verbal and nonverbal immediacy, self-disclosure, and clarity, have been associated with teacher caring (Comadena et al., 2007; Teven, 2001; Teven & Monte, 2008). Additionally, the literature suggests that students recognize when their teachers care for them and for the practice of teaching itself (Anderson et al., 2020; Miller & Mills, 2019; Therrell & Dunneback, 2015).

The link between teacher caring and multiple positive student outcomes has been well established. For example, Therrell and Dunneback (2015) found that teachers' care and enthusiasm were the two most important factors in motivating students, claiming that "students want to feel cared about, and they want to feel that what they learn is worth caring about" (p. 58). Similarly, Dickinson and Kreitmair (2021) reported that students were more likely to attend class and expect higher grades when they perceived that their instructors cared about them.

Challenges

The COVID-19 pandemic brought unprecedented challenges to higher education, with instruction shifting to online or hybrid modes of delivery, an abrupt transition that resulted in significant stress for instructors and students alike (Hensley et al., 2022). The pandemic exacerbated existing feelings of burnout among faculty (McMurtie, 2020; Roos & Borkoski, 2021), while students struggled with financial burdens, time management challenges, and general anxiety (Hendrickson et al., 2021). One survey revealed that 87% of faculty members believed students' mental health "significantly worsened" or "worsened" during COVID-19, and a fifth reported that responding to students' emotional needs had taken a toll on their own mental health (Healthy Minds Network, 2022). In a review of the literature on college students' mental health, Li and colleagues (2022) found that the prevalence of depression among college students globally was 33.6%, while the prevalence of anxiety was 39% (pp. 1226-1227). In addition, students are entering college less academically prepared. For example, recent data from the National Assessment of Education Progress indicated that 45% of high school seniors scored below basic proficiency in math, and 32% scored below basic proficiency in reading (Cochran, 2025). These figures were the lowest since 2005 and 1992, respectively. Collectively, these findings demonstrate the need for the expression of care to be analyzed in a post-COVID climate.

College Instructors' Conceptualizations of Care

Current scholarship on faculty members' perceptions of their own caring behavior is limited. The extant research examines care in online contexts (Sitzman, 2016), explores differences in caring approaches by gender (Mariskind, 2014), or investigates specific disciplinary experiences such as nursing (Jones et al., 2020). However, faculty perspectives from varying disciplines and institutional types are necessary for enhanced understanding of instructors' perceptions of their own caring behavior (Walker & Gleaves, 2016). The present study contributes to the literature by considering

Caring After COVID *continued*

more diverse disciplinary viewpoints. In addition, this research offers insight into faculty members' expressions of care in the ever-evolving, post-pandemic climate.

Theoretical Framework

Philosopher and educator Nel Noddings has written extensively on the phenomenon of human caring behaviors, particularly as care relates to teaching (Noddings, 2005, 2013, 2014). The underlying premise of Noddings's work is that caring occurs within a relationship between the one-caring and the cared-for. Noddings (2005) explained that the one-caring must exhibit "engrossment," or attentiveness to another's needs, and "motivational displacement, the sense that our motive energy is flowing toward others and their projects" (p. 16). Engaging in engrossment and motivational displacement enables the one-caring to be "seized by the needs of another" (Noddings, 2005, p. 16). Noddings claimed further that both the one-caring (teacher) and the cared-for (student) must mutually contribute to the relationship and that the roles are not "permanent labels" (p. 17). Rather, the one-caring and the cared-for acknowledge each other and may trade roles if circumstances warrant.

A fundamental assertion of Noddings's work is that all human beings wish to be cared for. From this desire, she argued, human beings practice natural caring, defined as "situations where we act on behalf of the other because we want to do so" (Noddings, 2013, p. 79). However, there are many instances in which individuals are not compelled to care, including within educational contexts. When natural caring is not possible, Noddings claimed we must summon the ethic of caring. Ethical caring requires recognition of when we ought to care, even if the natural inclination is absent. To achieve ethical caring, we must return to our own memories of caring and being cared for, utilizing those moments as a "guide" for our comportment (p. 80). Noddings argued that by calling upon these memories of caring, we recognize the value of human caring as the most basic form of human relatedness.

Method

This study aimed to highlight how college faculty conceptualize and express care for their students post-pandemic. As this study was exploratory in nature, qualitative methodology was selected to provide an enhanced perspective of instructors' caring behaviors. More specifically, a phenomenological approach was employed to "deeply understand a phenomenon's fundamental dimensions based on the inner essence and structure of participants' lived experiences" (Urcia, 2021, p. 1). As a method, phenomenology seeks to produce "in-depth descriptions" of the phenomenon (Yuksel & Yildirim, 2015, p. 1). To achieve the study's aim, the following research questions were posed:

1. How do college instructors conceptualize expressions of care toward students?
2. In the aftermath of the COVID-19 pandemic, what challenges do college instructors face when demonstrating care to their students?

Sampling and Participants

This research was conducted at a midsized, public, regional university in the southeastern United States. For selection in this study, participants were required to have full- or part-time faculty status at this university. Following approval from the researchers' Institutional Review Board, email communication was distributed to the university's department chairs, deans, and other campus leaders to assist with identifying potential participants for the research. Purposeful sampling was employed for this study to ensure that broad disciplinary perspectives were represented in the research. As Patton (2002) explained,

The logic and power of purposeful sampling lie in selecting information-rich cases for study in depth. Information-rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the inquiry.... (p. 232)

Caring After COVID *continued*

As the current literature lacks instructors' perspectives from diverse disciplines, participants were chosen to represent each academic college. Given the concentration of caring literature in fields such as nursing and education, the authors intentionally sought broader representation across academic disciplines. This study adhered to Gentles and colleagues' (2015) recommendation that a phenomenological study should include a minimum of 10, but not more than 30, participants. As such, 12 faculty members were interviewed for this research. The participants' teaching disciplines included English (two), criminal justice (two), history, public health, Spanish, statistics, business, social work, nursing, and education. To ensure the anonymity of participants, pseudonyms and gender-neutral pronouns are used throughout this manuscript (see Table 1).

The data source for this study was composed of one-on-one, semi-structured interviews with college faculty. Eatough and Smith (2017) noted that semi-structured interviews are "by far the most common way of collecting data" for phenomenological analysis (p. 199). Interviews were conducted in person or via video conferencing technology (i.e., Zoom)

and recorded on a hand-held device. General inquiries about the participants' teaching and academic background were used as icebreaker questions and to build rapport with the participants (Orcher, 2014).

Analysis

To prepare for analysis, interview data were transcribed with the software, Sonix. The primary researcher also completed and reviewed handwritten notes immediately following each interview (Orcher, 2014).

Initially, the primary researcher reviewed the handwritten notes and each transcription, searching for common themes and repeated words and phrases (Alase, 2017). Each transcript was reviewed multiple times, allowing opportunity for additional insights to emerge with each subsequent review (Smith & Osborn, 2007). Next, the primary researcher identified significant statements within the data. Significant statements are defined as words, groups of words, or passages that are given equal attention by the researcher (Dabengwa et al., 2020). These significant statements were then clustered into common themes, or "meaning units" (Dabengwa et al., 2020). As advised by Smith (2011), the primary researcher made

Table 1
Participant Characteristics

Participant Pseudonym	Rank
Ariel	Associate Professor
Cameron	Associate Professor
Terry	Assistant Professor
Lane	Professor
Morgan	Professor
Emerson	Professor
Jules	Associate Professor
Aubrey	Professor
Jesse	Associate Professor
Quinn	Professor
Robin	Professor
Jordan	Part-time instructor

Caring After COVID *continued*

interpretations and descriptions for each theme and noted convergence and divergence among the participants' experiences. (See Appendix for example coding). The second author and another scholar evaluated the primary researcher's interpretation of the data through peer debriefings (Moon et al., 2016). When repeating themes emerged from the interviews, data collection ceased due to saturation (Suri, 2011).

Findings

The purpose of this study was to explore how college faculty conceptualize and express care for their students in the post-COVID-19 environment. The findings revealed that faculty perceive care to be a negotiated relationship between themselves and their students. Additionally, participants referenced the level of support required by students and the current climate in higher education as common challenges associated with providing care.

Care as a Negotiated Relationship Between Teacher and Student

Multiple participants identified the teacher-student relationship as the baseline component of instructor caring behaviors. Jesse, an Associate Professor, shared, "It's just relationships. It's a cliché, that they've got to know that you care I mean, it's a combination of enthusiasm for the content. But the main thing is the relationships and being connected with students." Morgan, a Professor, highlighted how fostering the connection between instructor and student is an important goal in their classroom:

I do believe, you know, in the research that says an important factor for retention is developing that connection with professors. And so I try to make myself accessible in terms of ... just not being so self-important, and ... having fun with them. Making conversations before and after class. Making sure they know my door is always open.

These statements reveal that a "connection" is essential to demonstrate care. The participants in this study did not view themselves as simply conveyors of content; rather, they sought to build a baseline rapport with students.

In addition, participants indicated that balancing care with expectations is part of the negotiated relationship. When discussing balancing care with academic rigor, Lane, a Professor, stated:

I guess my approach to caring is ... two-fold. It's trying to find the balance between, 'I absolutely care for you as a human being' ... but at the same time, I'm there to teach them something If I'm not challenging them in some way to adjust their worldview or to try something new, or learn a new skill ... I think I'm not caring about them as a person.

Terry, an Assistant Professor, mentioned the "burden" of balancing care with professional standards. Terry shared, "I don't think any of us don't worry about students passing ... and being successful That's a heavy burden. We can't be graduating people that don't have the bottom-line skills."

Responding to Students as Individuals

Other faculty participants focused on responding to students' individual needs as a crucial aspect of the teacher-student relationship. Terry elaborated on responding to students as individuals:

I think it's empathy. I think that it is ... not adjusting our expectations of students, but figuring out how we can support students in meeting those expectations ... just you know, meeting students where they are and helping them respond to their needs on an almost individualized basis.

Cameron, an Associate Professor, also spoke of the importance of recognizing students as individuals, stating, "I think it's not just educating,

Caring After COVID *continued*

but also learning about people's lives and taking interest in that ... try[ing] to connect with them on a personal level versus just an academic level." Aubrey, a Professor, offered a similar viewpoint but noted the importance of the students' role in voicing their respective needs:

So trying to find out a little bit about what their goals are and then, you know, having them verbalize that to me, either in person or in some sort of written format allows me to then start that process [of care]. But I don't necessarily initiate that by pushing students to do any one particular thing. It's somewhat incumbent on them, as far as I'm concerned, to be clear with me.

Morgan also stressed the importance of relating to students individually: "I mean, these [students] aren't just cogs in our system, you know? And, yeah, I can teach them facts and skills and, you know, how to think critically. But I think it's important to try to relate [the content] to their lives and understand their experiences." In other words, the participants in our study emphasized that caring for students should not be approached with a one-size-fits-all mindset but rather with an intentional regard for individual student differences and goals.

Other faculty participants discussed balancing course content with "meeting students where they are" as part of this negotiated relationship. Jules, an Associate Professor, characterized this balance as follows:

I think the essence of caring [is] commitment to students, rather than to curriculum. How that looks will be different in the classroom, outside of the classroom. But when you have a commitment to the students, the students come first It's important that, you know, students do receive the education they're paying for. However, we have to ask who defines what education looks like? And that's professors, instructors. We have that privilege. And I think a caring professor will modify to the realities, social realities

in general ... and meet students where they are at.

Ariel, an Associate Professor, offered a similar viewpoint:

To me, instructor caring is you do your academic job. I kind of think of it as the academic CEO for the class. So you are the content expert and you understand the skills and/or competencies that students need to gain in this class, you know, like within your major But instructor caring is [also] seeing your students on campus and saying hi, learning their name and using it in class, asking them, 'Hey, how are you doing?' Making sure that they know where resources are, like, 'Hey guys, it's the fourth week, hang in there. But if you're stressed out, here's the link to the counseling center.'

Both Ariel and Jules emphasized that while instructors create the overall goals and competencies for a course, they must also be aware of the support students need to reach those outcomes.

Mutuality

Several participants emphasized the importance of the mutual nature of the instructor-student relationship, indicating that both parties must contribute. Lane explained this mutuality by emphasizing the "imperfectionism" in both teacher and student:

I used to have a teaching philosophy that started at the top saying that I believed in 'imperfectionism.' That I'm imperfect, that students are imperfect, and that the way we work through the course is kind of wrangling with your imperfections and trying to find ways to grow and improve We're just a bunch of imperfect people trying to work our way through this course content the best we can.

Jordan, a part-time instructor, emphasized the importance of student communication in achieving mutuality by stating, "We're all human I just ask my students, communicate with me, talk to me. You don't have to give me every little detail of what's going on. But if [students

Caring After COVID *continued*

communicate], I'm in a better position to help [them]."

Other participants named "co-learning" as an essential component of the mutuality required in the instructor-student relationship. As Aubrey explained:

My philosophy reflects a belief that the best type of learning environment is one in which both the faculty member and the students are co-learning I want to walk out of a classroom feeling as if I've learned something that day. That's the most rewarding for me, and I think that becomes the most rewarding for the students.

Ariel also characterized co-learning as essential to caring. Ariel described co-learning as "a journey together I like to call it a quest. A quest together is what a class is. And just showing the human side and the connection side of what a college course [can] be."

Multiple participants expressed that they feel disheartened when students neglect their role in the teacher-student relationship. As Robin, a Professor, observed:

I've had students fall behind, they're ill or whatever, and they ask for make-up exams, or extensions, or an incomplete. And I go to the trouble of doing those things and then they don't follow through on their end, and when I've poured a lot of time into it and they don't do their part that, you know, that makes it difficult.

Terry shared a similar sentiment, stating, "I struggle with students that aren't working as hard as I am I have a really hard time putting energy and empathy into a student that isn't bringing that back I run out of juice real quick." Jordan also indicated that student investment was essential:

I have some students, who, they show up the first day of class, then I don't see them again until the midterms, and then I don't see them again until the final exam ... and

it's when they show that lack of effort, if they ask me for an extension or additional time or something like that, and they haven't made the effort to come to class, then I'm not that adamant about being caring or helpful.

Challenges of Providing Care

While the participants in this study generally characterized instructor caring as a negotiated relationship between teacher and student, they also elaborated at length on the challenges of providing care in the post-COVID environment. Specifically, the participants cited the exceptional needs of current students and the often-demoralizing climate of higher education as the most significant barriers to providing care in the present climate.

Exceptional Needs of Current Students

Multiple faculty members discussed the various challenges students are currently experiencing, including mental health struggles, physical illnesses, and a lack of academic readiness. For example, Robin described their observations of student mental health:

This is anecdotal, but one of the things I'm seeing is that students seem more open about their mental health issues, and I don't know if there are more mental health issues or if they're just more willing to tell me about them now. But I've seen a lot of that kind of thing.

Terry offered a similar viewpoint, stating that "These students have tales of woe, you know? They are going through so much. They carry so much. It sometimes just blows my mind how much they're dealing with." Quinn, a Professor, further discussed prioritizing students' mental health needs:

I, like many faculty members I know of, have stopped a one-on-one session with a student and walked them down to the counseling center. It's like, okay, the stuff you brought up is beyond my pay grade basically, and we're going to go down and you need to get

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this squared away before we can ever begin to talk about, you know, [course content].

In addition to their observations about students' mental health concerns, participants discussed ongoing physical illnesses their students are experiencing. For instance, Robin relayed:

I used to be more strict about ... deductions It seems like these students are still having so many issues, and there's still a lot of them sick, so many out sick this semester. And so I just say, 'Yeah, go ahead and turn that in, just get it done.'

Multiple faculty members in this study perceived that students are less academically prepared for college. Terry discussed reconciling students' preparedness with program standards:

I think we're all seeing students that are really underprepared to be in our classrooms... and how do you have compassion? ... How do we uphold, you know, the standards of our program? ... I think that's a problem a lot of us are struggling with, 'How many times do you let a student rewrite something? How late do you let them put in assignments? How wiggly are you on your attendance sheet?' I think we're all struggling with that.

Lane conveyed similar thoughts about students' academic preparedness, but highlighted the extra time spent supporting students with basic academic tasks, stating:

Everything they don't know how to do is something I have to spend time and energy teaching them. That is not course content, right? ... I have all these students, they don't know how to save files. We have to teach them now to send emails ... And I'm not talking about, do you know the difference between a sentence fragment or a comma splice ... no, not that kind of stuff. Not knowing how to save a file to their desktop ... basic computer literacy. Every time that happens with a student, I have to show them again how to do it, right? ... I can't do the class until they've

accessed their own content. At this point, I [spend] literally hours individually, because especially with these students, if you don't do it individually, I've learned they don't get it sometimes we have to do it individually two or three times [for students] to get it.

Offering a slightly different perspective, Morgan expressed that online students are often underprepared and require additional support:

[Online students] typically have a plate that is much fuller than our traditional students. They have barriers that they've overcome. They're different populations And a lot of them are underprepared. We have to recognize that. We asked them to come into our program. So if we invite them to join us, then we need to do our job in helping them succeed That population needs a little bit more, in my opinion, care and support.

Demoralizing Climate of Higher Education

Several participants in this study expressed that one of the most significant barriers to providing care toward students was the current political climate on their campus, in their state, or within the United States. They explained that the current environment posed numerous challenges, creating an often-unsatisfying workplace and difficulties in caring for students. For example, Jules explained:

Sometimes the state of higher ed in the United States is demotivating. And I don't want to think too righteous of myself, right? But that I might have good intentions, noble intentions toward my students, but yet those are not represented throughout the institution. And that in a way demotivates me.

Jesse provided a similar viewpoint, focusing on issues on their campus, stating, "maybe the thing that makes it rough to care not about them [students], but about the job, is when we see some of the policies and practices [at the university] level, that when we hear 'shared governance,' that's a complete, fabricated lie." Ariel also offered their thoughts about the current

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state of higher education, citing conditions in their state:

Higher ed is being disrupted. And it's been a disruption since the pandemic. You have student disengagement. You have faculty disengagement. You have faculty burnout, which is similar. You have, at least locally in our state, pushback about the value of a college education and degree.

Two participants, Quinn and Lane, voiced concerns about their institution's prioritization of retention, while students may be struggling with mental health or academic readiness. Quinn observed, "This is going to sound jaded, but what that [the university's retention efforts] often boils down to is about numbers, and we don't want too many students dropping out because of mental health issues." Lane also expressed similar concerns that there is "a lot of pressure from the university" to "bend over backwards to help these students be successful," even in cases where students may not be submitting work or attending class. Collectively, these statements indicate that providing care to students is challenging for faculty because of ongoing trends in higher education, at both the government and institutional levels.

Discussion

Following the COVID-19 pandemic, college students continue to experience mental health challenges (Alonso, 2023), and many are academically underprepared for college (American College Testing, 2023). Given these circumstances, how college instructors express care for their students needs to be analyzed in the present climate. This study investigated how college instructors conceptualize care to their students during the aftermath of COVID-19. Additionally, the challenges instructors face when demonstrating care to their students were explored.

When asked about the expression of care, statements given by participants directly reflected Noddings's (2005) work pertaining to the one-caring and the cared-for. Participants

cited the teacher-student relationship as essential to demonstrating care. When reflecting on the teacher's (one-caring) role in the teacher-student relationship, participants demonstrated two common themes. First, they expressed the need to demonstrate genuine enthusiasm for the content and subject matter being taught. This involves showing passion and energy about the content being taught. The second, and more frequently discussed, theme centered on being connected to students by responding to their specific needs and relating to them on a personal level. This finding supports Noddings's (2013) framework, which suggested that the instructor-student relationship begins with attention, or engrossment, to individual students' expressed needs. As the ones-caring, participants in this study strived to relate content to students' lives, show empathy, and be connected to students through open-door policies, talking with them before and after class, and greeting them when seeing them on campus. Participants, such as Jules, stressed the importance of considering the changing social realities students face. This includes the incorporation of trends and technologies. For example, Quinn demonstrated this practice through their discussion of the use of Discord in class: "Discord is an app many students are familiar with from gaming and video gaming experiences. So this seems to them like I'm coming to them on their turf." In the discussion of practices used to express their role in the teacher-student relationship, participants demonstrated that the teacher role goes beyond that of being passionate and knowledgeable of one's own subject matter. To express care to students, an instructor must be grounded in attentiveness to students' lived experiences and evolving needs, meeting them where they are.

Participants also emphasized the importance of the teacher-student relationship being mutual in nature, meaning that the cared-for (students) must also put work in for care to be expressed effectively. Noddings (1996) elaborated on the role of the cared-for by stating:

Students have tremendous effects on their

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teachers, and these possibilities should be discussed openly. The contributions of teachers and students are necessarily unequal, but they are nonetheless mutual [Students] can be expected to respond with growing sensitivity to attempts to promote their own growth. (p. 108)

In their understanding of the cared-for role, instructors cited communication and effort as the minimum engagement needed from students. Furthermore, instructors described student effort as students doing their part and putting in energy not only in coursework and learning, but also when falling behind. These findings are congruent with previous scholarship. For instance, Miller (2021) found that students' lack of effort or commitment to their academics (e.g., ignoring feedback from their instructor) were positively correlated with instructor compassion fatigue. While instructors can influence student effort through clearly communicating their expectations for student communication and performance, the findings of this study demonstrated that the teacher-student relationship is a mutual exchange. For care to be expressed in an authentic manner, both the instructor (one-caring) and student (cared-for) must participate.

Participants identified three main challenges they face when expressing care to their students. One of these challenges is the current political climate at their university, state, or nation. Participants stated that policies and agendas that misrepresent what they believe to be good intentions for students, devalue or demoralize higher education degrees, and doggedly pursue higher enrollment numbers hinder their ability to care and lead to burnout. The second challenge given by participants is students not doing their part in the teacher-student relationship. Students' lack of effort, especially when falling behind in coursework, and communication were cited as the main reasons for this challenge occurring. Lastly, participants discussed the learning and mental health needs of students as being more challenging and detrimental than the pre-COVID-19 era. These circumstances have resulted in the need to support college students in ways

instructors may not feel prepared for. These challenges were mentioned across participants in this study. This occurrence demonstrates a need for instructors to be supported in facing these challenges.

Support Needed

Findings of this study exhibited the need for college instructors to be supported in demonstrating care to their students. One area of support needed is enhanced professional development for faculty. Teaching and Learning Centers might offer programming specifically related to the topic of care. Workshops or seminars designed to foster conversations about instructor caring provide opportunities for partnerships with various entities on campuses, including counseling centers, multicultural offices, and residence life. This professional development must also focus on student and faculty mental health. Research published by the Healthy Minds Network (2022) found that nearly three-quarters of faculty (73%) would embrace further professional development on understanding students' mental health. Ray et al. (2023) found that almost 97% of faculty reported feeling emotionally exhausted, which is a key predictor of burnout. Given these realities, college administrators must recognize the emotional labor expended by instructors and prioritize the mental health and well-being of their institution's faculty and students. As Shalka (2022) cautioned, administrators must discourage faculty overinvolvement and create opportunities for instructors to rest and renew. Additionally, McClure (2025) recommends that institutions implement more comprehensive onboarding programs for faculty, as well as one-on-one coaching support for faculty, to help create a university culture that cares for its instructors. Lastly, professional developments which equip instructors with teaching practices that foster the expression of care should be implemented. Such professional developments should emphasize the use of inclusive strategies that promote accessibility, such as the Universal Design for Learning (CAST, 2024) and integrate principles of trauma-informed pedagogy (Carello & Butler, 2015).

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Limitations

As every university is unique, the findings from this study cannot be easily transferred to faculty at other universities. Replication of this study at other institutions will increase the transferability of these findings. As semi-structured interviews were used in this study, data were self-reported in nature. A limitation to this is social desirability, which occurs when participants have the “tendency to present reality to align with what is perceived to be socially acceptable” (Bergen & Labonté, 2020, p. 783). To mitigate the possibility of social desirability, techniques such as identifying cues that indicate the behavior (e.g., providing partial answers or the use of inconsistent vocabulary) (Bergen & Labonté, 2020) were used. The final limitation of this study is the relative lack of perspectives from part-time adjunct and non-tenure track faculty. Eleven of the 12 participants in this study were full-time tenure-track professors. Only one participant was a part-time, non-tenure track professor.

Future Research

Future research on how college instructors express care for their students in a post-COVID-19 era needs to be completed. One emerging issue in this topic is the concept of how artificial intelligence (AI) is impacting the way faculty care for their students. As Petricini et al. (2024) point out, trust is an important contributor to the teacher-student relationship, and early research suggests that faculty are concerned about students’ misuse of AI. This mistrust can lead to a disruption in the expression of care to students and needs to be examined. An emerging theme in this study pertains to how the current political climate and possible demoralization of higher education is negatively impacting instructors’ ability to express care for students. Further research that examines these phenomena can lead to strategies to support instructors in these challenges. Data from the National Center for Education Statistics (2022) indicated that 61% of undergraduates in the U.S. were enrolled in at least one distance education course in the fall of 2021, with 28% of undergraduates enrolled exclusively in distance education courses. This

shift demonstrates the need for expression of care in varying course format offerings (online asynchronous, online synchronous, hybrid, or face-to-face) to be researched. Instructors may feel that it is more difficult to express care for students in online courses (in which they may never meet the student) versus face-to-face courses. Therefore, as online course formats become higher enrolled, examining how care is and can be expressed to students in this format can offer support and strategies to online instructors. Furthermore, the perspectives of part-time and/or non-tenure-track faculty need to be explored in studies about expression of care. According to the National Center for Educational Statistics (2023), part-time faculty account for 44% of the professoriate. Thus, it is essential to include part-time faculty as participants in studies about expression of care in higher education.

Additionally, this study’s purpose was purely to gain, and report, perspectives on how instructors express care to college students in the aftermath of COVID-19. Due to this, the study was phenomenological in approach and design. The purpose was not to analyze pedagogical teaching practices (such as the use of inclusive and/or trauma-informed practices) and how these relate to the expression of care. This is another potential area where future research is needed. Finally, the focus of this study was not to draw comparisons as to how care is expressed differently than it was prior to the COVID-19 pandemic, or to determine how COVID-19 may have contributed to changes in the expression of care. Therefore, investigating possible shifts in the expression of care pre/post-COVID-19 may be another valuable direction for future research.

Conclusion

Since COVID-19, college students and instructors have faced changing circumstances. The shifting political climates at the national, state, or institutional level, increase in mental and physical health concerns of students, and academic unpreparedness of students are some of the circumstances instructors have expressed as detrimental to expressing care to students.

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Burnout and lack of effort and communication from students were also cited as challenges that hinder the ability to express care to students. This study demonstrated that the COVID-19 pandemic has resulted in a need for strategies to support college instructors in the expression of care to their students, while maintaining the mutuality of the teacher-student relationship. With the right support and strategies, instructors can successfully meet the needs of their students, protect their own mental health, and mitigate burnout in a post-COVID-19 era.

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Appendix

Examples of Coding Themes

Significant Statement	Meaning Unit	Theme
"This is anecdotal, but one of the things I'm seeing is that students seem more open about their mental health issues, and I don't know if there are more mental health issues or if they're just more willing to tell me about them now. But I've seen a lot of that kind of thing."	Students are experiencing increased mental health struggles	Caring requires responding to students' exceptional needs (RQ2)
"I, like many faculty members I know of have stopped a one-on-one session with a student and walked them down to the counseling center...and that to some extent gets to the boundaries thing. It's like, okay, the stuff you brought up is beyond my pay grade basically, and we're going to go down and you need to get this squared away before we can ever begin to talk about, you know, developing good thesis statements."	Students are experiencing increased mental health struggles	Caring requires responding to students' exceptional needs (RQ2)
"Everything they don't know how to do is something I have to spend time and energy teaching them. That is not course content, right?...I have all these students, they don't know how to save files. We have to teach them now to send emails...Not knowing how to save a file to their desktop...basic computer literacy. Every time that happens with a student, I have to show them again how to do it, right?...I can't do the class until they've accessed their own content. At this point, I [spend] literally hours individually because especially with these students, if you don't do it individually, I've learned they don't get it."	Students are underprepared	Caring requires responding to students' exceptional needs (RQ2)

ARTICLE

The Negative Space Syllabus: Inverting Course Design to Promote Autonomy and Collaborative Learning

—Amitabh Vikram Dwivedi

Amitabh Vikram Dwivedi, Shri Mata Vaishno Devi University, amitabh.vikram@smvdu.ac.in

Abstract

The Negative Space Syllabus (NSS) is a course-design approach in which the instructor specifies the non-negotiables and intentional exclusions of a course, while reserving a substantial portion of the curriculum for structured student decision-making. Students may contribute to the selection of topics, readings, cases, learning activities, and assessment formats within boundaries established by learning outcomes, institutional policies, feasibility, and disciplinary expectations. Drawing on constructivist learning theory, self-determination theory, critical pedagogy, and reflective teaching practice, this article develops the conceptual basis of the NSS and explains how it may be implemented in higher education. It describes decision tools that make curricular selection and omission visible, including the decision matrix, include/exclude log, outcome map, and collaboratively developed rubric. Illustrative disciplinary scenarios show how the model may be adapted across the humanities and social sciences without presenting those scenarios as empirical research cases. The article concludes with practical guidance and adaptable templates for instructors who wish to pilot the approach within their own courses.

Keywords:

negative space pedagogy, collaborative syllabus design, student autonomy, co-created curriculum, democratic pedagogy, higher education

In many university settings, students encounter the syllabus primarily as a contract: a document that clarifies expectations, schedules, and obligations. This clarity can reduce uncertainty, but it can also conceal how curricula are built through choices. Texts are selected, topics prioritized, and assessment formats designed, yet students often meet these decisions only after they have been settled. In discussion-driven courses, this can produce strategic compliance, cautious participation, and the sense that the course is something done to students rather than with them.

The Negative Space Syllabus (NSS) responds to the risk of disengagement in overdetermined courses, where an “obsession with coverage” (Biggs & Tang, 2007, p. 40) can narrow student thinking to memorizing rather than understanding. By shifting away from a teacher-centered transmission model toward a learning design in which students are “active agents” (Bovill et al., 2016, p. 197), the NSS puts into practice a core pedagogic insight: “what the student does is actually more important in determining what is learned than what the teacher does” (Shuell, 1986, p. 429).

Within the NSS, students can be positioned as “pedagogical co-designers,” with authentic “responsibility for the educational process” (Bovill et al., 2016, p. 197). As a result, they move beyond being “passive recipients” and develop “meta-cognitive awareness” of what they are learning and why (Bovill et al., 2016, p. 197). The instructor’s guardrails create a learning climate in which structure is offered in an “autonomy-supportive way” (Jang et al., 2010, p. 590), rather than as control. Although an absence of

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structure can produce uncertainty, autonomy within clear limits can help students coordinate their motivational resources with the demands of academic work (Reeve, 2006; Rogers, 1969). By deliberately shaping this negative space, learners are drawn into “performances of understanding”: tasks that require them to justify, apply, and revise their choices in unfamiliar contexts (Biggs, 1996, p. 347).

The NSS functions as a systematically aligned intervention rather than a total philosophy: it aims to balance administrative and educational needs while redistributing curricular authority. The NSS may be most feasible in courses where learning outcomes and core competencies are stable but instructors retain flexibility in selecting readings, cases, activities, or assessment formats. It is particularly suitable when multiple performances of understanding can satisfy the intended learning outcomes within a structured, autonomy-supportive learning climate (Biggs & Tang, 2007; McGregor, 1960, as cited in Biggs & Tang, 2007). It is less suitable where external or accreditation requirements prescribe granular content coverage or where class size and scheduling make sustained negotiation impracticable without additional support. In practical terms, the NSS gives students structured responsibility for content and assessment decisions; makes selection and omission visible through include/exclude logs; converts the syllabus into a revisable design document; and produces audit-friendly artifacts, such as outcome maps, rubrics, and decision matrices, that reconcile autonomy with institutional accountability.

This article contributes to scholarship on teaching and learning by developing the NSS as a bounded model of collaborative course design. Conceptually, it explains how selected forms of curricular authority may be shared without transferring responsibility for academic standards away from the instructor. Practically, it offers a sequence of classroom activities and adaptable tools through which students can participate in selecting, organizing, and justifying parts of a course. The purpose is not to report or evaluate a human-participant research study,

but to articulate a pedagogical model derived from teaching practice and established learning theory.

Background and Theory

Constructivist approaches (Vygotsky, 1978) characterize learning as a qualitative rather than a quantitative process, in which “meaning is created by the learner” (Biggs & Tang, 2007, p. 28). From this perspective, classroom participation is not an optional add-on but an “indispensable component of the process of both learning and knowing” (Freire & Macedo, 1995, p. 379). As Tyler (1949) argues, “learning takes place through the active behavior of the student” (as cited in Biggs & Tang, 2007, p. vii). In this frame, interactive engagement, defined by “joint dialogue patterns” in which both partners are constructive, becomes a primary mechanism for achieving the “deepest understanding” (Chi & Wylie, 2014, p. 221, 228).

Self-determination theory complements constructivist approaches by identifying autonomy, competence, and relatedness as central conditions for sustained motivation and internalization (Deci & Ryan, 2000; Ryan & Deci, 2000). The NSS draws on these conditions by linking student choice to shared responsibility, scaffolded support, and collective decision-making. In so doing, the NSS is intended to support students’ perceived competence while making the design process more accessible and equitable (Deci & Ryan, 2000). To clarify, by “negative space,” I mean the intentionally unfilled portion of the syllabus reserved for student decision-making. The NSS does not treat all sources as interchangeable: the design process includes explicit criteria for credibility, diversity, feasibility, and alignment with outcomes.

Guardrails are the non-negotiable learning outcomes, policies, feasibility limits, and disciplinary requirements established by the instructor. An anchor spine is the small common set of concepts, readings, or methods that all students complete. An outcome map links each selected topic, activity, or assessment to one or more required learning outcomes. A design

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audit is a scheduled review of alignment, pacing, workload, accessibility, and participation, while a participation check records who contributes to speaking, writing, documentation, and decision-making so that roles can be adjusted where necessary.

Syllabi do more than list schedules and requirements; they communicate expectations, signal what counts as knowledge, and shape the teacher-student relationship. The NSS begins from the premise that changing the form of the syllabus can change the student's role in the course. It does not remove instructor responsibility, but reframes it as facilitation, alignment, and accountable shared decision-making.

Treating the syllabus as a co-designed artifact directly supports constructive alignment: the principle that teaching and learning activities, along with assessment tasks, “must be systematically aligned” to the “intended learning outcomes” (Biggs & Tang, 2007, p. 19). In the NSS framework, this alignment becomes visible because students must map their chosen activities to specific outcomes, and rubrics or grading criteria are explicitly negotiated. This transparency strengthens fairness and “participatory parity” (Fraser, 2009, p. 16), since students can understand the logic of assessment instead of experiencing grading as a private instructor preference. Ultimately, the approach operationalizes the insight that “what the student does is actually more important in determining what is learned than what the teacher does” (Shuell, 1986, p. 429).

Co-created syllabi can increase ownership and improve alignment between course content and learner needs, but only when the process is structured. Without guardrails, collaborative design can amplify existing hierarchies, privilege confident students, and leave others anxious or under-directed. The NSS addresses these risks through visible guardrails, documented decision criteria, and scheduled reflection that keeps the course coherent while granting students authentic responsibility over learning.

The NSS also intersects with efforts to decolonize the curriculum, which critique the dominance of Western epistemological traditions and the presentation of some knowledge as universal (Abu Moghli & Kadiwal, 2021; Molefe, 2016). While the NSS is no guarantee of decolonizing outcomes, it can create a procedural “Third Space” in which students name omissions and debate criteria for inclusion without relying solely on the instructor's authority (Lubicz-Nawrocka, 2019). These design artifacts matter because they leave a trace of how judgments were made, making it visible whether the class engaged difficult exclusions or chose the comfort of familiarity (Zembylas, 2010).

The NSS separates what must remain stable from what may be negotiated. In a prospective implementation, four elements would remain instructor-led: (a) program or institutional learning outcomes; (b) non-negotiable policies, including academic integrity, accessibility, and ethical guidelines; (c) explicit exclusions, consisting of topics or approaches that will not be covered and the reasons for their omission; and (d) a minimal anchor spine of concepts that ensures a shared disciplinary vocabulary. Students could participate in deciding additional readings or cases, the balance of voices and perspectives, assessment formats, and, within defined limits, assessment weights. To keep negotiation productive, an NSS course would use three principal tools: a decision matrix,¹ an include/exclude log,² and a rubric template (see Appendix). The emphasis would remain on criterion-based justification and visible documentation, thereby making curriculum-making more accountable.

In a full-semester implementation, the model may be organized into several phases. The first six weeks may prioritize collective design and alignment, while the remaining weeks follow the negotiated plan with scheduled design audits. This protects instructional time later in the semester while allowing space early on for argument, revision, and explicit outcome mapping (see Table 1).

The Negative Space Syllabus *continued*

Because the NSS grants students “authentic responsibility for the educational process” (Bovill et al., 2016, p. 197), scaffolding is essential to provide a well-structured knowledge base. Four layers of support can be introduced and gradually reduced as learners move from “passive recipients” towards “active agents” (Bovill et al., 2016, p. 197). First, a starter kit can provide exemplars of maps, source-selection practices, and rubric language to clarify standards of good performance (Sadler, 1989). Its purpose is not to decide for students but to prevent the early stages from becoming an unstructured search exercise or a process dominated by the most confident speakers. Second, decision tools can structure discussion: teams can use a matrix and rotating roles to build shared responsibility and mutual interdependence. Third, guardrails can remain visible as non-negotiables, requiring teams to justify any proposed omission or substitution by explaining how the intended learning outcomes will still be achieved (Biggs & Tang, 2007). Finally, short anchor mini-lessons can introduce concepts needed for performances of understanding, such as evaluating sources or writing an intended learning outcome in assessable language.

Equity supports should be treated as process requirements rather than optional practices. Teams can conduct participation checks at scheduled points to monitor who speaks, writes, records decisions, and presents the group’s rationale. Where imbalance appears, teams can

rotate roles and create low-stakes entry points, such as requiring each student to propose one reading with a criterion-based justification before a collective decision is finalized. These measures cannot eliminate hierarchy, but they can reduce the likelihood that confidence alone determines curricular decisions.

Pedagogical Context and Development of the Model

The NSS emerged from the author’s reflective teaching practice in Applied Linguistics. Its potential applicability was subsequently considered in relation to three illustrative curricula: “Global Literatures in Translation” in literature, “Ethics in the Posthuman Age” in philosophy, and “Rituals and Social Structures” in sociology and anthropology. The NSS was not evaluated in these three courses; rather, the curricula serve as hypothetical contexts for examining how the model might support student choice, curricular inclusion, assessment design, and workload planning across disciplinary settings. Accordingly, this article develops a conceptual and practice-based account of the NSS by relating reflective teaching insights to scholarship on autonomy support, collaborative curriculum design, constructive alignment, and critical pedagogy (Schön, 1983). It does not analyze student records, grades, assignments, interviews, focus groups, personal information, or other systematically collected data.

Table 1
Phases, Roles, and Deliverables

Phase	Typical weeks	Instructor role	Student deliverable
Framing	1–2	Explain the NSS; set guardrails; model selection criteria	Team contract and shortlist of candidate topics
Negotiation	3–4	Facilitate workshops; require documentation	Unit map, source list, and include/exclude log
Refinement	5–6	Teach assessment options; support rubric co-writing	Assessment plan and rubric (version 1)
Implementation	7–14	Run anchor mini-lessons; monitor equity and workload	Unit artifacts and peer-review notes
Reflection	15–16	Map evidence to outcomes; support syllabus revision	Revised syllabus segment and reflection memo

The Negative Space Syllabus *continued*

The classroom references included in the article are used solely to explain the instructional logic of the model. They should not be interpreted as research findings or as evidence of causal effects on student engagement, achievement, motivation, or participation. Where disciplinary examples are provided, they function as illustrative scenarios showing how an instructor might adapt the NSS to different teaching contexts.

In a professional or clinical ethics course, the NSS would treat mandated standards and codes as fixed guardrails, while allowing students to select case clusters that reflect local practice contexts and risks. The class would co-create a case map,³ then use the decision matrix to prioritize cases for depth rather than attempting exhaustive coverage. The artifacts would include an outcome map, a case-selection log, and rubric language specifying how ethical reasoning will be evaluated across different scenarios.

A course using the NSS may begin with an instructor-prepared core spine consisting of the required learning outcomes, non-negotiable policies, explicit exclusions, and a short conceptual foundation. Students may then work in stable groups to propose topics, readings, cases, or assessment formats by using a decision matrix and include/exclude log. Proposals can be discussed in relation to outcome alignment, feasibility, disciplinary relevance, workload, source credibility, and representational balance. The instructor retains responsibility for academic standards and may reject a proposal that conflicts with the published guardrails, although the reasons for such a decision should be made transparent.

Once the negotiable elements have been agreed upon, the course may proceed according to the resulting plan. Scheduled design reviews can be used to reconsider pacing, workload, duplication, accessibility, and assessment criteria. The negotiated syllabus should therefore

Table 2
Illustrative Course Contexts and Potential Benefits of the NSS

Course context	Potential NSS application
Global Literatures in Translation	An NSS adaptation could retain a short anchor spine on world-literature and translation concepts while allowing students to nominate translated works from underrepresented regions, languages, and literary traditions. A decision matrix and include/exclude log could help the class balance historical coverage, availability, translation context, and representational breadth.
Ethics in the Posthuman Age	An NSS adaptation could retain core ethical frameworks as non-negotiable foundations while allowing students to select contemporary cases involving artificial intelligence, Indigenous ethical systems, speculative fiction, moral reasoning, and posthuman environmental ethics. A case map and decision matrix could make the relationship between cases, frameworks, and learning outcomes explicit.
Rituals and Social Structures	An NSS adaptation could retain foundational concepts in ritual theory and ethical observation while allowing students to select public, digital, cross-cultural, or emergent ritual practices for comparative study. The include/exclude log could help students justify selections in relation to feasibility, ethical appropriateness, accessibility, and representational balance.

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be treated as sufficiently stable to support serious academic work while remaining open to reasoned revision.

The instructor's role in the NSS is both pedagogical and reflective. The instructor establishes the boundaries of negotiation, models the application of decision criteria, monitors participation, and ensures that the resulting course remains aligned with the approved learning outcomes. Reflective notes may assist the instructor in improving future teaching, but the present article does not treat such notes as systematically collected research data or use them to make empirical claims about students.

Pedagogical Applications and Illustrative Scenarios

The pedagogical rationale of the NSS may be organized around four related aims. First, consequential but bounded choice can encourage students to treat curriculum planning as part of academic learning. Second, the explicit documentation of inclusion and omission can make curricular selection more visible. Third, activities such as outcome mapping and rubric development can introduce students to the reasoning normally undertaken by instructors during course design. Fourth, structured participation can draw attention to differences in confidence, prior knowledge, disciplinary familiarity, and access to decision-making. These are theoretical and practice-oriented propositions rather than findings from a human-participant study.

Taken together, Table 3 suggests that the NSS may be transferable across contexts because its mechanism is procedural rather than discipline-specific: shared outcomes remain stable, while choices are evaluated through common tools such as the decision matrix, include/exclude log, and other audit-friendly artifacts. The criteria used to justify those choices will vary by discipline, including representational balance in literature, ethical feasibility in field inquiry, and conceptual rigor in philosophy. The NSS should therefore be treated as a bounded pedagogical

model whose criteria, weighting, and examples must be calibrated to local competencies and constraints.

The following hypothetical scenarios illustrate the kinds of curricular decisions that the NSS may generate. They are not reports of individual students, research participants, or formally analyzed classroom events. Each scenario is constructed to demonstrate how criteria, constraints, disciplinary expectations, and questions of inclusion may become visible during collaborative course design.

1. Illustrative literature scenario: A group designing a unit on global modernism initially selects predominantly European and North American texts. Completion of the include/exclude log reveals limited representation from Africa, South Asia, and other translated literary traditions. The group then considers translated short fiction and critical essays addressing translation politics. Its rationale memo explains the resulting trade-offs between breadth, depth, contextual preparation, availability, and representational balance.

2. Illustrative philosophy scenario: A group proposes organizing an ethics unit around contemporary technological controversies. The decision matrix requires the group to evaluate each proposed case for conceptual relevance, source credibility, ethical complexity, feasibility, and alignment with the learning outcomes. The group may retain selected contemporary cases while adding an instructor-led conceptual foundation on major ethical frameworks. The assessment can then require explicit application of a framework rather than unsupported personal opinion.

3. Illustrative sociology or anthropology scenario: A group proposes examining rituals in public or community settings. Ethical feasibility becomes a central selection criterion. Before approving the activity, the instructor asks the group to distinguish public observation from the collection of personal information and to identify what should not be recorded. The scope may then be narrowed to publicly accessible or

The Negative Space Syllabus *continued*

Table 3

Pedagogical Aims, Disciplinary Applications, and Suggested Classroom Tools

Pedagogical aim	Possible disciplinary application	Suggested classroom tool
Investment and responsibility	Students contribute to choices that affect the sequence, workload, or form of learning.	Team contract, proposal form, or unit map.
Making selection visible	Students explain why particular texts, cases, methods, or perspectives are included or omitted.	Include/exclude log and rationale memo.
Metacognitive curriculum skills	Students connect proposed activities and assessments to learning outcomes.	Outcome map, decision matrix, and rubric template.
Equity in participation	The instructor structures participation so that decisions are not controlled only by confident or experienced students.	Rotating roles, individual preliminary proposals, and participation checks.

institutionally appropriate examples that can be examined without intrusive data collection.

The NSS is designed on the premise that students may engage differently with a course when they are required to justify choices that affect collective learning. The model does not assume that choice automatically produces motivation. Rather, it combines bounded choice with accountability, shared criteria, instructor guidance, and visible learning outcomes. Its pedagogical value lies in turning selected elements of course design into academic tasks requiring comparison, justification, planning, and revision. Whether these processes improve engagement, ownership, relatedness, participation, or willingness to ask questions remains an empirical question for future research.

The include/exclude log is intended to make curricular selection visible by requiring students to record not only what they propose to include but also what they leave out. In a literature course, this process may prompt questions about geography, language, translation, canon formation, and access. In philosophy, it may draw attention to the difference between contemporary relevance and conceptual rigor. In sociology or anthropology, it may help students balance intellectual interest against feasibility and ethical appropriateness. The log also creates a record that can support later revision of the course plan.

The NSS treats curriculum construction as a learnable practice. Students may be asked to select sources, anticipate workload, map activities to outcomes, and formulate assessment criteria. Rubric co-writing can make standards more visible, while outcome mapping can show why a proposed activity belongs in the course. These exercises are not intended to eliminate instructor judgment. Their purpose is to allow students to examine how academic judgments are formed and how such judgments may be communicated transparently.

Several foreseeable challenges require attention. Students enter collaborative design activities with unequal levels of confidence, disciplinary knowledge, language proficiency, and familiarity with academic conventions. Without structure, the process may privilege students who speak readily or already understand the subject. Rotating roles, short preparatory activities, written preliminary proposals, instructor modeling, and scheduled participation checks can reduce this risk.

Negotiation also requires classroom time. An instructor adopting the NSS must decide how much conventional content coverage may reasonably be exchanged for deeper work on selection, justification, assessment, and curriculum design. For this reason, the approach is best introduced through a bounded pilot rather than by opening the entire syllabus to negotiation.

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The NSS also raises practical questions about institutional accountability: if students choose readings and assessment formats, how can the instructor demonstrate alignment with program outcomes? Documentation provides one possible solution. A living outcome map can link student-selected units to required outcomes, while rubrics can make assessment criteria explicit. This allows the NSS to be framed not as a risk to quality assurance but as a transparent account of how curricular decisions are made. Across the illustrative scenarios, disciplinary conventions shape the kinds of arguments students would need to make. In literature, a central tension may be representational balance involving voice, geography, and translation politics. In philosophy, the tension may be conceptual rigor, particularly the need to avoid treating contemporary relevance as a substitute for argument quality. In sociology and anthropology, feasibility and ethics may become central, including the appropriateness of observation or case analysis and the need to avoid turning everyday practices into extractive data. These differences suggest that the NSS does not impose a single disciplinary template; instead, it invites each discipline to articulate its own criteria for inclusion, evidence, feasibility, and ethical practice.

Discussion

The conceptual argument developed here is that the NSS may support student investment by making selected aspects of course design part of the learning process. Its central mechanism is not unrestricted freedom but structured choice within visible boundaries. This is consistent with theories of autonomy-supportive teaching while preserving the instructor's responsibility for learning outcomes, academic standards, feasibility, and fairness. The NSS also strengthens constructive alignment because students are required to link their selections to outcomes and to make assessment criteria explicit. In traditional courses, alignment is often the instructor's invisible labor. The NSS makes alignment a shared task and therefore a shared learning outcome: students practice turning big ideas into assessable performances.

A central issue for democratic pedagogy is whether shared authority improves learning or merely redistributes burden. A bounded design can reduce this burden by providing templates and limiting the elements open to negotiation. Where scaffolds are absent or weak, fatigue and drift are foreseeable risks. The NSS should therefore be understood as structured participation rather than open choice; its structure is what makes participation potentially meaningful and equitable.

The NSS makes curricular politics legible. When students document exclusions, they can examine how canons and core content are constructed rather than naturalized. This can support critical reflection, but it also demands care: instructors should avoid substituting one dogma for another. The process is likely to be most productive when students articulate criteria and revise plans after encountering constraints rather than simply declaring what the course should contain.

Finally, the NSS can be read as a modest but concrete intervention into curriculum justice debates. Rather than starting from abstract calls to decolonize, it begins by changing procedures: who gets to decide, what counts as a reason, and how omissions are recorded. This procedural focus is compatible with but not reducible to any one ideological program. It invites students to argue, in a disciplined way, about what knowledge should travel and why.

Disciplinary Transferability, Limitations, and Future Research

Although the illustrative scenarios are situated in the humanities and social sciences, the NSS may be adapted wherever the negotiable space can be carefully calibrated. In methods courses, competencies such as sampling, validity, and inference may remain fixed while students choose datasets, domains, or final project formats. In laboratory or studio courses, safety procedures and required techniques remain non-negotiable while students propose bounded questions or products. In professional ethics courses, accreditation outcomes and mandatory

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standards remain fixed while students select local cases or professional scenarios. The NSS is least appropriate where external bodies require granular standardized coverage, or where class size and scheduling make sustained negotiation infeasible without additional facilitation.

Future research could examine the effectiveness of the NSS. Possible directions include comparisons with conventional syllabus structures, investigations of student experiences across disciplines, studies of participation equity, and longitudinal examination of whether curriculum-design activities influence later learning practices. Such research should clearly distinguish ordinary teaching from research-specific procedures and should follow the applicable institutional requirements for ethics review and informed participation.

Implementation Guide

Drawing on the conceptual framework and illustrative scenarios, seven practices appear especially important for instructors who wish to pilot the NSS. They are presented here as a short checklist emphasizing bounded implementation, visible documentation, and equitable participation (see Table 4).

An initial four-week design cycle can be used to pilot the NSS in one unit or one assessment:

- Week 1: publish the outcome map and guardrails and provide the starter kit.
- Weeks 2–3: open one unit (or one assessment) using the decision matrix and include/exclude log.
- Week 4: conduct a short design audit to finalize the unit plan and rubric language.

A fuller semester implementation may require the first four to six weeks for design and alignment work. Instructors can protect time later in the semester by using a shared document, setting decision deadlines, and limiting the number of negotiable elements. A useful rule is to open only one dimension at a time: topics or cases first, then readings, then assessment formats and weights. This sequencing reduces overload and keeps attention on the reasoning behind each choice. Instructors may use consensus, weighted scoring, or a hybrid approach, but the decision matrix should remain central because it shifts disagreement from personal preference to explicit criteria and evidence. Assessment transparency should be addressed separately through the collaboratively developed rubric,

Table 4
Recommended Practices and Purposes in Negotiated Syllabus Design

Practice	Purpose
Start with a bounded pilot.	Open one unit or one assessment before opening the whole course.
Make criteria visible.	Use a decision matrix so choices are argued, not simply preferred.
Require an include/exclude log.	Omissions must be named and trade-offs explicit.
Use an anchor spine.	Teach a short set of shared concepts so students are not negotiating from uneven foundations.
Build equity into the process.	Rotate roles, use low-stakes entry points, and run a participation check during design audits.
Normalize revision.	Schedule a mid-term design audit where teams adjust pacing, workload, and criteria using evidence from the class.
Map choices to outcomes.	Keep a living document linking student choices to program outcomes for internal review or accreditation.

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which makes the standards applied to student work visible and discussable.

Conclusion

The NSS reframes the syllabus as a bounded collaborative design space. The instructor retains responsibility for required outcomes, academic standards, institutional policies, accessibility, feasibility, and essential disciplinary foundations. Within those boundaries, students may participate in selecting and organizing topics, readings, cases, learning activities, or assessment formats.

The model treats curricular absence as pedagogically meaningful. By requiring students to document both inclusion and omission, it makes visible the reasoning through which courses are constructed. Decision matrices, include/exclude logs, outcome maps, rotating roles, and rubric templates provide practical ways to structure this participation.

The NSS should be understood as a pedagogical proposal rather than an empirically validated intervention. Its value lies in offering instructors a disciplined method for introducing shared responsibility into course design while preserving coherence and accountability. The Appendix provides adaptable resources for future classroom use and may be modified according to disciplinary, institutional, and student needs.

The Negative Space Syllabus *continued*

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Footnotes

¹ A decision matrix is a structured comparison table in which candidate topics, readings, cases, or activities are scored, and, where appropriate, weighted against agreed criteria such as outcome alignment, feasibility, credibility, inclusion, and student interest. The scores and supporting evidence make the basis of the final choice explicit.

² An include/exclude log is a running record of each candidate item, whether it was retained or omitted, the criterion-based reason for the decision, and any trade-off, gap, or perspective affected by that choice.

³ A case map is a visual or tabular overview of candidate cases organized by issue, context, stakeholders, ethical framework, and learning outcome. It helps the class identify overlap, gaps, and priorities before selecting cases for detailed study.

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Appendix

Negative Space Syllabus Toolkit

The following materials are prospective and adaptable instructional templates for instructors who may wish to pilot the Negative Space Syllabus in future courses. They are not research instruments, validated measures, records of a formal study, or reproductions of materials administered uniformly to a participant sample. Instructors should adapt them to local learning outcomes, disciplinary practices, institutional policies, accessibility requirements, class size, and available teaching time.

A1. Decision Matrix (template)

Criterion	Weight (%)	Score (1–5)	Evidence / notes
Relevance to outcomes	30		
Feasibility in time/resources	20		
Diversity and credibility of sources	15		
Assessment fit and evidence quality	15		
Ethical sensitivity and inclusion	10		
Student interest and ownership	10		

The Negative Space Syllabus *continued*

A2. Include/Exclude Log (template)

Candidate item	Include / exclude	Reason (criterion)	Trade-off noted

A3. Rotating Roles

- Facilitator: keeps discussion moving and ensures each person is invited to speak.
- Timekeeper: monitors time and prompts decisions when discussion stalls.
- Scribe: records decisions, criteria, and unresolved questions in the shared document.
- Inclusion advocate: asks whose voices, cases, or methods might be missing and why.

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A4. Rubric (abbreviated)

Criterion	Exemplary	Developing	Weight
Rationale for selections	Clear, evidence-based rationale linked to outcomes; exclusions noted.	Rationale vague or unlinked; exclusions missing.	25
Use of evidence and sources	Diverse, credible sources with accurate citations.	Limited or weak sources; citation issues.	25
Alignment to outcomes and checks	Tasks map cleanly to outcomes; checks are feasible.	Weak or missing alignment; checks unclear.	20
Collaboration process	Roles rotated; decisions documented; participation monitored.	Roles unclear; uneven participation; weak documentation.	15
Reflection and iteration	Meaningful revision after feedback and checks.	Little evidence of revision.	15

A5. Reflection Prompts

Week	Prompt	Mode	Time
2	What criteria did your team use to select or reject topics today?	150–200 words	10 min
3	Name one text you excluded and why. What voice might that exclusion silence?	150–200 words	10 min
5	What did the pilot reveal about load, pacing, or evidence?	3 bullet points	8 min
7	What did you change after peer review and why?	150–200 words	10 min
10	Which rubric row most affected your choices this week?	100–150 words	8 min
14	What would you keep, change, or drop if you ran this unit again?	200–250 words	12 min

A6. Abbreviated Syllabi Excerpts (template)

Unit	Required anchor (instructor)	Student-chosen additions	Assessment and checks	Rationale for selection
1	Title, author, year	2–3 items with citation	One product, one quick check	2–3 sentences linking to outcomes and noting exclusions
2	Title, author, year	2–3 items with citation	One product, one quick check	2–3 sentences linking to outcomes and noting exclusions

ARTICLE

Librarians Igniting Research Journeys: A First-Year Experience Course on Undergraduate Research

—Kat Nelsen, Stephanie Sparrow, Molly Bostrom, Kate Peterson, Lacie McMillin, and Kim Clarke

Kat Nelsen, University of Minnesota Twin Cities, kgerwig@umn.edu

Stephanie Sparrow, University of Minnesota Twin Cities, ssparrow@umn.edu

Molly Bostrom, University of Minnesota Twin Cities, mbostrom@umn.edu

Kate Peterson, University of Minnesota Twin Cities, katep@umn.edu

Lacie McMillin, University of Minnesota Twin Cities, mice0018@umn.edu

Kim Clarke, University of Minnesota Twin Cities, clark078@umn.edu

Abstract

In 2017, librarians at the University of Minnesota Twin Cities developed a first-year experience course focused on getting students started with faculty-sponsored research, which has evolved and continues to be taught nine years later. A product of leveraging relationships across the institution and building off of existing library programs, the course addresses barriers to student access and involvement in undergraduate research opportunities using trauma-informed pedagogy as a guiding principle. This article provides an overview of the course, expands on specific activities and learning outcomes, describes how the course benefits students, and examines the advantages and challenges of developing and teaching similar courses. First-year experience courses developed and taught by librarians such as this offer a unique opportunity for early library intervention in undergraduate education and set students up for successful research journeys after the course has concluded.

Keywords:

credit-bearing courses, undergraduate research, undergraduate services, academic libraries, library instruction, libraries and education

Academic librarians often play key roles in the undergraduate research process. They staff library information desks, conduct research consultations, host workshops on research skills and tools, and support courses through instruction, collection building, and resource development. Librarians often find themselves playing a supporting instructional role in first-year experience, first-year writing, and discipline-specific writing intensive courses. Often librarians are faculty or hold faculty-like status; however, they rarely have the opportunity to teach an entire course that is not situated inside an information studies department or similar department that is directly affiliated with the library.

In 2017, librarians at the University of Minnesota Twin Cities (UMNTC) seized an opportunity to support the College of Liberal Arts' (CLA) first-year programs by creating a section of their first-year experience (FYE) course focused on getting early undergraduates started with faculty-sponsored research. The one-credit pass/fail Research Spotlight course makes use of librarians' knowledge of the local research environment, discipline-specific research methodologies, scholarly communication, and teaching philosophies that strive to meet learners where they are. The course illuminates

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the multiple pathways students may take toward participating in faculty-sponsored research at UMNTC.

This article will outline the course curriculum, discuss benefits and challenges of library staff developing and teaching a credit-bearing FYE course focused on undergraduate research, and detail how the course benefits students. Additionally, it will highlight how trauma-informed pedagogical principles were employed in the development and delivery of the Research Spotlight course, providing students and instructors with opportunities to bring their authentic selves into the classroom (or learning management system) to explore research both generally and through the lens of their disciplines and research topics of choice.

Literature Review

Undergraduate research has long been recognized as a high-impact practice linked to increased rates of student retention and engagement (Bowman & Holmes, 2018; Finley & McNair, 2013; Kuh & Association of American Colleges and Universities, 2008; Provencher & Kassel, 2019). Furthermore, undergraduate participation in faculty-sponsored research can be particularly beneficial for first-generation and traditionally underrepresented students (Jones et al., 2010; Locks & Gregerman, 2008). In the Boyer report, “The Equity/Excellence Imperative: A 2030 Blueprint for Undergraduate Education at U.S. Research Universities,” institutions are urged to ensure high-impact practices are accessible to all students (Boyer 2030 Commission, 2022). Engaging in undergraduate research offers advantages to academics and undergraduates alike, state Hensel and Blessinger (2020), and promotes socioemotional and intellectual abilities that include strengthening student engagement, faculty-student collaboration and mentoring, student academic achievement, and higher-order thinking and inquiry. Undergraduate students’ budding research expertise can help encourage persistence and retention, as well as help them to discover their future career or education paths (Hensel & Blessinger, 2020). Unfortunately, getting students involved in

research as undergraduates is not as easy as one would presume. Undergraduates are often intimidated by the process of getting started with faculty-sponsored research and encounter obstacles that are invisible to many in academia. These barriers may prevent students who would most benefit from an undergraduate research experience from pursuing one.

Definitions of undergraduate research can vary. Brew and Mantai (2017) conducted a study of academics from different disciplines at a research-intensive university who are interested in undergraduate research, to learn how they define undergraduate research. They coined the term “forms of engagement” as well as a three-phase schema to explain the levels of undergraduate participation in research (Brew & Mantai, 2017). The forms include: what the academics did not consider to be research where, as an example, students may passively listen to a professor’s lecture about their own research; atomistic undergraduate research development, where students’ exposure to research activities is uneven and uncoordinated; and holistic undergraduate research, where students can access more cohesive research experiences (Brew & Mantai, 2017). Considering this framework, holistic undergraduate research is where the Research Spotlight course sits—students are introduced to and get to practice research skills as well as begin to imagine what their future careers in research might look like.

There are many different types of undergraduate research experiences, including individual, course-based, and laboratory-based (Ruth et al., 2023; Werth et al., 2022). In a course-based research experience (CURE), the entire class of students works on a real research project, typically related to the faculty’s research, thus giving students a guided and hands-on opportunity to develop research skills (Course-based Undergraduate Research Experiences Network, 2018). These courses focus on developing the students’ disciplinary knowledge while they practice asking questions, collecting data, performing iterations, problem solving, and eventually communicating the research findings through common scholarly formats like

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oral presentations and posters (Dolan, 2016). While some introductory-level courses have been developed as CUREs, they more frequently are higher-level courses with a large number of students (Werth et al., 2022).

Librarians are well-positioned to support undergraduate students by illuminating a path through the maze of academic jargon and administrative hurdles. Substantial expertise in information resources, strategic searching, and research lifecycles enable librarians to scaffold student learning to understand the world of research (Oehlers et al., 2023) and contextualize it within students' own disciplines and experiences. Through established relationships with units on campus (e.g. Office of Undergraduate Research) and faculty who work with undergraduate researchers, librarians help students navigate institutional bureaucracies and develop confidence in building their own relationships with faculty mentors outside of the classroom (Hayes-Bohanan, 2013; Nelsen et al., 2023).

Librarian support for undergraduate research often occurs in the classroom. In a survey of instructional support for undergraduate research programs, Hensley (2015) found that most library programs supporting undergraduate research were discipline-specific. When asked to describe how librarians were providing instruction in support of undergraduate research programs, very few librarians responded that they taught credit-bearing courses. One-shots, single library sessions for classes typically focused on a specific assignment, and course integrated instruction were listed most often, with many of the respondents teaching basic database skills and information literacy or assisting with research question formation (Hensley, 2015). These results build upon a prior survey by Hensley et al. (2014) where 86% (n=164) of respondents reported that the library supports undergraduate research programs through instruction. In the same survey, only 14.2% (n=162) of survey respondents affirmed that the library teaches credit-bearing courses to support formal undergraduate research programs.

In North America, FYE courses are also widely acknowledged as high-impact practices, providing significant educational benefit to students (Harrington, 2025; Kuh & Association of American Colleges and Universities, 2008). American FYE programs "can be found in some form in at least 85% of colleges" (Jagiello-Manion & Nagle, 2025, p. 1117). Although core components can vary, depending on the needs of the students and the school (Woods, 2023), FYE programs share some common elements: credit-bearing courses, graded assignments, and dedicated instructors. Overall, the ultimate outcome of the FYE course is to acculturate new students to the university community (Jamelske, 2009).

A survey of United States higher education institutions showed libraries had become a common part of FYE programs, with 86% (n=315) of FYE programs surveyed offering a library-focused component. Of the institutions that included libraries in the FYE curriculum, 81% had librarians involved in the development of the library's curriculum and librarians were the lead instructor in 15% of the programs (Boff & Johnson, 2002). Multiple case studies indicate librarians want to be involved in FYE programs because librarian instruction increases student confidence in information literacy skills and engagement with library resources (Douglas & Rabinowitz, 2016; Kim & Shumaker, 2015). A survey of first-year students at the University of Guelph showed that after taking an FYE course, students used a higher number of sources and the sources they used were more complex, incorporating databases, scholarly articles, and specialized encyclopedias in addition to the internet search engine resources they typically used (Murray & Lachowsky, 2017). However, librarian capacity for embedded instruction with FYE courses may be waning. Recent case studies from the University of Mississippi and Central Connecticut State University demonstrate how institutions experiencing staff reductions may increasingly prioritize flexibility for FYE program involvement, opting for learning objects that can be used across modalities instead of embedded librarians (Dennis & Dees, 2024; Hansen, 2022).

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As counterpoints to the benefits listed above, the structure of the university can present impediments to librarian course development and teaching as the library is often not set up to generate revenue and must partner with other campus colleges and departments to offer courses (Burke & Hofstra University, 2012; Tedford et al., 2023). Libraries are not income-producing entities and are seldom reimbursed for the costs incurred in offering classes, with only 13% receiving funding (Davidson, 2001). “A lack of faculty status” for librarians can be an additional barrier (Cohen et al., 2016, p. 570).

Low enrollment in courses focused on information literacy is an ongoing challenge. Low-credit elective courses tend to experience low enrollment, especially if the course is unaffiliated with a major or a general education requirement (Cohen et al., 2016; Jardine et al., 2018). While requiring the course is one way around the enrollment obstacle, required courses can create resentment among students leading to low motivation or disruptive behavior in the class (Burke & Hofstra University, 2012; Tedford et al., 2023; Waggener, 2018). Some library-run programs have made strategic decisions to try to increase enrollment. Tedford et al. (2023) describe how the library program at Wake Forest University chose to have the course start in the last half of the term to pick up students dropping classes but needing the credits for financial aid reasons and by actively promoting the courses to academic advisors.

Establishing buy-in at the library level can be challenging as some critics of credit-bearing library instruction think that information literacy is better taught in the context of a disciplinary course or class assignment, or by disciplinary faculty (Cohen et al., 2016). Methods of instruction that favor the quantity of students reached with unique interactions, such as one-shots, may be preferred to repeated interactions taking place over a longer period of time that reach a smaller number of students due to limited staffing in libraries (Jardine et al., 2018). While faculty development programs and “train-the-trainer” models of instruction can be helpful to teach disciplinary faculty information literacy

skills for the classroom that they can embed, thus reaching more students over time, it is important that librarians teach this content and build relationships with students directly (Fister, 2009; Flierl et al., 2020). The CLA FYE Research Spotlight course at the UMNTC combines the high-impact practices of undergraduate research and FYE courses to support students in taking the first practical steps to starting faculty-sponsored research as a backdrop to teaching information literacy and library research skills.

CLA 1002 Research Spotlight

Due to existing relationships with the CLA FYE office and their knowledge of the previously developed *Think Like a Researcher* program (Nelsen et al., 2023), the University of Minnesota’s Undergraduate Services Librarian was approached about teaching sections of CLA’s FYE course with a focus on getting students involved in undergraduate research. Supporting early undergraduate students in their research requires a broader curricular scope than the standard information literacy instruction embedded into first-year writing or discipline-specific courses. This more holistic approach builds a strong foundation of skills and knowledge that are not necessarily taught in disciplinary courses.

A small group of librarians and library staff developed the curriculum, at first largely adapted from the *Think Like a Researcher* and first-year writing library programs. The Research Spotlight section has been offered each spring semester since 2018 and the curriculum and content have been reviewed and revised each year, including a complete overhaul after Spring 2020 to accommodate distance learning in synchronous and asynchronous modalities. During the pandemic, a central focus of the course became flexibility and psychological safety. The collective traumas of COVID-19 and the murder of George Floyd caused the instructors to incorporate trauma-informed pedagogical principles using the trauma-informed care framework of the Substance Abuse and Mental Health Services Administration (SAMHSA). The SAMHSA framework included six key

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principles for a trauma-informed practice: safety; trustworthiness and transparency; peer support; collaboration and mutuality; empowerment, voice, and choice; and cultural, historical, and gender issues (SAMHSA, 2014). These principles provide a path for educators to acknowledge the collective, structural, and personal trauma that individuals face while “improving access to education, responding to trauma with empathy and support, and promoting social justice to redress policies, practices, and environments that create barriers to learning in the first place” (Carello & Thompson, 2022, p. 5).

Enrollment has grown steadily since the course’s inception. There were 23 students in two sections in 2018 and enrollment expanded to 60 students across three sections by 2025, with the course being taught in-person, asynchronously, synchronously online, and in hybrid formats over that time. Students in the course are typically second-semester first-year students in the CLA, with intended majors and research interests spanning arts and humanities, social sciences, health sciences, and even physical and applied sciences. Generally, students are still exploring and unsure of what academic, research, or career paths they will take. This is another unique aspect of Research Spotlight as it is more common that courses, labs, and programs designed to get undergraduates involved in research are aimed at older students already situated in their discipline, committed to research in their field, and in the research pipeline (Adedokun et al., 2012).

The course’s student learning outcomes are intentionally aligned with the Association of College and Research Libraries (2016) Framework on Information Literacy for Higher Education, a set of interconnected concepts upon which much of modern library instruction is built. “Information Creation as a Process,” “Research as Inquiry,” and “Scholarship as Conversation” are among these information literacy concepts that connect the ability to navigate existing information with the production of new information. Grounding in this framework allowed for

course outcomes rooted in research practice to also build broadly applicable information literacy skills. Additionally, the UMNTC CLA Core Competencies (University of Minnesota, n.d.) and the UMNTC Undergraduate Student Learning Outcomes (University of Minnesota, 2007) informed the course outcomes, which are:

- Students will become comfortable with the skills and tools needed to participate in a variety of research and creative opportunities.
- Students will have a plan for getting involved in research as an undergraduate.
- Students will build and become part of a community around research interests to support the team-based nature of research and scholarly communication.

Whether the course is being taught in person or asynchronously, the content benefits from a focus on active participation with limited time devoted to lecture. All recorded and live lectures directly support the completion of an assignment, activity, or discussion. The active nature of the course encourages students to connect and provide support for each other, which is in keeping with CLA’s core competencies as well as adhering to the tenets of trauma-informed instruction. Weekly assignments require students to reflect on tasks in written or verbal discussions and respond to one another with constructive comments and questions.

The first half of the semester expands and solidifies students’ understanding of what undergraduate research can be. Course activities and assignments enable students to take concrete steps toward connecting with a faculty mentor. Examples of content include an overview of the ways research differs between disciplines, panel discussions and interviews with faculty and students who have completed undergraduate research projects, and lectures on communicating with faculty. Each week builds upon the week prior, culminating in week

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six when the students draft an email to a faculty member expressing interest in working with them on their research. The course instructors give actionable feedback on the drafts and students are encouraged, but not required, to send the email. Other activities and discussions from the first half of the course include:

- finding a poster or written report from past undergraduate research experiences in the Libraries' online digital conservancy;
- listing characteristics of successful researchers, then identifying which ones the students feel they already possess and what attributes and skills they would like to grow;
- reflecting on their own realities, interests, and goals to begin to narrow down what undergraduate research pathway might work best for them;
- drafting skills statements for their resumes; and
- identifying potential faculty mentors and finding articles or other research outputs they created using the campus faculty profile system.

The second half of the semester delves deeper into the foundational skills and systems relevant to a student's research experience. This includes translating research questions into effective literature searches, describing scholarly communication systems, and exploring the importance of research ethics. Examples of activities and assignments from the last eight weeks of the course include:

- creating a mind map of a research topic to brainstorm keywords and finding articles about an existing research project;
- finding an article on the Retraction Watch blog which reports retractions and corrections in the scientific literature, and discussing the implications of the ethical infraction and consequences to the

researchers involved;

- imagining themselves as a participant in a research study and identifying questions they would ask during the consent process;
- discussing the ethical considerations around AI use in their classes and investigating what practices concerning AI look like in their areas of research interest; and
- exploring how to compellingly share their research, both visually and orally, and completing an assignment where they evaluate the effectiveness of various research posters and presentations.

Throughout the second half of the term, students work on a final project in addition to completing weekly assignments and activities. The final project requires students to volunteer two hours of work on a citizen science project on Zooniverse ([zooniverse.org](https://www.zooniverse.org)), where they choose from a range of projects that may involve transcribing historical documents, identifying species in wildlife photos, categorizing baby sounds based on development, or more. Often, this may be the first opportunity for students to look behind the curtain and see the day-to-day work of research that can culminate in a journal article. After completing their work on the project, students make a short presentation to the class describing the project they contributed to, what appealed to them about the research, and the possible impacts of the project.

In addition to this final research project, students write a 250-or-more-word reflection on their journey over the semester, sharing two potential next steps on their research path and selecting a CLA Core Competency (University of Minnesota, n.d.) that particularly exemplifies their work and growth over the semester. The most frequently cited competencies include digital literacy, oral and written communication, analytical and critical thinking, and career management.

The hands-on and reflective work of these final assignments gives students opportunities

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to participate in the whole lifecycle of a research project over the course of a single semester by contributing to ongoing research, practicing the skills needed to effectively communicate and contextualize their research, and thinking critically about the research process.

Assessment

The course sections are deliberately aligned with the main CLA 1002 FYE program in terms of grading expectations and assessments, being worth one credit and using pass/fail grading. Research suggests that pass/fail grading “enhances student well-being...lessening stress and competition and increasing self-monitoring” (Normann et al., 2023, p. 104336). The vast majority of students pass the class. Overall, the course is designed using the FYE high-impact practices guidelines, including a focus on frequent writing, collaborative learning, and information literacy, while also emphasizing the development of practical competencies to support faculty-sponsored research (Kuh & Association of American Colleges and Universities, 2008). The course does not have quizzes, tests, or finals; instead, the competencies are assessed through low-stakes assignments, such as discussion posts, which focus on student reflection, experience, and growth over the semester. The primary goal is for assignments to be useful for students as they learn more about undergraduate research, increase their confidence, and take steps to connect with faculty over research opportunities in a scaffolded way. For this reason, all assignments and discussions are graded on completion. Rather than assigning points or percentages, instructors participate in discussions and give constructive feedback on key assignments.

The most impactful way the student learning outcomes are measured is through the reflection assigned during the last week of the course. This written reflection is the only reflection not shared with the entire class. In the final reflection, students often discuss the realization of their value as an undergraduate researcher, the ways in which the class has aided the creation of their network on campus, the opportunities to

become a more effective researcher using library resources, and successes in pursuing research opportunities since they enrolled in the class. Students often mention the student and faculty panels in order to express their surprise about how much undergraduates are appreciated in research communities at the university, and how this realization has increased their confidence in seeking out a research role. Many students share that they have formed relationships with their instructors over the semester by utilizing office hours or sending out their draft faculty email from the class assignment to a potential mentor. Hands-on activities like creating mind maps, searching databases, or participating in the Zooniverse projects are often referenced as activities that make students feel more prepared to participate in faculty-sponsored research as well as being helpful for their courses. The reflection requires students to share the next steps they plan to take in their research journey (or not, if they have decided it is not for them). Many students share that they have already begun the application process for a research opportunity or found a spot in a research lab.

Benefits to Students

While students often do not have a clear picture of what it means to participate in research at the beginning of the course, the course introduces them to the research lifecycle, both generally and within the specific context of UMNTC. Students participate directly in data generation and cleanup (seen in the Zooniverse project), showing how this kind of research differs from library literature searches and synthesis and connecting them to the iterative process of how research develops from an idea through planning, data collection, and eventual dissemination. Modules and discussions created to educate students on research practices across disciplines are imperative in a course where many students have not yet developed an understanding of the research processes and methods of their field. Librarian knowledge of the institutional culture, and a recognition of the underlying systems of power in academia that may pose barriers, are woven together to assist students in navigating the complexities of beginning a research project

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and formulating concrete steps to achieve their goals.

Students opt-in to the course, bringing with them a curiosity about pursuing research. Course content and authentic assignments contextualize and outline a path toward participating in undergraduate research. Whether delivered asynchronously or in person, discussions and activities create a community where the students interpret, reflect, and learn from each other. Librarian teachers create space for students' personal interests, experiences, and academic or professional goals to drive their engagement in the class. This offers a corrective to some common failings of lecture-style instruction which can be transactional with the course content deposited into students' minds (Freire, 1993). Student interests and goals drive discussions of the day-to-day realities of pursuing academic research.

Trauma-informed practice is woven throughout the course, showing up in the curriculum, instructional design, and class management. When put into practice, trauma-informed pedagogy can look like checking in regularly with students, soliciting feedback and adjusting the course accordingly, providing flexible deadlines without penalty, and acknowledging and making space for the vast array of emotions people may feel at any given time (Arbour et al., 2024; Carello & Butler, 2015). Prioritizing students' sense of stability, agency, and connection to one another while decreasing cognitive load became a pedagogical focus of the course (Nelsen et al., 2022). Weekly modules were organized and communicated consistently, clearly designating what assignments were due, and the various ways students could choose to engage with the module content. All of the course content was chunked into smaller portions and scaffolded over time, and some assignments also have an element of choice to support students' different disciplines and interests. For example, an ethics assignment asks students to learn more about article retractions via the Retraction Watch website (retractionwatch.com) or explore human subject research by thinking about the questions a student should ask before being

part of a study. Another assignment addresses the ways systemic barriers have existed to keep people of color, women, and LGBTQIA+ folks from pursuing higher education and careers in research. One activity asks students to provide examples of what they think of when they picture a researcher. At times the examples provided lead to discussions of race, gender, and class in academic and research settings. These assignments attempt to demystify research for students, encouraging them to see themselves as researchers while considering possibilities, stereotypes, and limitations.

Avoiding Pitfalls

Low enrollment in courses not tied to major requirements is frequently a concern both for administrators and librarian instructors. By collaborating with CLA on their existing FYE course, a requirement for all first-year students, librarians have built and offered a credit-bearing course section while avoiding the uphill battle of marketing that course to students. The partnership allows librarian instructors to rely on the instruction infrastructure that already exists in the college (i.e. registration, communication pathways, etc.), lightening the administrative burden on the library and the librarian instructors. Offering multiple sections and modalities allows the instructors the flexibility to easily add or drop sections based on total student interest and enrollment. Student buy-in is a known issue for many required FYE courses. Providing the research section as an option for students ensures those who opt-in have some interest in the course. Additionally, the curriculum and assignments are closely tied to tangible outcomes and student goals. Continually relating how course content applies to achieving future goals means buy-in is established early and high levels of engagement are maintained throughout the course.

Conclusion

Librarians teaching a credit-bearing course is not without its challenges but can be advantageous for both instructors and students. The Research Spotlight course leverages

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librarians' existing connections to research practices and instruction at UMNTC to create a credit-bearing, FYE course that opens the door to undergraduate research for students. The curricular focus on student goals and priorities, coupled with the librarians' deep understanding of both the disciplinary and local research environments, hooks student interest while weaving in broader information literacy concepts with practical research skills. By partnering with existing course structures outside of the libraries and collaborating with colleges and departments already working with librarians, Research Spotlight was able to side-step many of the logistical and administrative challenges to librarian-led credit-bearing instruction and focus instead on how best to support new college students as they begin their research journeys.

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ARTICLE

Meaning-Making About a Sustainable Society Through Collaborative Online International Learning (COIL) Projects in Higher Education

—Tunde Szecsi, Debra Giambo, Marianela Rivera and Flavia Stara

Tunde Szecsi, Florida Gulf Coast University, tszecsi@fgcu.edu

Debra Giambo, Florida Gulf Coast University, dgiambo@fgcu.edu

Marianela Rivera, Amherst College, mriveraperez@amherst.edu

Flavia Stara, University of Macerata, flavia.stara@unimc.it

Abstract

In higher education, engaging students with topics concerning the present and the future of society is essential to bolster sustainability. Collaborative Online International Learning (COIL) is a pedagogical avenue to provide a space to discuss these issues and to gain new perspectives through international partnership. In courses offered at two universities, one in the United States and the other in Italy, university students collaboratively explored societal issues through technology-enabled interaction. This paper reports on the outcomes of COIL projects through the connectivism theory, focusing on how students' self-selected topics and discussions were reflective of internationally relevant societal concerns outlined in the Sustainable Development Goals developed by the United Nations. In addition, we report on how students navigated meaning-making on these social issues by using multimodal communication tools in an online space of the COIL projects. Recommendations for stakeholders in higher education are offered based on the findings.

Keywords:

Collaborative Online International Learning, COIL, multimodal communication, SDGs, sustainable future, meaning-making, connectivism

Promoting sustainability in higher education involves engaging students in topics related to the present and future of society. Professors play a key role in creating a learning environment in which students can develop and practice critical thinking and multimodal communication to explore, express, and negotiate meanings and ideas about societal topics. Collaborative Online International Learning (COIL) offers a space in which students can engage in these discussions while gaining new perspectives through collaboration with international peers (Rubin & Guth, 2022). In courses featuring a COIL component, international faculty collaborators design and facilitate projects in which students in different countries work together to construct knowledge about shared topics of inquiry (Rubin & Guth, 2022). Because perceptions of societal issues are shaped by individuals' cultural, political, and economic backgrounds and experiences, international dialogue can open windows into how these issues are interpreted and understood across contexts.

In this study, meaning-making is understood as a relational and dialogic process through which students interpret experiences and negotiate understanding in interaction with others. From a sociocultural perspective, meaning emerges through mediated dialogue rather than in isolation (Vygotsky & Cole, 1978).

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Collaborative learning scholarship similarly emphasizes that shared understanding develops through interaction and the joint construction of knowledge (Dillenbourg, 1999; Stahl, 2006), while sensemaking theory highlights how individuals collectively interpret complex issues in ways that inform action (Weick, 1995). Together, these perspectives frame meaning-making as a dynamic process shaped through intercultural dialogue and multimodal communication within the COIL environment. This understanding of meaning-making highlights the importance of creating structured-yet-open spaces for students to examine complex societal challenges from multiple perspectives and to position their interpretations within broader global conversations.

The Sustainable Development Goals (SDGs) developed by the United Nations (UN) provide a comprehensive overview (2015) of the objectives that governments, policymakers, and institutions worldwide consider indispensable for building a more sustainable future. These goals emphasize global priorities while recognizing the importance of local interpretation and action, an interplay often referred to as glocalization. Imaduddin et al. (2025) state, “glocalization demonstrates the fusion of global and local contexts, acknowledging the valuable contributions from diverse communities and cultural backgrounds” (p. 3). Given the increasing relevance of the SDGs in higher education, recent studies have examined the impact of including SDGs in university curricula, noting positive effects on students’ awareness, engagement, and critical thinking (Campoy-Cubillo & Jimenez-Estrada, 2025; Janík, 2024; Merchán-Rubiano & Chateau, 2024). However, despite this growing body of scholarship, relatively few studies have focused on the use of COIL as a pedagogical approach for engaging students in societal issues through the lens of the SDGs.

In alignment with our universities’ internationalization efforts and strategic goals, we created a COIL project connecting students in Florida, USA, and Marche, Italy. Rather than directly teaching the SDGs, the courses addressed critical societal issues relevant in multiple fields

of studies. We encouraged students to select topics they believed required attention to contribute to a more just and sustainable global future. The COIL projects offered opportunities for students to connect with an international partner and engage in online, sustained, intercultural dialogue about self-selected topics to develop and elaborate their perspectives and explore potential approaches toward meaningful solutions.

To understand students’ thought processes and their jointly negotiated meaning, we critically analyzed student-selected topics and their collaborative discussions, referencing the UN’s 17 SDGs as an analytical framework. Thus, the aims of the study is to explore how students’ self-selected societal topics and related discussions reflect internationally relevant issues as articulated in the SDGs, and how students navigated meaning-making through multimodal communication tools within a shared space created by a COIL project.

Literature Review

The examination and integration of the SDGs have become prominent in higher education institutions worldwide, showing a growing commitment to raising awareness among future generations and equipping them with the knowledge and competencies required to advance sustainable development. The process leading to the SDGs began in 2013, when the UN established Open Working Groups tasked with developing a proposal for a new global development framework to succeed the Millennium Development Goals. This multilateral process culminated in 2015 with the formal adoption of the 2030 Agenda for Sustainable Development, which includes 17 SDGs at its core (United Nations, 2015). These goals articulate targeted objectives to address pressing political, economic, environmental, and social challenges, with the intention of achieving them by 2030. They include areas such as “No Poverty,” “Zero Hunger,” “Good Health and Well-Being,” “Climate Action,” and “Reduced Inequalities,” among others (United Nations, 2015). Higher education institutions play a critical role in advancing the

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SDGs (Alcántara-Rubio et al., 2022; Ashida, 2022; Chankseliani & McCowan, 2021). However, despite increasing institutional alignment with the SDGs, recent scholarship continues to note uneven integration of these goals into curricula, pedagogical practices, and research initiatives across disciplines (Leal Filho et al., 2023). This gap highlights the need for intentional pedagogical approaches that move beyond aspirational commitments toward sustained, contextually grounded curricular engagement with sustainability goals.

In response to this need, international and technology-mediated pedagogical models have gained substantial traction over the past decade, particularly those that promote global collaboration, intercultural dialogue, and critical reflection (O'Dowd, 2018, 2022). Historically, however, relatively few educators had extensive experience with pedagogical networking and collaborative approaches to teaching and learning across borders (Rubin, 2017). Among these emerging models, COIL has experienced rapid and sustained growth, evolving from a niche internationalization strategy to a widely adopted pedagogical framework across disciplines and regions (Zolbanin & Gosalia, 2024). Coined in 2006, COIL refers to a virtual academic exchange model in which faculty and students from different countries co-create innovative learning experiences through sustained online collaboration (Rubin, 2017). As digital communication technologies expanded and structural barriers continued to limit student participation in traditional study abroad programs, COIL emerged as a cost-effective strategy for internationalizing curricula without requiring physical mobility (Gokcora, 2021; Vahed & Rodriguez, 2020). Its expansion has been supported by the broader integration of online technologies, the widespread use of social networks, and growing safety and accessibility concerns surrounding international travel (Dostál et al., 2018).

The COVID-19 pandemic served as a significant catalyst for this expansion, as it accelerated the normalization of virtual collaboration and prompted higher education institutions to

reconceptualize international engagement beyond physical mobility (Borger, 2022; Gokcora, 2021; Hackett et al., 2023; Liu, 2023). Post-pandemic COIL initiatives increasingly emphasize equity, access, sustainability, and long-term partnership building, positioning COIL not merely as a contingency solution but also as a transformative and enduring mode of internationalized learning (Collett & Slapac, 2024; Hackett et al., 2023; Nikula et al., 2022). As COIL consolidated its position within post-pandemic internationalization strategies, attention shifted toward examining how the model might contribute more explicitly to the advancement of the SDGs.

Sustainable Development Goals in COIL Projects

Recent COIL scholarship published between approximately 2018 and 2025 reflects both the exponential growth of COIL initiatives and a diversification of their thematic foci, including disciplinary expansion, pedagogical innovation, intercultural competence development, social justice, and sustainability-oriented learning (Collett & Slapac, 2024; Chan, 2025; Vega Chica, 2025). Within most institutional contexts, COIL functions as a faculty-initiated pedagogical strategy embedded within existing courses rather than as a permanently institutionalized disciplinary component, which partially explains its uneven thematic integration across semesters and subject areas. Nevertheless, much of the literature examining COIL's engagement with the SDGs continues to prioritize environmental and economic dimensions of sustainability, particularly within science, technology, engineering, mathematics, and business-related programs (Ekici, 2025; Vega Chica, 2025). This pattern is evident across peer-reviewed studies indexed in major academic databases (e.g., Scopus, ERIC, and Google Scholar). This review was designed as a focused narrative synthesis rather than a systematic review and is intended to illustrate prevailing thematic patterns rather than provide an exhaustive account.

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While recent literature demonstrates COIL's growing role in sustainability-oriented internationalization (Adefila et al., 2021; Membrillo-Hernández & Cuervo-Bejarano, 2022; Miralles-Garcia et al. 2025), the social and human-centered dimensions of the SDGs such as equity, social justice, cultural inclusion, and well-being remain comparatively underrepresented, particularly in disciplines such as education, the humanities, and the social sciences (Collett & Slapac, 2024; Furtado Guimarães et al., 2019). Recent empirical studies show that COIL can effectively engage students with sustainability themes, such as health equity (SDG 3), gender equality (SDG 5), and responsible consumption (SDG 12). These initiatives often remain focused on certain subject areas instead of being incorporated more broadly across disciplines. Despite promising examples (Campoy-Cubillo & Jimenez-Estrada, 2025; Kiegaldie et al., 2022; Vega Chica, 2025; Wiesner-Luna & Burgoa-Godoy, 2023), recent review and synthesis studies continue to note an imbalance and call for broader conceptualizations of sustainability within COIL that move beyond primarily technical or environmentally focused approaches and toward more structurally integrated social justice frameworks (Chan, 2025). Addressing this imbalance requires not only expanding thematic coverage but also rethinking the epistemological and relational foundations of COIL collaborations.

COIL as Transformative “Third Space”

This gap highlights the need for COIL to function as a transformative “Third Space,” a concept rooted in spatial, sociocultural, and applied linguistics scholarship, which enables learners to move beyond binary distinctions such as Global North/Global South, local/global, or home/abroad. Drawing on Soja's (1996) conceptualization of Third Space as a site where lived experiences, social relations, and power intersect, COIL can be understood as a pedagogical space that disrupts dominant epistemologies and legitimizes alternative ways of knowing and meaning-making within international collaboration. Similarly, Oldenburg's (1997) notion of “third places” as

informal, relational spaces outside home and formal institutional hierarchies offers a useful lens for understanding COIL environments as dialogic, low-threshold spaces that foster community, reciprocity, and sustained interaction across differences. From an intercultural and linguistic perspective, Kramsch (2009) further conceptualized Third Space as a symbolic and discursive site where language, culture, and identity are negotiated rather than transmitted. In this sense, COIL operates as a Third Space in which participants co-construct knowledge through dialogue, reflection, and cultural mediation, particularly within Global South–North and South–South collaborations (Furtado Guimarães et al., 2019; Wimpenny et al., 2022). At the same time, research on the intersection of COIL and the SDGs frequently documents projects embedded within existing internationalization infrastructures, including established institutional partnerships, networking platforms, and structured partnership-building initiatives, particularly in collaborations involving institutions in the Global South or broader international contexts. This structural tendency may shape not only the thematic focus of projects but also the conceptual framework through which sustainability is interpreted and enacted.

Although COIL provides rich opportunities for collaboration, there is potential for increased emphasis on the social priorities of the SDGs beyond COIL's earlier concentration within business and technical disciplines (Adefila et al., 2021; O'Dowd, 2022). The focus of some studies on global and contextual issues (Obersteiner et al., 2016; Sarkar et al., 2022) also points to the need to respect the intersectionality and diversity of social and cultural understandings in international collaboration, which is also relevant to the potential multidisciplinary use of COIL for advancing social goals. As a pedagogical approach in social sciences or humanities, COIL could meet social and sustainability goals by respecting contextual and pluralistic approaches.

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Connectivism Theory and Knowledge Construction in COIL

This study is grounded in connectivism theory (Siemens, 2005) to examine how students engage in collaborative meaning-making around globally relevant societal issues in a COIL context. As a learning theory for the digital age, connectivism offers a framework for understanding how knowledge is constructed across networks of people, ideas, digital tools, and information sources, rather than within isolated individuals (Bates, 2022; Siemens, 2006). From this perspective, learning is understood as a relational and networked process, which aligns with COIL as a pedagogical approach that facilitates international collaboration, dialogue, and shared inquiry around complex societal issues (Rubin, 2016; Rubin & Guth, 2022). Unlike earlier learning theories such as behaviorism, cognitivism, and constructivism, which primarily emphasize internal cognitive processes or individual meaning-making, connectivism foregrounds the distributed, technological, and relational dimensions of knowledge production (Hendricks, 2019). Connectivism differs from earlier learning theories by recognizing that knowledge is constantly evolving and distributed across a variety of ways, many of which exist outside the learner (Hendricks, 2019). Therefore, students in online environments should be able to find, assess, and integrate information from a variety of sources. Knowing how to learn can be as important as acquiring knowledge, and individuals should know how to recognize patterns, understand complex systems, and see the value of ideas as they adapt to them (Siemens, 2005). These skills are crucial for COIL projects that require students to explore a societal problem or phenomenon that is created or influenced by specific cultural, economic, and political conditions.

Connectivism, therefore, serves as a conceptual bridge linking COIL, meaning-making, and engagement with globally relevant challenges such as those articulated in the SDGs. If knowledge is distributed across networks and learning occurs through the formation of

connections among diverse nodes (Siemens, 2005), then pedagogical approaches that intentionally create transnational digital learning networks, such as COIL, become particularly appropriate contexts for collaborative meaning-making. Within COIL environments, students may select and discuss globally relevant societal issues, sometimes without explicit alignment with the SDGs, while engaging with themes that intersect with sustainability-related concerns. From a connectivist perspective, such engagement can be understood as emerging from transnational knowledge networks rather than from predefined curricular pathways. International dialogue allows learners to bring local, national, and disciplinary perspectives into conversation, which enables them to form new conceptual connections through negotiation and synthesis. These exchanges move beyond information sharing to processes of collective inquiry and epistemic co-construction, which are central to connectivist learning (Siemens, 2005, 2006). When learners engage in dialogue about complex societal issues, they participate in networked processes of interpretation and synthesis rather than isolated content acquisition. In this sense, COIL can be understood as operationalizing connectivist principles in practice.

A foundational assumption of connectivism is that learning happens with and through various viewpoints and open systems (Siemens, 2005). Within a COIL context, students engage with peers who bring different life experiences, academic disciplines, and cultural assumptions to the dialogue (Rubin 2016, 2017). These differences are points of tension and possibility, which at the same time encourage learners to question their assumptions and to reframe their own knowledge. The theory of connectivism values diverse perspectives because they enhance both idea generation and conceptual frameworks within learning networks (Chien et al., 2019).

Autonomy is another important dimension of connectivism (Siemens, 2005, 2006). Learners

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can choose a topic that is relevant to their value system and social context, as well as jointly create meaning through communication. Autonomy is therefore central in connectivism's focus on learner agency and placing the onus on learners to assume responsibility for learning as well as its value for navigating complex, interconnected knowledge ecologies in globally networked classrooms (Afroz, 2024; Mukhlis et al., 2024).

Recent research underscores the relevance of connectivism for digitally mediated, internationally networked learning environments such as COIL. Connectivist frameworks support networked communication, autonomous engagement with societal challenges (Jeny, 2024), and deeper participation across networks (Pandya et al., 2024). These frameworks address key challenges in digital education by drawing on online communication and knowledge mobilization (Goldie, 2016) and have been linked to sustainable development through flexible, relational learning structures that connect diverse knowledge nodes (Dziubaniuk et al., 2023; Omodan, 2023). In these contexts, individual and collective inquiry intersect to generate an emergent understanding dynamic central to COIL projects (Tschofen & Mackness, 2012). Together, these studies support connectivism as a theoretical framework for understanding learning in COIL as a digitally mediated, internationally networked pedagogical approach. With its emphasis on the use of different digital tools, promoting self-directed learning, and encouraging the synthesis of global perspectives, connectivism provides actionable strategies for engaging students in the co-construction of knowledge around complex, globally relevant societal issues.

Using a connectivist lens, this study examines how students navigate, connect, and make meaning of societal challenges, especially those relevant to the SDGs, in international digital learning environments. Connectivism, unlike traditional learning theories, is based on the idea that knowledge is not fixed or delivered by an instructor. Rather, it is built, experienced, and developed as an emergent, participatory, and networked process (Siemens, 2005). From

this perspective, COIL is not simply a space for exchanging perspectives but a structured environment in which students connect, negotiate, and synthesize diverse viewpoints to construct new shared understandings. Therefore, this approach provides a strong foundation to COIL settings, where students work together to explore the relationship between local issues and global priorities and engage in meaning-making through dialogue. Grounded in connectivist principles of distributed knowledge and relational learning, this study explores how students' topic selection and multimodal interactions reflect processes of networked knowledge construction in relation to globally relevant societal challenges. Building on this foundation, this study applies connectivism learning theory as a dynamic lens for exploring collaborative meaning-making within COIL contexts to answer the following questions:

1. Within a COIL project, to what extent do students' self-selected topics reflect globally relevant societal issues aligned with the SDGs?
2. To what extent do students perceive their learning in a COIL project to be affected by communication and collaboration with their international partners?
3. How do students engage in multimodal communication to negotiate, connect, and synthesize perspectives in the co-construction of knowledge about critical societal issues?

Methodology

Institutional Context and COIL Project

This study was conducted in four graduate courses across two semesters at two universities: a medium-sized, comprehensive public university in Florida, USA and a similarly sized public university in Marche, Italy. The students who participated in the COIL project were pursuing either a graduate degree in education or international tourism. The primary purpose of the COIL project was to enable students to examine critical societal issues from various

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perspectives and collaboratively negotiate their understanding with an international partner. For this study, we consider critical societal issues that are addressed in the UN 17 SDGs (United Nations, 2025). The specific course learning objectives addressed knowledge development about society, discussing topics such as power, accessibility to resources, education, demographic changes in society, and social trends. The expected learning outcomes also included skill development for effective intercultural communication about these critical societal issues, with the goal of enabling students to share their independently researched topic and engage in the co-construction of knowledge with their international partners. To accomplish these goals, students were encouraged to use different multimodal communication tools to support collaborative knowledge construction across national contexts.

The COIL project followed a structured sequence of steps. Teams of two, consisting of one student from Italy and one from Florida, were randomly created. First, each team member completed an icebreaker activity, which included a 2-minute video about their background, interests, and personal and professional goals. This activity was designed to help them get to know each other, and they engaged in some initial informal communication to develop a relaxed atmosphere for the upcoming work time together. During the following two weeks, each student developed a 5- to 6-minute presentation on a self-selected topic they deemed critical and important to discuss with an international partner using research and multimodal communication tools, such as a narrated PowerPoint. They chose which societal issue they wanted to explore further to expand their own knowledge, share it with their partner, and navigate an emerging shared understanding. After reviewing each other's presentations, the international team members came together online to jointly elaborate on different perspectives presented in each other's work, negotiate their understanding, and brainstorm possible solutions. The teams had the flexibility to decide which online platforms to use, such as Zoom, WhatsApp, Padlet, and Skype, and when to meet to discuss their projects. These online

dialogues between the two students were audio recorded. The collaborative learning experience concluded with an individual paper in which each student had the opportunity to reflect on how this internationally connected learning space impacted their understanding of critical issues in the two countries.

The COIL projects took place during the second half of the semester and spanned six weeks. The COIL component in the courses in Florida was a required course assignment, while in the courses in Italy, the students volunteered for this international experience. We, the instructors in Italy and Florida, co-designed and co-facilitated the COIL project and maintained regular communication before, during, and after the project. We provided structured guidelines to help students navigate the timeline and expectations, and we guided them in the completion of the tasks.

Participants

Ethical approval from the Institutional Review Board (IRB) was secured at Florida Gulf Coast University (IRB Protocol: 2022-79), and following the conclusion of the semester, we received signed informed consent forms from 24 students. Eleven students were enrolled in the graduate education courses in Florida, including five Hispanic students, five African American students, and one White student. The two male students, one non-binary student, and eight female students were between the ages of 35 and 50. All of these graduate students were pursuing a doctoral degree in education while working full-time as teachers, instructors, or administrative professionals in educational institutions. The 13 students in Italy included six Italian nationals and seven students from other countries, including Russia, Gambia, the Netherlands, and India. The eight female students and five male students were full-time students between the ages of 25 and 45 and enrolled in master's-level programs in international tourism and education. To keep the participants' identities confidential, we used the following coding system: IT1 for Italian student 1, and US1 for student 1 in Florida.

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Data Collection and Data Analysis

We included the following data sources: participants' presentation projects and audio-recorded online dialogues between the two team members, the end-of-semester reflection papers, and instructors' notes throughout the COIL project development and implementation. The narrated PowerPoint presentations were transcribed. All data were in English. After preparing the data for analysis, four researchers, including two course instructors and two unaffiliated researchers, analyzed the data independently and held several data sessions to check the codes, categories and themes in order to ensure an unbiased interpretation. For this single instrumental case study (Stake, 1995), we employed discursive research analysis (Gale, 2010) to analyze the data that represented different discourses, such as communicating about critical societal issues with international partners and reflective thoughts. Language and speech are the main instruments for building an understanding of reality; however, there are other modes of communication, such as visual representation of thoughts; therefore, we used multimodal discourse analysis (Kress & Bezemer, 2023) to include communication tools beyond language that students used to express or negotiate their understanding. Through a detailed thematic analysis of discourses, and the examination of the multimodal tools, we identified jointly developed meanings that emerged from students' written and virtual oral exchanges (Creswell & Poth, 2018), while also taking into consideration students' cultural and societal backgrounds (Bray et al., 2014).

Specifically, to understand the relationship between the participants' discourses on critical societal topics and the SDGs, we used the students' PowerPoint presentations, reflection papers, and the audio-recorded dialogues. We began by closely examining the data to identify recurring words, designated as keywords, which captured a wide range of topics that participants addressed in their discourses. Then, we used the keywords to create codes, which were assigned to segments of the discussions. We then organized the codes into meaningful categories, which resulted in themes aligned with student-selected

social issues and connectivism-related concepts (Naeem et al., 2023). Next, these themes were compared with (1) the SDGs to develop insights into students' critical understanding of these issues and their relationship to the SDGs and (2) connectivism theory to determine whether related concepts were fundamental to student learning through the COIL projects. During the data analysis process, we noted the negotiation, synthesis, and integration of knowledge that emerged due to the collaborative nature of this project. Regarding the second research question, which addresses the ways students created meaningful understanding with their international partner, we used multimodal discourse analysis to explore how students communicated and created new understandings through various modes of communication beyond language. We treated the various modes of discourse, such as images, different forms of linguistic writing and oral expression, and auditory messages, as equally capable of contributing meaning to complex topics. As Kress and Bezemer (2023) argued, language is only one of the many resources for meaning making.

We examined the students' projects and identified various modes they used in expressing their thinking about their chosen social issues. In addition, using the reflection papers and the audio-recorded dialogues, we examined how the students utilized these different multimodal tools to build the connections between team members, and to generate and negotiate their understanding of the critical societal issues.

Findings

In this section, we outline the findings in relation to the research questions. First, the participants' selected topics are discussed in connection with the SDGs. Second, student reflections are shown to indicate a deeper understanding of the issues through their engagement with an international partner via the COIL project and, thus, through learning how these societal issues are understood and manifested differently across national contexts. Then, the participants' use of multimodal communication tools to

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foster meaningful understanding of the selected topics is reported. The thematic findings are presented through a connectivist lens by examining how knowledge emerged through ongoing interaction among students, ideas, and multimodal forms of communication within the international learning network, rather than solely at the individual level.

Connection Between Self-Selected Topics and SDGs

In the context of international collaboration, students' self-selected topics indicated connections to educational and societal issues that hold global relevance. Project topics were grouped into four themes: (a) race, ethnicity, poverty, and gender in education; (b) rights of newcomers in education; (c) politics and perspectives in higher education; and (d) vulnerability of women in society. Although these themes are presented as four distinct themes for analytic clarity, the data revealed that they functioned as interconnected nodes within a broader learning network. Across projects, recurring concepts such as representation, structural inequality, policy influence, and human rights emerged as shared points of connection linking students' inquiries across national contexts.

Race, Ethnicity, Poverty, and Gender in Education

Student project topics reflected global connections and intersected with a variety of SDGs. Project topics included issues surrounding the marginalization of diverse students based on income, ethnicity, race, gender, sexual orientation, and academic achievement as well as issues related to the recruitment and retention of teachers in lower-income schools and of women in educational leadership roles. Topics intersected with SDGs of "No Poverty," "Quality Education," "Gender Equality," "Reduced Inequalities," and "Peace, Justice, and Strong Institutions." One student from Italy addressed the marginalization of low-income students in educational settings and the role of education in reducing inequities:

Democracy intentionally created poverty as a means of control of social and economic balances.... The western democracies exploited the marginalities and poverty to consolidate the government of upper classes.... Starting from marginality means consider[ing] this phenomenon as a personal and social condition with specific educational needs. (IT1)

The students discussed the topic of representation in higher education in relation to academic achievement, with the insight that students of color often do not see themselves reflected in their professors. One student stated, "Representation of faculty of color is a critical step towards helping students of color graduate and succeed. Faculty of color provide a cultural aspect and understanding that cannot be obtained from White professors alone" (US7). Through interaction with international partners, these discussions evolved beyond individual national examples. Students began referencing each other's educational structures and demographic realities, linking local experiences of marginalization to broader structural patterns. In this way, race and inequality became central nodes within the learning network, as students connected multiple projects across borders, which contributed to a shared understanding rather than merely engaging in parallel comparison.

Rights of Newcomers in Education

Another group of students' projects focused on newcomers, especially immigrants, refugees, and their experience in schools, demonstrating intersections with SDGs related to "Quality Education and Peace," "Justice," and "Strong Institutions." One student examined the predominant views of people in the United States about immigrants:

A majority of Americans support immigration of high-skilled people.... In recent surveys, more than 60% of American citizens have expressed support as they see them as people who contribute and strengthen the country with their hard work and talents. However, there are others who say they are

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a burden because they take American jobs, abuse welfare, and bring crime and violence to the country. (US6)

Another student considered culture and cross-cultural communication in education, the prevalence of diversity, and the importance of strategies for promoting effective communication. This student described some of the challenges and stresses faced by immigrant children in the United States:

Unfortunately, children who migrate from other countries or the children of immigrants who attend school, face challenges constantly, such as the stress caused by immigration status, language barriers, social, cultural, and academic isolation, financial struggles, and lack of access to health care. (US6)

Another student focused on informal educational segregation, or lack of inclusion, from the Italian perspective. She described this kind of segregation as “one of the worst cases of discrimination and a serious violation of social and civil rights that threatens children’s learning opportunities... and undermines the future employment and earning opportunities of many children and young people” (IT4). Through dialogue, students increasingly understood immigration as a shared human rights concern, not primarily a national debate. Students drew connections between segregation in Italian schools and systemic inequities in U.S. education. They also recognized common structural challenges despite different national contexts. As they engaged with one another’s perspectives, their analyses expanded from local observations to more integrated understandings. This shift suggests that knowledge developed through connection and exchange within the international learning network.

Politics and Perspectives in Higher Education

The third grouping of chosen topics focused on politics and perspectives in higher education and included topics related to students from different backgrounds, first-generation college students, and the intersection of governmental

priorities and higher education. These topics intersect with the SDGs of “Quality Education,” “Reduced Inequalities,” and “Peace, Justice, and Strong Institutions.” An asset-based perspective on first-generation college students, though less common than seeing them through a deficit-based lens, was presented as a pathway to enhance their success (US8). After reviewing past legislation supporting access to higher education, one student (US10) expressed concerns about the effects of governmental priorities on academic freedom in higher education (US10). Overall, students’ projects reflected a shared concern about the availability of quality higher education for all. Across these projects, the politicization of education emerged as a shared theme. Students recognized that legislation, funding priorities, and public discourse influence access and equity in both national contexts. As they compared policy environments, they began to notice patterns that extended beyond individual countries, which broadened their understanding through dialogue and exchange.

Vulnerability of Women in Society

Women’s vulnerable position, as reflected in student-selected topics and international connections, included female genital mutilation, early arranged marriages in India, human trafficking, women’s rights, and gender inequality in higher education leadership. These topics aligned with the SDGs “Gender Equality,” “Decent Work and Economic Growth,” “Reduced Inequalities,” and “Peace and Justice.” Noting the fundamental violation of women’s human rights, one Italian student stated,

Female genital mutilation (FGM) is a violation of basic human rights, is medically unacceptable,...[and is a form of] discrimination against girls and women. All forms of FGM remove and damage healthy tissue and interfere with the biological foundation of girls’ bodies. (IT12)

Connections to Deeper Meaning-Making

Students attributed deeper learning to the networking opportunities afforded them by the

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COIL projects, negotiating diverse perspectives to autonomously make meaning of similarities and differences between related issues in different societal and educational contexts. One student's assumptions were challenged when discussions with the Italian partner revealed "more freedom... as part of the LGBTQ+ community" in Italy than in the United States, although there is a lag in "Italy... behind the US on LGBTQ+ policies" (US3). Another student expressed deeper learning about similarities as well as nation-specific information because of the connection with the Italian partner: "Although the socio-political reasons that pushed the waves of migration are different in the United States and in Italy, we have many things in common... such as... perceptions that citizens have of immigrants... and other issues that arise from them (such as racism)" (US6). This student also expressed experiencing broadened learning through connection, such as regarding "nationalities of immigrants arriving in Italy, the migration routes, and the initiatives implemented in Italian schools to support both immigrants and the educators who work with them." Furthermore, some connections revealed different educational foci. For example, one student stated, "[The] University of Milan has the Gender Equality Plan which is a strategic plan that focuses on getting more women into STEM fields and more men into humanities fields, ... [yet] resources or support for first-generation college students [were nonexistent]" (US8).

Some students' reflections indicated that their connected learning created deep and lasting effects. One student, reflecting on child marriages, stated,

It is one thing to read about a tragedy that happens on the other side of the world [and another] to speak to someone who knows a victim intimately and personally. Had I never interacted with my partner, I would still be very naïve and shut out of such worldly problems. Hearing his voice, hearing his compassion, and seeing the emotional toll this topic took on him impacted me very personally. While I may never speak or work

with him again, his story carries on in my mind. (US11)

Another student reflected on her broader and deeper knowledge as well as her ongoing questions from connecting with her Russian partner: "The common denominator... is the way in which politicians in [the US and Russia both] use legislation to hinder possible solutions to problems of social injustice.... I had (and still have) so many questions!" (US10). Yet another student reflected that connecting internationally through the COIL project provided a fundamental connection relating both to humanity and back to her profession:

Often, I only hear about international issues from news outlets. Many times, I hear in the media this is not 'America's issue;' however, this is a human race problem. It also allowed me to reflect on current practices within schools when students move from another country into American schools. (US9)

Connections made with international partners deepened student learning, and the COIL project provided meaningful, autonomous, meaning-making opportunities with partners.

Multimodal Communication for Meaning-Making

Participants in the COIL project aimed to express their thinking about the selected societal issues with clarity, using evidence from reliable sources. In joint online communication, it was also essential to ensure that the international partners would develop an understanding of the issues, regardless of their different cultural, linguistic, and experiential backgrounds. Therefore, participants used various modes of communication, including language and multimodal forms of representation. The analysis resulted in the following themes: (a) narrative discourse, (b) visuals, and (c) auditory modes. The analysis indicated that these diverse modes were not used in isolation; rather, the interplay among them contributed to creating and navigating meaning-making about complex societal issues.

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Narrative Discourse

The narrative discourses indicated two different dimensions: (a) interpretation of evidence-based information related to the societal issue, and (b) personal stories narrating the relevance and experience with the selected topic.

Evidence-Based Information. Participants frequently referenced research studies and reports to validate their descriptions and arguments. For example, to describe the depth and breadth of human trafficking, one student (US11) used current scholarly articles focusing on human trafficking and sexual exploitation. In addition, an Italian student (IT11) shared narratives including data from UNICEF sources to depict the widespread presence of child marriage in certain countries (IT11). To provide a detailed and objective overview of the recent legislative changes in Florida's education system, the narrative drew upon interpretations of specific House and Senate Bills and their impact on students, teachers, and curricula. Similarly, Italian students (IT9 and IT10) validated their narrative about immigrants and refugees with recent scientific literature. These narrative sources were first shared in the PowerPoint presentations. In online conversations, students often revisited the narrative sources to clarify or emphasize the details of the selected topic. Ultimately, these narrative sources contributed to the shared knowledge production.

Personal Stories for Relevance and Experience. Some participants included narrative texts describing their own experiences (e.g., being a first-generation college student or being an African American male teacher). Most topic selections were also justified by their lived experiences, adding their voice to highlight their concern. For example, one Latina student (US11) discussed how recent legislative changes heightened her concern about maintaining safe places for all students and ensuring their voices are heard. An Italian student (IT3) complemented her research-based narrative with a personal commitment statement:

I had the opportunity to interface with foreign students at school, and I perceived the

difficulty of teachers when they were unable to transmit knowledge easily and when, despite their efforts, they didn't receive feedback from these students. However, I strongly believe that these students, if welcomed, included, and stimulated in the right way, show the same interest as Italian students. I believe that we all, as human beings, have the same rights, which must be respected in the same way.

By combining research-based information with personal experiences, students showed that they were not only studying societal issues but also reflecting on how those issues touched their own lives. This combination of evidence-based resources and lived experience strengthened their arguments and encouraged a more meaningful connection within international collaboration.

Visuals

Participants used images to express, solidify, and supplement the information they presented verbally in their PowerPoint presentation. Two distinct types of visuals, scientific and illustrative, supported meaning making. These visuals stemmed from different media sources.

Visuals from Scientific Sources. Tables, graphs, and diagrams from scientific sources provided additional evidence-based information to deepen understanding of the topics. Participants also frequently incorporated maps, graphs, and charts with demographic or statistical data to inform their partners about the widespread nature of the issue. For example, students used charts from the Pew Research Center and the U.S. Census to show immigrant diversity by ethnicity and languages. For example, one student inserted a map from UNICEF indicating the percentage of populations affected by female genital mutilation in African countries into the PowerPoint to emphasize the widespread nature of this issue. In addition, to visually demonstrate the disparities in higher education enrollment by race, several students utilized charts and graphs from the National Center for Educational Statistics. In the reflection paper, several students commented on how their team

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partners' visuals deepened their understanding of the specific issue.

Images from Non-Scientific Sources. Students used images, such as photographs, and art-based visuals from non-scientific sources to foster the meaning-making process and evoke emotions and empathy. Some participants used authentic photos of, for example, rallies supporting immigrants featuring verbal messages such as "Immigrants make America great," and "I love this country. I just want to stay." Many participants used commercial images, probably to visually support their narrative. Some examples would be an image of a scale to demonstrate justice, a classroom picture with students to illustrate cultural diversity in schools, and an image of graduating students to emphasize the idea of successful college completion for first-generation students. A few participants included artful visuals, such as a painting representing human diversity. Among them, some images appeared more decorative than informational, with limited communicative intent. Overall, visual elements helped students clarify complex information while also encouraging empathy and a sense of shared understanding across cultural contexts.

Auditory Modes

Participants used various auditory modes of communication to negotiate meaning with their international partners. These included self-made videos, published videos in the PowerPoint presentation, and synchronous online conversations between team members to expand and clarify the meaning of the societal issues.

Narrated PowerPoint and Videos. Some participants decided to use a self-made video recording rather than creating written presentation projects. One student (US3), who selected the topic of LGBTQ+ students in schools, first described their own identity as a transgender, non-binary individual who experienced bullying as a high school student and concluded the video message with recommendations for teachers to create an environment that embraces all students with respect. Their partner

commented on how this video expanded her understanding on challenges which LGBTQ+ youth experience. Also, one Italian student (IT6) included two YouTube videos of young refugees describing their struggles and challenges as they settled down in Italy. Her partner in Florida noted, "Before this project, I never understood the disparities many refugees face in Europe" (US5). Another student (IT10) included Human Rights Watch videos, BBC, and Russian media outlets to provide a comprehensive overview of the extent and brutality of domestic violence against women in Russia. The student in Florida commented on these images from videos, "The type of violence displayed... was shocking, frustrating, and terrifying" (US10). The materials generated rich and deep conversation between the two students. These authentic voices added emotional strength and increased relatability.

Synchronous Online Conversation. Participants used synchronous virtual meetings for further discussion and clarification of their topics, after reviewing each other's PowerPoint presentations. These interactions often lasted 30–45 minutes and included active exchanges, questions, and reflections on each other's projects. The analysis of these recorded online dialogues showed how students used this time to expand beyond the information included in their presentations. For example, a student in Italy (IT10), who provided a shocking insight into the domestic violence against women in Russia, described how COVID and the war between Russia and Ukraine had worsened conditions for women and limited access to support. Several participants used these conversations to compare perspectives across countries such as India, Ghana, Russia, Italy, and the United States on the selected issues, which included human rights, immigration, access to higher education, and cultural diversity. Several students noted that these online conversations with international partners fueled their curiosity, made them reconsider their prior perception or image of a country or issue, and made them aware of the need for joint brainstorming for some solutions. Many stated that they felt that this online joint thinking created a long-lasting bond between them, and that they intended to keep in touch. This part of the COIL project cemented the connection between these young professionals.

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It is important to note that most participants used diverse modes of communication, including those discussed above, to emphasize the importance and complexity of their selected societal issue. This variety of multimodal communication contributed to building professional relationships across borders, deepening mutual understanding about societal issues, and engaging in joint exploration of possible solutions. The participants' reflection papers discussed the benefits and excitement of being involved in an international conversation on topics that mattered to them and that had broader implications for improving the future of societies.

All together, these multimodal exchanges show how meaning did not simply pass from one student to another but grew through ongoing interaction and shared dialogue. By combining narrative, visual, and auditory modes, students were able to clarify ideas, respond to one another's perspectives, and build on each other's insights. In this way, learning developed through connection and collaboration within the COIL experience.

Discussion

This study explored the outcomes, through the lens of connectivism learning theory, related to (a) the extent to which students participating in the COIL project self-selected topics that reflected global connections concerning educational and societal issues, (b) the extent to which students perceived their learning to be affected by their international collaboration, and (c) how students used multimodal communication tools to construct meaningful understanding of critical social issues with their international partners. The results support the effectiveness of COIL as a pedagogical practice, especially when implemented with a connectivism foundation to promote learner autonomy and build knowledge and engagement across networks (Jeny, 2024), integrate various ways of knowing and promote relational learning (Omodan, 2023), and support the intersection of students' personal experiences with collective inquiry across diverse settings to support emerging ways of

knowing (Tschofen & Mackness, 2012).

Given participants' different cultural, linguistic, and experiential backgrounds, it is significant that the findings indicated that students' self-selected topics aligned with the SDGs, demonstrating a global interest in and connection to educational and societal issues such as race, ethnicity, poverty, and gender in education, the educational rights of newcomers to a country, politics and perspectives in higher education, and the vulnerability of women in society. These connections reflected consideration of both their personal/local context as well as their articulation within broader frameworks (United Nations, 2015) using plural worldviews to promote and assist relational networks of cooperation (Mukhlis et al., 2024) centered on topics within internationally determined goals. COIL created a supportive, technology-mediated space to engage with international partners who brought different experiences (Rubin, 2016) and facilitated the discussion of critical and complex issues aligned with UN priorities (2015). The autonomy and interconnectivity observed in students' topic selection within digital social settings, which are central tenets of connectivism learning theory (Mukhlis et al., 2024; Siemens, 2005, 2006), align with the SDGs and directly address calls for the inclusion of the SDGs in higher education (Leal Filho et al., 2023) in a manner that is personally meaningful to learners (Afroz, 2024). COIL can serve as a transformative laboratory for reconceptualizing knowledge and perceptions around cultural traditions, paths of emancipation, and contemporary conflicts.

Students used synchronous and asynchronous modes of communication, combining scientifically supported and personal connections expressed through both visual and auditory means, to connect with their international partners, thus making meaning of their learning in different types of programs of study. Students reflected on social and ethical responsibilities by taking into account their own knowledge and judgments as well as evidence-based information. The context of such interpretive interaction on relevant social narrations includes individual stories of everyday life, descriptions of

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private lives, work experiences, and community life, along with representations of exclusion and marginalization. The awareness of historical and geographic contexts became intertwined with empathy and emotional insight. This resulted in a rich and multifaceted perception and understanding of social dynamics, cultural norms, linguistic expressions, and institutional frameworks.

Participants navigated communication with international partners, whose heritage language, cultural backgrounds, and experiences differed from their own, using multimodal discourse approaches to negotiate meaning (Kress & Bezemer, 2023). These included evidence-based narratives, personal reflections, both scientific and non-scientific images (e.g., photographs, visual art), and auditory formats that included narrated PowerPoint presentations, videos, and synchronous online conversations. The combination of evidence-based sources and personal insights and experiences allowed students to approach their topics from various angles, strengthening their arguments and enhancing their resonance with their international partners (Chen, 2024; Kress & Bezemer, 2023). Such learning supports a core concept in connectivism learning theory: knowing how to learn is more critical than information or knowledge (Siemens, 2005). Participation in the COIL experience validated both the benefits of interdisciplinarity for curricula addressed to a particular professional field and offered the opportunity for teachers and students to gather direct socio-historical evidence. Students' individual evaluative reflections confirm the effectiveness of implementing transnational projects. COIL was recognized by participants as an educational approach capable of stimulating solidarity, reshaping physical and mental boundaries, and enhancing critical thinking.

Interdisciplinary Applicability

Connectivism theory emphasizes knowledge production across networks of people, ideas, and information, mediated through multimodal tools rather than knowledge located within isolated individuals (Bates, 2022; Siemens, 2006). The transferability of this design lies not

in the specific SDG topics selected but in the epistemic processes it activates (i.e., distributed inquiry, negotiated meaning-making, and collaborative knowledge construction across contexts). Complex societal challenges, many of which are articulated through the SDGs, require collaborative problem-solving that integrates multiple disciplinary perspectives. Accordingly, the connectivist COIL design employed in this study, centered on dialogue, negotiation, and autonomous topic selection within international networks, demonstrates strong potential for interdisciplinary transfer across higher education contexts. Although participants in this study were education and tourism majors, whose disciplinary orientations may explain their focus on SDG topics like education, race, gender, and immigration, the underlying instructional design framework demonstrates potential for application beyond the disciplines represented in this study. The design principles of distributed inquiry, cross-border comparison, multimodal knowledge construction, and negotiated meaning-making can be adapted across fields while preserving disciplinary rigor.

Implications and Conclusions

This study contributes to the growing body of knowledge on the use of COIL in the exploration of social issues addressed by the SDGs in higher education. Due to the research design, this study has limitations in terms of the small number of participants; therefore, there was no intention to offer generalizable findings. However, the data analysis provides new and valuable insights into the use of COIL in higher education classrooms, particularly when the purpose is to offer authentic avenues for exploring societal issues through international partnerships. In addition, the theoretical framework, connectivism, and methodological approach of multimodal communication analysis to explore the social construction of knowledge can be useful and applicable in studies in various disciplines.

Exposing students in higher education to complex, real-world, critical issues in society is essential, as they are conscientious critical thinkers who want to address these challenges

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and explore potential solutions. As such, incorporating SDG-related topics and dialogues around them in local contexts emerges as a meaningful component of higher education. In this study, the richness of the student projects showed that the participants' intellectual engagement with complex and critical topics generated deep, cross-cultural discussions between students from diverse countries and backgrounds, and students perceived their learning to be deeper due to these connections. Therefore, COIL, which is considered a cost-effective way of exposing students to new knowledge and skills through international collaboration (Gokcora, 2021; Vahed & Rodriguez, 2020), can serve as a pedagogical approach for broadening student perspectives, enhancing their global understanding, and deepening their learning through collaborative connections.

Instructors across disciplines in higher education should consider implementing COIL projects to cultivate students' openness toward a plurality of languages, and systems of social representation, and to promote ongoing exercise of critical thinking, which is essential to collective negotiation, inquiry-based decision making, and internationalization. Students should be encouraged to use multimodal tools not only to communicate but also to co-construct meaning and critically reflect on global challenges. Specifically, the combination of various evidence-based sources with tools that allow for personal expression can deepen students' understanding and highlight the value of diverse discourse modalities. Professors are recommended to both allow and encourage students to use these various ways of expression and also to provide flexible platforms for students to creatively and critically engage in global issues together.

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ARTICLE

Synthesizing Project-Based Learning and Universal Design for Learning to Enhance Student Success: A Review and Reflection

—Danielle Nielsen

Danielle Nielsen, Murray State University, dnielsen@murraystate.edu

Abstract

The principles of project-based learning and Universal Design for Learning overlap in significant ways that when combined can improve student success in the classroom. Project-based learning incorporates student interests, encourages student choice and metacognition, and allows for multiple ways of communicating mastery. Moreover, it helps students to connect prior knowledge with new information, further enhancing student success. By drawing from Universal Design for Learning principles when designing curriculum, instructors create more successful classrooms for their students. This article reviews current Universal Design for Learning and project-based learning research, shows the relationship between the two ideologies, and reflects on a classroom design influenced by the primary elements of Universal Design for Learning and project-based learning.

Keywords:

Universal Design for Learning, curriculum, alternative assessment, project-based learning

Drawing from constructivist learning theory, this essay explores contemporary research in Universal Design for Learning (UDL) and project-based learning (PjBL) to illustrate how UDL and PjBL complement one another to support student success. The essay reflects on an upper-level British literature course whose curricular design combines the UDL framework and PjBL pedagogy. This combination encourages student engagement and motivation, enhances curricular understanding of the subject matter, and helps students connect unfamiliar literature to their everyday lives. It concludes by proposing PjBL+UDL alternatives for courses outside of English studies.

PjBL and UDL embrace similar conceptions of learning that follow from constructivism. Constructivist learning theory asserts students create their own knowledge when they combine, apply, and reflect on their experiences. Drawing from both Jean Piaget's and Paulo Freire's theories of education, constructivism posits that rather than a product, learning is a process that students must actively engage. Classrooms based on a constructivist theory privilege active learning, student choice, and a broader understanding of the lived experiences of students and their contexts above the more traditional lecture style (Allen, 2022).

Universal Design for Learning

Universal Design for Learning is “a framework to guide the design of learning environments that are accessible, inclusive, and challenging for every learner” (CAST, 2024); faculty and instructional designers use the framework to guide course development rather than respond in

Synthesizing PjBL and UDL *continued*

real time to student needs and accommodations (Hayward et al., 2022). Table 1 shows UDL's three main categories (design multiple means of engagement, design multiple means of representation, and design multiple means of action and expression), and each category's respective guidelines. Each category includes a guideline designed to improve student access, support, and executive function, illustrated by the rows of the table. Each guideline contains 2-5 "considerations." These considerations, such as "optimize choice and autonomy," in the "Welcoming Interests and Identities" section, act as checkpoints in curriculum design. (For a complete list of the considerations, see the CAST website: <https://udlguidelines.cast.org/>).

Currently, faculty in the humanities, education, and affiliate disciplines such as language instruction, reading, and literacy are more likely to implement UDL than those in STEM and the allied health professions (Hayward et al., 2022; Joseph & Añazco, 2025). The lack of professional development, faculty conceptions about time investments, and a belief that making information more accessible decreases instructional rigor are responsible for lower levels of UDL integration in many disciplines, particularly in STEM and adjacent fields (Casebolt & Humphrey, 2023; Chini et al., 2021). Despite these concerns, faculty across disciplines who have adopted UDL have found higher student retention and success (Casebolt & Humphrey, 2023) and lower levels of classroom inequity across modalities (Redstone & Luo, 2025).

Project-Based Learning

While UDL is a framework to support curricular design, PjBL is a student-centered pedagogical model that encourages student choice, critical thinking, and creativity. It is supported by constructivist learning theories which purport that learning happens when students create knowledge themselves through interaction with the material rather than passively receive knowledge from their teachers (Allen, 2022). In PjBL classrooms students develop a question, design a research procedure, determine materials needed, identify a target audience, and decide how they will display their findings or what they have learned (Bell, 2010). Often, but not always, PjBL can be completed in collaborative spaces, allowing students to practice interpersonal and intercultural communication skills (Daskou & Tzokas, 2020). PjBL "introduces real-world scenarios, encouraging students to engage with complex issues. It enhances their critical thinking skills and aligns with the principles of self-regulated learning as students take charge of their learning journey" (D'Elia et al., 2025, p. 12). Metacognitive practices and investment in one's learning journey are hallmarks of PjBL classrooms. Loyens et al. (2023) identified PjBL assignments as those in which "students seek solutions or clarifications [that] are relevant to their lives," "answer questions," "collaborate with other students, teachers, and members of society," and often, but not always, use technology to "produce artifacts" (para. 7). In a PjBL classroom, there is rarely one "right" answer or way to come to a solution. Instead, students are asked to reflect on their own skills,

Table 1
UDL Framework Categories and Guidelines

	Design Multiple Means of Engagement	Design Multiple Means of Representation	Design Multiple Means of Action and Expression
Enable Student Access	Welcoming Interests and Identities	Perception	Interaction
Enable Student Support	Sustaining Effort and Persistence	Language and Symbols	Expression and Communication
Enable Student Executive Function	Emotional Capacity	Building Knowledge	Strategy Development

Synthesizing PjBL and UDL *continued*

knowledge, and expertise.

Unlike UDL, PjBL has been widely adopted in STEM and allied fields (Burmesch et al., 2024; Hira & Anderson, 2021; Ozfidan et al., 2022; Wang et al., 2025). PjBL is also widely used in education, social sciences, humanities, and interdisciplinary fields (Andersen & Hvidtfeldt, 2022; Balleisin et al., 2023; Boardman & Coleman, 2025; Joseph & Añazco, 2025; Na sulong et al., 2023; Salido-López, 2025). Across these studies, students who participated in PjBL activities showed increased learning of course content and greater soft skills practice. Because of the student-centered nature of PjBL, it has also been found to increase achievement of diverse student groups: research has shown that both students with disabilities and language learners benefit from PjBL curricula (Boardman & Coleman, 2025; D'Elia et al., 2025; Joseph & Añazco, 2025). In their meta-analysis of PjBL research, Chen and Yang (2019) concluded students enrolled in humanities courses benefited more from PjBL than students in STEM.

Recent PjBL research has highlighted student growth in critical thinking, creativity, and problem-solving. The American Association of Colleges and Universities (2026) has included these skills in their “Essential Learning Outcomes.” Researchers have addressed PjBL’s role in increasing critical thinking (Burmesch et al., 2024; Ozfidan et al., 2022), student creative capabilities (Andersen & Hvidtfeldt, 2022), and problem-solving skills (Azer et al., 2021; Hira & Anderson, 2021; Tabar & Meshgi, 2022). Fatima et al.’s (2025) study examined the relationship between these three skills and PjBL’s effect on improving them.

PjBL has also been found to increase student metacognition, motivation, and engagement. Wang et al. (2025) found that the use of PjBL in an undergraduate physics course improved student motivation alongside content and conceptual knowledge and problem solving. Researchers investigating an agricultural journalism capstone that used PjBL found students showed exceptional pride in producing a final project that would be professionally published. The

authenticity of this work increased student engagement (Burmesch et al., 2024). In a study of master’s level in-service teachers participating in PjBL curriculum design instruction, in-service teachers reported they found PjBL to increase students’ metacognitive skills like goal setting and reflection and improved their critical thinking (Martinez, 2022).

Intersections Of Universal Design for Learning and Project-Based Learning

PjBL can enhance a course designed using UDL guidelines because key principles support one another in offering greater student choice and autonomy. Research examining the intersections of PjBL and UDL is typically found in studies of K-12 classrooms (Boardman & Coleman, 2025; Boardman & Hovland, 2024; Fitzgerald & Evans, 2024; Javed et al., 2024; Joseph & Añazco, 2025). Salido-López (2025) and Watzke (2025) discuss the joint application in higher education. This essay contributes to the growing discussion of the benefits of using PjBL in a course supported by the UDL framework, particularly in the post-secondary classroom.

Table 2 illustrates the relationship between the seven core elements of PjBL (Buck Institute for Education, 2022, p. 2) and the UDL Guidelines (CAST, 2024). To prevent repetition, “authenticity” and “challenging problem or question” in the PjBL core elements have been combined. Though all three categories of UDL guidelines are represented, PjBL attends most to “design multiple means of engagement” because of the heavy emphasis on student choice, authenticity, and scaffolding support that appears in well-designed PjBL classrooms.

Case Example: Project-Based Learning in an Upper-Level English Literature Course

This section details an example of PjBL as it is integrated into a course designed using UDL guidelines. The curricular design attends to the UDL guidelines across all three categories of engagement, representation, and action and expression.

Synthesizing PjBL and UDL *continued*

Table 2
The Relationship Between PjBL core elements and UDL guidelines

PjBL Element	UDL Guideline	Significance of Relationship
An authentic, challenging problem or question	Design Multiple Means of Engagement • Welcoming Interests & Identities Design Multiple Means of Representation • Building Knowledge	Student engagement and motivation increase when students believe work applies to their lives (Bermesch et al., 2024; Buck Institute for Education, 2022, p. 3). Both UDL and PjBL encourage faculty to create a variety of learning opportunities so students recognize the relationship between learning and their lived experiences.
Sustained Inquiry	Design Multiple Means of Engagement • Sustaining Effort & Persistence	PjBL's broader nature and sustained inquiry should encourage faculty to provide appropriate scaffolding and support for students (Boardman & Coleman, 2025). Both UDL and PjBL encourage offered supports through which students build confidence.
Student Voice and Choice	Design Multiple Means of Engagement • Welcoming Interests & Identities Design Multiple Means of Action & Expression • Interaction • Expression & Communication • Strategy Development	In PjBL- and UDL-supported classrooms, students choose how to complete work and engage with the material even within specific parameters (answering the question asked, genre of final project, subject matter, etc.) to ensure they meet course learning objectives.
Reflection	Design Multiple Means of Engagement • Emotional Capacity Design Multiple Means of Representation • Building Knowledge Design Multiple Means of Action & Expression • Strategy Development	Reflection improves metacognition (Martinez, 2022). Reflection in the PjBL classroom supports the third row of UDL guidelines intended to support student executive function, and it helps students understand their strengths and weaknesses.
Critique & Revision	Design Multiple Means of Action & Expression • Expression & Communication • Strategy Development	Peer and teacher critique, alongside revision, allows students to continue to practice their metacognitive and executive functioning skills. Through critique, part of the scaffolding process, teachers and peers provide feedback through different media. Students can use this feedback to strategize and make plans as they revise.
Public Product	Design Multiple Means of Representation • Perception • Building Knowledge Design Multiple Means of Action & Expression • Interaction • Expression & Communication • Strategy Development	Student choice in planning, implementation, and execution of the public product provides opportunities to make decisions about accessing and displaying information. This student choice echoes UDL's emphasis on multiple means of representation, action, and expression.

Synthesizing PjBL and UDL *continued*

British literature, 1760-present, is an upper-level literature survey, covering poetry, prose, and drama from authors who lived in the British commonwealth and/or former British colonies. Enrolled students are primarily English majors and minors who have completed the pre-requisite introduction to literature course. Students who successfully complete the course will be able to:

- A: Describe the differences between the Romantic, Victorian, Modernist, and contemporary periods of British literature;
- B: Explain the evolution of British literature between 1760 and the present;
- C: Describe each period's primary characteristics, according to wide scholarly consensus;
- D: Recognize important themes and techniques employed by authors during the various periods;
- E: Apply basic techniques of literary interpretation to works in various genres; and,
- F: Determine the relationship between historical events and literary production.

The course uses the driving question "How can British literature published since 1760 help us understand contemporary society?" to provide a framework for discussion and analysis.

I have designed the course using UDL principles to enable multiple means of engagement, interaction, and representation. I make course texts available in print and electronic versions. Because the course addresses primarily historical texts, many are also available in free audio versions, which I share with students. I also use video to supplement course materials. All texts, regardless of media, are accessible to assistive technologies and tools. Class instruction

includes frequent reviews, expansions, and applications of vocabulary and concepts learned in the pre-requisite course. These applications help students connect prior and new knowledge and work towards transfer and generalization. Course discussions, informal assignments, and exams provide scaffolding for students through the semester, giving students the opportunity to practice answering the semester's driving question as it relates to different texts, applying literary analysis techniques, and learning more about the historical context. Importantly, I have worked to include a diverse array of authors, cultures, and time periods, attending to the "represent a diversity of perspectives and identities in authentic ways" and "cultivate understanding and respect across languages and dialects" considerations (CAST, 2024).

While the vast majority of assignments are completed in the learning management system, the course design addresses the "Action & Expression" considerations. For most assignments, such as exams and weekly informal writings, students may type or video/audio record their responses, which often includes choice in which texts they respond to and the topic of those discussions. Exams are open-note/open-book and untimed. Students have one week to complete the exam and turn it in through the LMS, and all students may use assistive tools and technologies without need to ask for specific accommodations. If students do not meet objectives on the exams, they are asked to revise their work, without penalty, until they have met course objectives. This provides flexibility for students, following the "vary and honor the methods for response, navigation, and movement" consideration (CAST, 2024). Class meetings allow students to convey information in diverse ways, whether through large-group discussion, typing directly into the shared Google Doc the class uses to take notes, or groupwork. Students are also encouraged to contribute to the Google Doc outside of class time.

Integrating PjBL into the curricular design

Synthesizing PjBL and UDL *continued*

attends to the majority of the considerations in the “designing multiple means of engagement” guideline. The impetus for PjBL in this course is to help students understand that literature, even that published hundreds of years ago, speaks to the human condition, encourages empathy, and teaches contemporary readers to put their own experiences into context and conversation with

others’ experiences. The assignment, “Thinking Outside the Essay,” provides the culminating public product for the course. This assignment is introduced during week 2 of the university’s 16-week semester. It is due in week 14. Figure 1 shows the assignment prompt.

Table 3 shows the relationship between the

Figure 1
Thinking Outside the Essay Prompt

<i>Assignment Introduction</i> In many of your humanities or social science courses, you will be asked to write essays: you will develop a thesis, find evidence from the texts, perform a close reading that defends your thesis, and put it together in a nice, coherent essay. In our course, we will do this work in class discussions and in-class activities, the comments we make in our class Google Doc, our weekly writing assignments, and our exams. Thus, the culminating assignment will not be another essay, but it instead will be a comparative creative project that asks you to engage with one (or more texts) that we have read this semester in a reflective and purposeful manner of your choice. This assignment is designed to foster your critical thinking skills as you make decisions about the texts you work with. The project will specifically address the question “How can British literature published since 1760 help us understand contemporary society?”
<i>The Assignment Learning Objectives</i> • To facilitate engagement with at least one of the works of literature we have examined this semester and at least one other source (this may be another class text or an outside source); • To demonstrate mastery of at least one of the works we have read in class (this mastery may be demonstrated by exploring the text’s historical context, considering the literary techniques used to create the work, exploring major themes and issues within the piece of literature, or a combination of these and other analytic techniques); and • To answer the question “How can British literature published since 1760 help us understand contemporary society?” in a way that teaches people outside of our classroom space the importance of the literature we have read in relation to contemporary society.
<i>The Assignment Guidelines</i> You have complete creative control. Your goal, as outlined by the learning objectives above, is to engage with a work in a way that demonstrates its importance to contemporary society. The form this project takes is entirely up to you, as long as you adhere to the following guidelines. A successful creative project will include: • A unique project that you have conceptualized, planned, and executed independently. The project should be comparative. It should speak to and with at least one other source. This source might be another text in the class or a non-course text (these non-course texts might include music, movies, books, advertisements, social media, etc. My definition of text is very broad. If you are uncertain about your choices, please ask). • A 3-4 page reflection (or 5-8 minute video) that explains: (a) what your project represents and why you chose this particular creative display; (b) the rationale behind the major decisions you had to consider while planning and executing this project; and (c) a critical discussion of how this project enhances our understanding of the work in its original context AND what it teaches us about contemporary society. • Completion of the single-point rubric that identifies your project’s strengths and weaknesses using specific examples to justify the strengths and opportunities for growth. (See Appendix).

Synthesizing PjBL and UDL *continued*

seven core PjBL elements (with the “authenticity” and “challenging problem or question” combined to mirror Table 2), the “Thinking Outside the Essay” assignment features, and UDL alignment. It also discusses a specific example from the course to illustrate how the concepts work together. The core elements of PjBL and the UDL guidelines are closely related

to one another. Each of PjBL’s core elements are supported by UDL guidelines to help “ensure that all learners are able to access and participate in meaningful, challenging learning opportunities” (CAST, 2024). Conversely, the sustained nature of PjBL and its emphasis on student voice and choice fit well within UDL’s guidelines to ensure all students have the ability

Table 3
The relationship between PjBL Core Elements, UDL, and “Thinking Outside the Essay”

PjBL Core Element	Assignment Feature	UDL Implementation	Example
An authentic, challenging problem or question	How does British literature published between 1760 and the present help us understand contemporary society?	This question draws from UDL’s “Welcoming Interests & Identities” guideline to increase student autonomy. It also encourages the diverse perspectives found in UDL’s representation category (CAST, 2024).	One student staffed a soccer team with eleven characters encountered during the semester. They explained the responsibility of each player’s position on the field and matched those characteristics with specific characters from novels and short stories we had read. This project showed the continuity and complexity of the human experience. Focusing on authentic learning that is meaningful to students in the moment engages and motivates them to learn (Buck Institute for Education, 2022). This student connected information that was foreign to them (literature that is hundreds of years old or written from different perspectives) to their lived experiences.
Sustained Inquiry	The project spans twelve weeks.	Sustained inquiry requires clear scaffolding (Boardman & Coleman, 2025) and supports the UDL criteria of helping students to sustain efforts.	The student’s soccer project drew from multiple texts across the semester. They continually looked for connections between the literary characters and their knowledge of the psychology/personal characteristics of athletes, refined their previous knowledge, and applied it to new texts. Class instruction provided scaffolding. Each day, we purposefully explored the driving question, giving students repeated opportunities to practice conceptualizing answers and refine their comparisons. When students engage deeply with a text, they have a greater appreciation for that text, its context, and the culture from which it came. This knowledge enables greater success in meeting course learning objectives.
Student Voice and Choice	Students choose to work with any class text and have free choice for a comparative text, including genre and/or media. Students devise their own presentation method.	This project does not work without student choice. The variety of texts students choose from and the choices they make presenting the final product address considerations in all three access guidelines.	Soccer had played an important role in the student’s life, and they had the ability to bring that knowledge into the literature classroom and connect it with information that was new to them. By analyzing different literary and historical characters, the student used prior knowledge of human psychology to understand literary characters’ motivations. These choices may have made the project not just more enjoyable for the student but also helped them to think more critically about the literature we read.

Synthesizing PjBL and UDL *continued*

PjBL Core Element	Assignment Feature	UDL Implementation	Example
			(cont.) Student voice and choice is key to constructivist learning theory (Allen, 2022). Choice increases motivation, engagement, buy-in, and critical thinking/problem solving, and it helps students understand the importance of the new information (Azer et al., 2021; Buck Institute for Education, 2022; Hira & Anderson, 2021; Tabar & Meshgi, 2022).
Reflection	The reflection asks students to justify their choices, suggest revisions, and answer the driving question.	Purposeful reflection supports UDL considerations that address metacognition and critical thinking.	The student's reflection justified their decisions. By defending their roster, they identified the similarities and differences of people across cultures and time, answering the driving question and showing a deep understanding of the literature.
Critique and Revision	Students apply a single-point rubric (see Appendix) to their own and peers' work at mid-terms. This rubric guides revision and is used again during the reflection stage at the end of the semester.	Peer and self-critique are particularly important to the "sustaining effort and persistence" considerations. It provides "action-oriented feedback," "optimizes challenge and support," "offers action-oriented feedback," and encourages collaboration (CAST, 2024). Students are also encouraged to speak with the instructor to brainstorm and get feedback, strengthening these components.	Critique and revision help students practice metacognition, set goals, and reflect (Martinez, 2022). Paired with appropriate scaffolding, critique and revision help students practice "growth mindset" (Buck Institute for Education, 2022, p. 6), further embracing the process-oriented learning of constructivism. Critique and revision are important within a scaffolded classroom helping students understand what goals they have or have not met.
Public Product	Students complete a comparative creative project that answers the driving question. The final project is presented during finals week where peers have the ability to ask and answer questions related to their project. *To embrace PjBL even more, I am considering expanding this presentation to the campus community.	The assignment instructions draw on UDL principles of student choice and voice, reflection, metacognition, and critical thinking.	Most assessments in post-secondary English classes are text-based. This final product allows students to experiment with modalities other than text. In line with constructivism, students apply prior literary analysis skills to new literature and contexts. In the soccer project, the student drew on previous knowledge of soccer and literary analysis skills to apply it to new contexts. They created a slide deck presentation, rather than a traditional essay, to illustrate how these characters would play their positions, using visual images to help their audience imagine these characters on the field.

Synthesizing PjBL and UDL *continued*

to access and participate in their own learning. In this curricular design, the creative project helps students meet course learning objectives such as recognizing and identifying important themes and techniques employed by authors during the various periods, applying basic techniques of literary interpretation to works in various genres, and determining the relationship between historical events and literary production.

Integrated PjBL and UDL Application in Other Disciplines

Integrating PjBL and UDL is not confined to the English or humanities classroom. Faculty should first begin curriculum design with the UDL guidelines in mind, ensuring materials are accessible, learning is appropriately scaffolded, students have multiple ways of demonstrating learning, and there is room for student choice and voice. Though the UDL guidelines most often attend to design and access opportunities, faculty should also seek to incorporate diverse voices and perspectives. Part of ensuring students have multiple ways of showing what they have learned is the type of assessments available to students. Using PjBL as a framework provides this opportunity. Building the class with UDL guidelines first enables the PjBL aspect of the class to be accessible.

While this project's specific driving question, "How does British literature, published between 1760 and the present, help us understand contemporary society?" may be inappropriate outside of the literature classroom, adapting the question to fit other disciplinary learning goals makes this pedagogy widely applicable. The closest corollaries are other humanities courses. In foreign language literature classes, students might be asked "How does [Spanish, French, German, Arabic, etc] literature help us understand our contemporary society?" In this project, students would practice language skills and consider intercultural similarities. Watzke (2025) asks students in German language classes to conceive of, plan, and prepare a presentation using German rather than rely on exams. In history classes, faculty might ask students "What does [a particular historical event/person/

time period] teach us about the world today?" or "How can [a particular historical event/person/ time period] help us solve a global problem today?" Students' public products might include pitching their proposed solution—comparing the historical and contemporary problems and solutions—to a panel of judges.

Social science classes can also benefit from this approach. Psychology faculty may ask their students to design and execute a study appropriate for the content subject matter (Na sulong et al., 2023). To share their research, psychology faculty could organize a campus symposium or poster session. An upper-level political science or sociology course could ask students "How does globalization impact your daily life?" To answer the question, students could complete a visual ethnography, taking photographs of local and personalized instances of globalization. The ethnography would include a reflection that brought together the photographs, student experiences, and course concepts. Students would present their visual ethnographies in a public photo exhibition at the end of the semester (Nielsen et al., 2021). Similarly, lower-level students enrolled in a social problems course might be asked to explore "How do social problems effect people on an individual level?" The public product for this course could include writing a children's book that explores the answer to this question (Maples & Taylor, 2013).

Student Examples

To help faculty envision the form this kind of assignment can take, this section provides examples of student projects. The variety of projects illustrates students' ability to engage with multiple methods of learning and practice executive functioning skills. Because this project did not fall under IRB jurisdiction, student consent to include their project descriptions was obtained by email after students had graduated from the university.

- A former music major shared their passion for musical theater when they created a slide deck that compared multiple texts from the

Synthesizing PjBL and UDL *continued*

semester with contemporary musicals. By reflecting on this project and sharing it with classmates, this student shared their own expertise in musical theatre.

- One student built the starting lineup for a baseball team using nine characters from texts read throughout the semester. The student assigned each character a contemporary song as a walk-up song that would play as they went up to bat; the student analyzed their choices, explained why the song was representative of the player, and considered how it would get the crowd excited to see that player at bat.
- One student found themselves to be the only person in class to defend Isabella Thorpe in Jane Austen's *Northanger Abbey* (2002). This student fashioned themselves as a lawyer for "misunderstood characters" and created a defense for Isabella. They used class discussion notes to articulate the accusations against Isabella and drew from gender and class expectations of Austen's time to prove Isabella's actions were not underhanded.

Conclusion

This article responds to a current gap in post-secondary educational research by presenting a course design guided by the core elements of PjBL and the UDL guidelines. It explores the overlap between the two concepts and suggests that PjBL complements classes designed with the UDL guidelines. This combination creates a classroom environment that creates opportunities for metacognition, problem solving, critical thinking, and creativity and supports student learning outcomes. Both concepts draw heavily from constructivism, seeking active learning and reflective opportunities for students in the learning environment to understand how their own experiences speak to new knowledge that they are learning. Further research, including qualitative, quantitative, and mixed-methods studies that review student performance in classes using this dual design process, is warranted.

Synthesizing PjBL and UDL *continued*

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Appendix

Single Point Rubric

Students use this rubric to assess their work at a mid-semester checkpoint and as part of the reflection on the final draft of their project.

Opportunities for Growth	Criteria	Strengths
	The project is unique, and I have planned and executed it independently.	
	The project compares at least two texts, one of which must be from our required reading.	
	The reflection explains my completed project so that someone not in the course can understand it.	
	The reflection identifies and explains the major decisions I considered while planning and executing this project.	
	The reflection includes a critical discussion of how my project enhances our understanding of the work in its original context AND an appreciation of the selected work in today's society.	
	Revisions required to meet the criteria for the assignment.	

ARTICLE

Cultivating Connection: On-Campus Community-Based Learning (CBL) Projects

—Lindsey Caola and Isabelle Jenkins

Lindsey Caola, College of the Holy Cross, lcaola@holycross.edu

Isabelle Jenkins, College of the Holy Cross, ijenkins@holycross.edu

Abstract

Amid growing concerns that college graduates lack key professional skills, community-based learning (CBL) offers a promising strategy to integrate academic knowledge with practical experience. This paper presents an on-campus CBL model implemented in a first-year seminar, in which students collaborated with campus offices to address authentic institutional needs. The projects not only allowed students to apply course concepts and cultivate a stronger sense of belonging, but they also helped them to develop skills for post-graduate experiences: enhanced communication, teamwork, and problem-solving skills. Campus partners benefited from innovative ideas, meaningful deliverables, and enhanced student engagement with their work. The paper outlines the project design, outcomes, and lessons learned, offering recommendations for others interested in leveraging their own campuses as CBL partners.

Keywords:

community-based learning, sense of belonging, experiential learning, professional skill development, campus partnerships

It appears that the pathway from a college education to landing and succeeding in a full-time job is becoming murkier. Surveys of both college graduates and employers are finding that recent college graduates may be unprepared for the demands of the workplace. A widely cited 2024 survey of 966 business leaders by [intelligent.com](https://www.intelligent.com), an independently funded data hub focused on the higher education landscape, found that employers were unsatisfied with their post-graduate hires. Key findings include: “75% of companies report that some or all of the recent college graduates they hired this year were unsatisfactory”; “6 in 10 companies fired a recent college graduate they hired this year”; and “1 in 6 hiring managers say they are hesitant to hire from this cohort” ([intelligent.com](https://www.intelligent.com), 2024, para. 3). Hult International Business School had similar findings in their 2024 survey of 800 leaders in Human Resources, concluding that graduates are unprepared for the workforce, leading to companies having to pay more for onboarding and training (Brown, 2025). The dissatisfaction of employers with recent college graduates is due to a variety of factors such as a lack of initiative/motivation, unsatisfactory communication and interpersonal skills, inability to problem solve, inability to work on a team, and/or lack of professionalism (Brown, 2025; [intelligent.com](https://www.intelligent.com), 2024).

It is not just employers who feel that recent college graduates are underprepared for the workforce. College graduates feel this themselves, too. In the same survey by Hult International Business School, 800 employees aged 22-27 reported feeling that their college underprepared them for the workplace, many reporting it was not until they received training

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on the job that they gained the skills they needed for professional success. In other words, their college experiences did not provide them with appropriate work-related skills (Brown, 2025). A 2022 survey of 1,005 adults with a bachelor's degree aged 22-28 by the Mary Christie Institute, the American Association of Colleges and Universities, the Healthy Minds Network, the National Association of Colleges and Employers, and Morning Consult had similar findings: "more than one third (39%) of respondents said their college did not help them develop skills to prepare them for the emotional or behavioral impact of the transition to the workplace" (Ames et al., 2023, p. 5). The survey also found that around half of the young adults surveyed were experiencing mental and emotional health challenges and were feeling burned out because of their work environment. Disaggregating by race, Black respondents, compared to their white counterparts, felt these impacts more acutely (Ames et al., 2023).

These findings are especially troubling given what incoming college students report that they hope, in part, to get out of their college education: job-readiness. In the Higher Education Research Institute's (HERI) 2023 CIRP Freshman Survey, which surveyed 27,040 incoming first-year students to baccalaureate institutions, 80.1% of respondents reported that a "very important" factor in their decision to go to college was to "be able to get a better job" (p. 15). Additionally, almost three quarters of respondents indicated that they hoped their college education would provide career training.

Community-Based Learning/Service-Learning and Sense of Belonging

There appears to be a mismatch between what students and employers expect from higher education and what institutions deliver. To address this gap, programs and practices that help college students gain job-readiness skills and practice being in job-like environments should be amplified. One such program/practice is community-based learning (CBL) or service-learning (SL). CBL/SL is a pedagogical strategy that integrates classroom learning with hands-

on experience with a community partner. Students work with that partner on a mutually identified issue, either through projects or placements, and then reflect on that experience to help them integrate it into their learning. In this way, both student and partner benefit—students' learning is increased and community partners' goals are met. Because of the ways in which CBL/SL typically requires students to spend "considerable time and effort" on a "purposeful task," demands engagement with peers and faculty about "substantive matters," helps students to encounter diversity, provides students helpful feedback on their performance, and helps students "integrate, synthesize, and apply knowledge," it is deemed a "high-impact educational practice" (Kuh, 2008, pp. 14–17).

It is well documented that CBL/SL has a high impact on college students. For example, in a longitudinal survey of almost 2,000 undergraduate students from 17 universities that examined the effect of high-impact practices on student learning, Kilgo et al. (2015) found that SL had a positive impact on students' socially responsible leadership and openness to diversity. Sass and Coll (2014) found that community college students who took a SL communication course developed higher communication skills, including adaptability and competence, than those who did not take the course. Augustin and Freshman (2016) found that students who had participated in a SL experience with older adults developed a positive attitude toward seniors, examined their own ageist stereotypes, and even became interested in working with older adults post-graduation. These feelings were still present almost two years after the SL experience. Eppler et al. (2011) found that compared to non-SL students, the SL students in their study (first-year students who volunteered with elementary school students) had gains in self-esteem and in their ability to cope with personal problems, as well as an increased motivation to continue to volunteer. Finally, in a mixed-methods study of undergraduates who participated in a variety of SL courses, Sterk Barrett and Jenkins (2018) found SL to be especially effective for BIPOC students, as it helped them practice social responsibility in alignment with their academics,

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provided avenues to personally relate to course content, and increased sense of belonging at a historically white institution.

Some studies have examined how CBL/SL can be a way to develop competencies for the job force. For instance, Ramson (2014) examined CBL courses in the City University of New York's public-interest paralegal studies program at Eugenio María de Hostos Community College and found evidence to support that the CBL courses led to the development of several job-related competencies: "(1) the ability to convert college-acquired knowledge to the workplace; (2) grasping the realities of the workplace; and (3) the development of global citizenship" (p. 171). In a study of 13 students in a teacher education program, Resch and Schritteser (2021) found that the students felt their CBL experiences helped them "bridge the claimed gap between theory and practice" in teacher education (p. 1119), particularly because it provided them with experiences related to the jobs they imagined for themselves in the future. In a study of 232 college business students taking a "Principles of Management" course, where one-third of the participants participated in a consulting project with family-owned businesses and two-thirds did not, Sabat et al. (2015) found that the participants who took part in the SL project "reported higher levels of practiced and applied knowledge, teamwork skills, and civic engagement skills compared to those who did not" (p. 29). They also found that the SL students did better on the core management knowledge test that all students took. The authors concluded that the SL project helped the students develop "twenty-first century skills that are essential to the contemporary workforce" (p. 29).

It is clear that CBL/SL can help students gain skills valued by both themselves and employers. It is also clear that, overall, the post-graduate experience is something for higher education institutions to consider when implementing programs and pedagogical practices. It is also important, though, to recognize that students have other needs and hopes for their college experience, which are equally important to cultivate. One such element of the college

experience that many scholars have concluded is critical to a successful and meaningful higher education experience is students' sense of belonging.

Sense of belonging refers to a fundamental human need to form and maintain meaningful, positive interpersonal relationships and to feel accepted and valued in an environment (Baumeister & Leary, 1995; Walton & Brady, 2017). In college settings, students develop a sense of belonging through interpersonal connections and by perceiving that they fit in the academic and social context, based on past experiences, group dynamics, and identification with others on campus (Ostrove & Long, 2007). When students feel they belong, they are more likely to experience a range of positive outcomes, including greater academic self-efficacy, intrinsic motivation, task value, and academic achievement, as well as improved physical and psychological well-being (Baumeister & Leary, 1995; Freeman et al., 2007; Jeno et al., 2018). A students' sense of belonging is also negatively associated with their intentions to drop out of challenging courses, supporting their persistence and success in college (Jeno et al., 2018).

CBL/SL can also be a program/practice that helps students cultivate a sense of belonging. Pak (2018), for instance, found in a study of 16 students enrolled in a Spanish for heritage speakers course with a CBL component that the students' experiences in the course enhanced their sense of belonging. The course and CBL component, more so than other courses the students were in, enabled the students to connect with others, develop compassion and empathy, feel closer to their classmates and professor, and, generally, "develop a sense of community" (Pak, 2018, p. 89). This was especially important for the students, as they identified as BIPOC students at a predominantly white institution. In a case study of one academic bridge course, Pichon (2021) found that the CBL project the students participated in (connecting with youth at a local community center) helped them orient toward the academic experience and feel like they belonged at the university by enhancing their communication skills, building

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relationships, and seeing themselves as a part of the community. Finally, in a research project about community service, ElKharboutly (2024) found that female students majoring in Computer Science/Software Engineering who served as facilitators in a Girls Who Code program for female youth felt an enhanced sense of belonging because of their community service involvement. The participants generally felt like they were understood and respected by the community in their major, that they could contribute to course discussions, and that, overall, they belonged at the school. These were particularly important findings given the underrepresentation of women in male-dominated computing disciplines.

It is apparent from CBL/SL literature that CBL/SL is beneficial to students for a variety of reasons. CBL/SL can prepare students for the workplace by developing skills like communication and teamwork—qualities employers often find lacking in recent graduates. CBL/SL may also be able to enhance students' experiences while they are in college, an equally important part of the higher education experience (that is, higher education is not just for job preparation). CBL/SL can enhance students' college experience by fostering a sense of belonging, connecting them to on-and off-campus communities, amplifying their voices, and building relationships.

These benefits, among others, led us to design an on-campus CBL project for students enrolled in a first-year seminar, which is the focus of this article. We explain the course, the project, and its impacts, as well as provide suggestions for implementing such a course and project at other institutions in the sections that follow.

The Project: Campus as Partner

Given the numerous advantages of CBL, we implemented CBL projects for students enrolled in a first-year seminar, "College Student Well-Being." This course explores contemporary challenges in higher education, including shared governance, equity, access, sense of belonging, and wellness. Because the course is about higher education, we determined that on-campus

projects offer an ideal opportunity for students to explore these issues in an authentic, relevant environment: their own college community. While many CBL courses immerse students in the broader local community through off-campus placements and projects, the campus itself can be an excellent CBL partner, enabling students to deepen their understanding of their institution while making a tangible impact. Beyond our campus context being an ideal match for the course content, students' participation in CBL within their own campus community can help them develop a stronger commitment to their institution and develop deeper knowledge about resources their campus has to offer. For example, Barr and McNamara (2022) describe an on-campus community-based participatory action research project in which undergraduates contributed to the development of a wellness intervention. Students conducted a campus-wide needs assessment, reviewed existing health-related campus policies, and interviewed campus staff; they then used the data to propose a targeted wellness initiative. The authors suggest that students' involvement increased the feasibility of the intervention and strengthened campus buy-in. Moreover, some students continued to support the program after the course ended, indicating sustained investment in the project and motivation to contribute beyond the classroom.

On-campus CBL projects also offer a number of benefits to those interested in CBL, but who might face logistical challenges when implementing CBL placements or projects in their local communities. For instance, community engagement research has shown that the extra time it takes to travel to and from CBL can be a barrier to students, as well as the resources needed to get off campus (Schattelman, 2014). Moreover, a review of the literature identified a lack of institutional support and funding constraints as significant barriers to CBL for many faculty (Chowdhury & Alzarrad, 2025). On-campus partners can eliminate these barriers, as students do not have to worry about transportation and travel, and faculty do not have to worry about placing these burdens on students when the institution cannot fund travel

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and other expenses related to off-campus CBL experiences.

For students and faculty to experience the benefits of on-campus CBL projects, the projects must be designed thoughtfully, beginning with close faculty-administrator collaboration. Here, we write as the course instructor and the director of our institution's center for community-engaged learning and scholarship. Administrative support is essential for identifying and planning projects, as administrators understand institutional priorities and can suggest departments that may benefit from student involvement. Together, faculty and administrators identify potential partners, assess project feasibility, and ensure projects align with course objectives, available resources, and partnership opportunities (the email template used to recruit campus partners is provided in Appendix A). This collaboration is key to selecting appropriate partners and ensuring logistical success.

Successful on-campus CBL projects should be grounded in community-identified needs and goals while also recognizing the unique value of student input. At our small liberal arts college, similar to many other institutions, faculty and staff are stretched thin and budgets are limited. Consequently, CBL projects can help campus partners advance work they may not otherwise have the capacity to undertake. In addition, many offices and departments lack formal, routine mechanisms for collecting student feedback, even when student input is essential for effective programming and policy. For example, units such as Student Wellness Programming and the Provost's Office often seek more timely insight into students' experiences on our campus. Partnering with students through CBL can therefore generate more authentic feedback than offices typically obtain, while also helping students feel that their perspectives are valued. This reciprocal approach becomes especially important as higher education confronts emerging challenges related to student mental health and wellbeing, AI in teaching and learning, and concerns about belonging and polarization. These issues require institutions to respond

thoughtfully and in dialogue with students, and CBL promotes this necessary communication. This emphasis on the value of reciprocity offers meaningful learning experiences for students and a useful deliverable for the campus partner.

When selecting campus partners, we consider the needs and challenges of each potential partner and select offices and departments that could benefit the most from the collaboration and/or those that have the greatest potential to make a positive impact on our campus community. We typically meet with several potential partners before deciding which collaborations will be the best fit. Perhaps most importantly, partners must offer projects that are feasible for a group of three to four students to complete in one semester, given the resources available to them. When assessing feasibility, we consider factors such as students' access to technology, relevant skills and training, and other constraints (e.g., time, data access, and institutional approvals). We also prioritize projects with a clear goal or concrete deliverable. Broad, exploratory projects (e.g., "learn about students' perceptions of library services") can feel vague and may frustrate students. In contrast, students tend to prefer working toward an identifiable product and often report greater satisfaction—along with a stronger sense of impact—when their work is adopted by the campus partner. For example, rather than asking students to broadly assess the perceptions of library services, a more focused project might examine first-year students' library use and culminate in the creation of an introductory tutorial to help new students navigate the various campus libraries. Projects framed in this way invite innovation and creativity while still providing clear expectations.

The CBL projects in the course "College Student Well-Being" have involved a diverse set of on-campus partnerships, including Admission, our AI Task Force, Athletics, Government and Community Relations, Marketing, Student Wellness Programming, and our peer tutoring programs. Assignment details, timeline, and sample project descriptions are provided in Appendices B and C. To take one example, a group of students collaborated with Government

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and Community Relations and Admissions to develop strategies for engaging local high school students and encouraging them to apply to the college. Their work culminated in an event that brought local youth to campus, introduced them to a new community space, and provided opportunities to learn more about the college. Another group partnered with our AI Task Force, which at the time had been gathering extensive input from faculty and staff but had not yet heard from many students. Serving as a bridge between their peers and the task force, these students collected feedback on students' perceptions and use of AI. Based on their findings and a review of the literature, they also created an outline for an online AI training module, which they recommended be assigned to all incoming students. Because each partner's needs and goals are unique, the specific deliverables vary across projects. However, all projects are grounded in the principles of mutuality, course relevance, and authentic engagement.

While these projects are assigned to first-year students in a course about contemporary challenges in higher education and college student well-being, the on-campus CBL project model is adaptable across class years and disciplines. For example, an English faculty colleague taught an upper-level course on disability and literature and implemented a CBL project with on-campus partners about accessibility. The students in that course worked with the Office of Accessibility Services, the library, and the Office of Diversity, Equity, and Inclusion to offer specific accessibility plans for the various divisions. Additionally, the environmental studies capstone course has a semester-long on-campus CBL project where the students work with the Office of Sustainability and other campus partners to consult on various green initiatives, such as developing a proposal to redesign the campus greenhouse, creating campus trail maps, and building an energy use dashboard. Since the on-campus model has a flexible structure regarding the project scope and partner engagement, it can be tailored to the needs of individual courses and the goals of participating campus units.

Methodology

The authors of this article employed reflective praxis (Gibbs, 1988; Schön, 1983), situating our instructional approaches within relevant scholarship on student learning and belonging. Reflective praxis was naturally employed because the course was offered in consecutive years, which provided the opportunity to be in dialogue with each other about year one, make changes between years one and two, and monitor the project's effectiveness throughout year two. Our praxis mirrors the six stages of Gibbs' (1988) reflective cycle. Before year two began, we reflected on the on-campus CBL projects from year one where we (1) described our experiences and reviewed student feedback from assignments and course evaluations. This allowed us to (2) explore our feelings about previous projects and (3) identify the challenges and opportunities of partnering with on-campus departments. With these reflections in mind, we (4) analyzed our experiences in year one and (5) drew conclusions and considered what we could have done differently. Finally, (6) we created an action plan and developed a revised CBL assignment for year two, which is the focus of this paper. As presented in Appendix B, the project included six scaffolded assignments that culminated in a final presentation at the end of the semester. These assignments created ongoing opportunities for reflection and dialogue as we reviewed student work and considered the experiences of the instructor, students, and community partners. Through this process, we continued to describe and interpret our experiences, explore our reactions to the project, and identify and respond to emerging challenges and opportunities.

Ultimately, our reflective praxis led to the decision to more formally examine the experiences of the students and community partners in the course, as we observed positive impacts on all stakeholders, impacts we felt were worth sharing widely. This decision came as year two was concluding, which led to a small but insightful sample of students and community partners who took part in year two. Students were recruited to share their perspectives through two voluntary mechanisms: (1) an open-

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response anonymous electronic survey and (2) student consent for the authors to excerpt material from a final reflection paper focused on the CBL project. Two of the 16 students enrolled in the class completed the open-response survey and four of the students granted permission for their reflection papers to be used in this article. Community partner perspectives were gathered via an anonymous open-response electronic survey, which was completed by two of the four participating partners. The reflection prompts and survey questions are provided in Appendices D and E. Institutional Review Board approval was obtained for the study (protocol number: 2025.06.13.Caola.Jenkins.v1). To mitigate concerns related to coercion, students were contacted regarding participation only after the semester concluded and final grades had been submitted. All quotes were anonymized and identifying details were removed. These excerpts are presented descriptively to illustrate important themes rather than as part of a systematic qualitative analysis.

We acknowledge that this article is limited, as it is based on the authors' reflections of a particular semester and project. Although we see potential for diverse applications, which will be discussed in a later section of this paper, future qualitative or quantitative research studies could be conducted to lead to more generalizable findings across disciplines.

The Project: Benefits to Students and Partners

On-campus CBL projects provide students with a valuable opportunity to deepen their understanding of the campus community early in their college careers. By engaging directly with offices and departments across the institution, they gain insights into the structures, resources, and initiatives that shape the student experience. Beyond simply learning about these departments and structures, they also have the opportunity to influence them. Importantly, students feel empowered when they make meaningful contributions to their community. As one student reflected on this project: "This was powerful and helped me recognize that I am

capable of having a meaningful impact on the world around me." Many students also viewed this project as the beginning of a long-term professional relationship. For example, one student will continue their work with the AI Task Force and others will advise Government and Community Relations in future projects.

In addition to fostering connections across campus, these projects serve as a bridge between academic learning and practical application, helping students see course content in real-world contexts. Applying course material in a concrete setting reinforces comprehension and allows students to critically evaluate and adapt what they have learned, thus making the learning more meaningful. As students integrate classroom knowledge with hands-on problem solving, they gain a richer understanding of the subject matter. One student shared: "Through this project, I was able to learn a significant amount about facets of higher education I had not previously known much about. In particular, I was able to learn about what is available on campuses that support the mental well-being of their students."

These projects also support relationship building and skill development for students. They provide opportunities to connect with professionals on campus, as one student described:

Collaborating with an on-campus community partner made me feel more connected to the campus. I thought this was especially beneficial during my first year because I was able to meet more adults and professionals on campus than I typically would. It also placed me in professional settings which I was able to learn and develop from, by working with campus professionals.

This work also fosters relationship building among classmates as they collaborate to reach shared goals, promoting a sense of belonging. In addition, students develop essential professional skills such as effective oral and written communication, collaboration, critical thinking, problem solving, and professional

Cultivating Connection Through CBL *continued*

etiquette, all of which prepare them for future academic and career endeavors. One student reflected on their growth in the course:

One challenge I faced in this class—and that I’m proud of myself for overcoming—is public speaking and leading discussions... Now, as we wrap up the year and I’ve just completed our CBL academic conference, where we presented our project to students, professors, and faculty, I can confidently say that I feel much more comfortable with public speaking and engaging in conversations. What once felt intimidating now feels more natural to me. This growth has not only helped me in class but has also given me more confidence in everyday situations where I need to speak up, share my thoughts, or advocate for myself.

These outcomes demonstrate the capacity of on-campus CBL projects to integrate skill development, professional engagement, and community connection in ways that support student growth.

On-campus community partners also benefit from this collaboration, which is especially valuable amid staffing and budget constraints (Nietzel, 2025). Projects are designed to offer meaningful assistance to the community partners by “taking something off their plate” and enabling them to delegate work to students. Beyond this practical help, students provide valuable insights into experiences and processes that some departments and offices may not have access to, especially those without regular student contact. For example, while the AI Task Force was soliciting extensive feedback from faculty and staff, it placed less emphasis on students’ experiences with and perceptions of AI. Relatedly, as stated by the Director of Student Wellness Programming:

The students brought fresh perspectives and innovative ideas that proved invaluable in enhancing our office’s ability to communicate our services more effectively. Their input helped us identify new strategies to reach the student body in more engaging and

relatable ways, ultimately improving student awareness and understanding of the support and resources we offer.

Together, this combination of new ideas and practical support expands the capacity of campus offices, making these collaborations especially valuable in the current climate of limited resources.

Students also bring valuable social capital to these projects. In addition to their skills and knowledge, students arrive with existing peer relationships that can benefit their campus partners. For example, one student formed a close relationship with a staff member from the Student Wellness office and became an advocate for their office: bringing “freebies” to class and encouraging friends, teammates, and classmates to visit. Additionally, many offices are not student-facing; although their roles exist to support students in some way, many staff may not have frequent opportunities for direct interaction. This project offers them a meaningful chance to build relationships with students, fostering greater understanding and collaboration.

Lessons Learned and Suggestions for Practice

Implementing CBL projects requires significant time, communication, and adaptability, but the investment consistently proves worthwhile. These projects create meaningful learning experiences for students, deliver tangible benefits to campus partners, and offer faculty the satisfaction of seeing their students make a real impact. By fostering connections with campus partners, these projects also strengthen students’ sense of belonging. While some projects have been more successful than others, each has offered insights that inform our ongoing efforts. Drawing from our experiences, we offer lessons learned that may help other instructors design, implement, and refine on-campus CBL projects in their own contexts.

Collaboration is essential for successful on-campus CBL projects. It would be unrealistic

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for a faculty member to expect to design and implement such a project entirely on their own. As noted above, we work as an instructor-administrator team and are fortunate to be at an institution with robust CBL support, including an office dedicated to this work. For us, this partnership was a natural fit. We recognize, however, that many campuses do not have the same level of resources dedicated to CBL/SL. Even so, faculty members can identify on-campus collaborators. For example, department chairs and deans may be aware of specific needs of other offices and could suggest potential campus partners for the projects. Likewise, most colleges have an office of community service; even if it is not a CBL office, its staff can provide insights into partnership development, logistical coordination, and working effectively with relevant stakeholders. Because on-campus projects require creativity, logistical planning, and the identification of appropriate campus partners, faculty interested in developing such projects should begin by identifying potential collaborators and supporters who can help bring their ideas to fruition.

Another key consideration when planning an on-campus CBL project is selecting and designing an appropriate assignment. The project should align with the course learning objectives and provide students an opportunity to apply course content in a real-world context. We observed that the most successful projects allow students to make a meaningful impact on the community by producing a final deliverable that translates into truly valuable work. Likewise, the project should benefit the campus partner by helping them accomplish an important task in their work.

It is also essential to consider the logistics of the assignment and ensure it is feasible to complete in the given time frame (e.g., one semester). This includes evaluating access to resources (if applicable) and defining a clear, achievable outcome for students to work toward. Both students and the campus partner must be aware of the project's end goal, and understand expectations related to student workload, prior experience, and skill development. Most of

these logistics are discussed and agreed upon by the faculty member and campus partner prior to the start of the semester in which the project is assigned.

Relatedly, strategic selection of the campus partner is critical for a successful project. As mentioned above, one goal of this work is to assist the partner with a relevant task. Achieving this requires excellent communication among the partner, faculty, and students. Partners should be informed early in the process about the time commitment involved and must clearly understand expectations for meeting with students to support their work.

While there are many ways to structure this collaboration, we require our campus partners to meet with students at least twice during the semester, and again at the end of the semester for final presentations. Although many partners meet with their student groups more frequently, the faculty member often becomes the gatekeeper for student questions. It is therefore essential that the faculty member understands the project thoroughly to best advise the students. Additionally, campus partners should be aware of the learning objectives for both the class and the project and should be encouraged to help keep the work on track. While it can be exciting for partners to hear all of the students' ideas, the faculty may occasionally need to step in to ensure the project remains focused and manageable.

In addition to intentional selection of projects and campus partners, the successful implementation of assignments requires extensive scaffolding for students. This is especially the case for us, as we are working with first-year college students, so this is the first time many of them have worked in a professional capacity. Regardless of student academic level, it is imperative that instructors clearly articulate the alignment between class content, learning objectives, and the project. Students must recognize the project as an integral component of the course, rather than a supplementary task. Also, we suggest establishing clear expectations and guidelines for communicating with campus

Cultivating Connection Through CBL *continued*

partners. For instance, we provide students with email templates to use when initiating contact and requesting feedback from partners (see Appendix A). We also explicitly discuss the norms related to faculty and staff working hours, as well as appropriate time frames for scheduling meetings and anticipating email responses.

We further recommend breaking the project down into multiple smaller assignments distributed across the semester. Each assignment should be clearly related to the final project, providing students with opportunities to demonstrate progress and enabling instructors to share feedback. Faculty may also require submission of meeting notes following each group meeting to help monitor progress. This structured approach fosters accountability and supports sustained engagement with the project over time.

Equally important is the need for consistent communication within student groups and between students and instructors. At the beginning of the semester, we require students to complete a group agreement that outlines expectations for communication, work completion, and procedures for addressing instances of incomplete work. This document establishes shared norms and promotes accountability. Additionally, students complete self- and peer-evaluations twice during the semester, offering the instructor insight into group dynamics and enabling timely intervention if necessary.

When designing a community-based project, instructors should also ensure that students have multiple opportunities to share their work throughout the semester. Informal opportunities include dedicating class time to brief presentations and discussions about each group's progress. Such activities encourage peer feedback, foster critical reflection, and enhance student interest in the project. Student groups should also share their work informally with the campus partner. We require at least one mid-semester check-in, though many groups choose to meet more frequently. Our students also share their work in two formal settings that contribute

to its perceived legitimacy and significance. First, they participate in a poster session at our college's Academic Conference day. Second, they deliver a final presentation to the campus partners and other relevant stakeholders at the end of the semester. These varied opportunities for sharing help students refine their ideas and increase the visibility of their work.

While campus-based projects require significant effort and planning, we have learned that the benefits justify this investment. As noted, students develop important skills through their participation in these projects, and it is particularly rewarding to observe their growth. Furthermore, these projects contribute to a more meaningful and engaging learning experience for all. They also create opportunities for faculty to collaborate with colleagues in innovative ways, potentially leading to new professional relationships and future collaborative endeavors. Finally, campus-based projects help keep teaching dynamic and stimulating for the instructor, as each project brings unique challenges and insights.

Conclusion

Today's students increasingly seek real-world experiences during their college years, aiming to graduate with both academic and professional skills needed to navigate life after graduation—whether that path leads to graduate study or the workforce (HERI, 2023). CBL/SL offers a powerful means of delivering such experiential education. In particular, we observed that campus-based CBL projects uniquely position students to make meaningful contributions to their immediate environment—the college community—while simultaneously deepening their understanding of institutional structures, priorities, and challenges.

When thoughtfully designed and implemented, these projects can yield reciprocal benefits for all stakeholders. Students gain authentic opportunities to apply course concepts, develop professional competencies, and build relationships with campus professionals. Importantly, as we

Cultivating Connection Through CBL *continued*

witnessed, these collaborations can also foster a stronger sense of belonging, helping students feel more connected to the campus community and invested in its success. Campus partners benefit from fresh perspectives, innovative ideas, and tangible contributions that address real needs—often in contexts where resources are limited. Faculty, in turn, have the opportunity to innovate pedagogically, foster cross-campus collaboration, and witness the direct impact of their students' work.

The adaptability of campus-based CBL projects is one of their greatest strengths. They can be implemented across disciplines, scaled for students at any academic level, and customized to align with specific course objectives. This flexibility ensures that the model is relevant in a wide variety of institutional contexts. Moreover, because these projects leverage existing campus networks and resources, they can be a practical entry point for faculty who are new to CBL or for courses that do not have access to off-campus placement and project opportunities.

Ultimately, on-campus CBL projects can bridge the gap between classroom learning and the lived experience of the campus community. By fostering collaboration, creativity, and mutual investment among students, faculty, and staff, these projects enhance student learning and strengthen the campus as a whole. In a time when higher education institutions face increasing pressure to provide relevant, impactful learning experiences, the campus itself emerges as an invaluable partner in preparing students to engage meaningfully with the world.

Cultivating Connection Through CBL *continued*

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Appendix A

Email Templates

Email template to community partner from faculty:

Dear [Name],

I am teaching a first-year seminar titled *College Student Well-Being* this spring, which is a continuation of a fall seminar, *Principles of Higher Education*. Together, these courses explore contemporary challenges in higher education.

In the spring seminar I assign a community-based learning (CBL) project, and I am reaching out to see if your office would be interested in partnering with us. Students will work in groups of approximately four to support you in addressing a current challenge or project related to your work. The student learning objectives for the project are to:

- Apply class concepts to practical contexts through engagement with an on-campus partner.
- Demonstrate effective oral and written communication in interactions with peers, faculty, and campus partners.
- Collaborate with group members to plan, organize, and implement a community-based project.
- Generate problem-solving strategies that address real-world challenges in higher education.
- Evaluate multiple perspectives on a higher education issue and justify proposed solutions.

In the spirit of CBL, my goal is for students to meaningfully contribute to your work. The time commitment for you would include: one initial meeting with me to discuss your project, one meeting with students in early February, a second meeting with students in early April, and attendance at their final presentation during the exam period. You are, of course, welcome to meet with the students more often if you wish.

If this project interests you, I would be delighted to meet and discuss potential ideas.

Sincerely,

[Name]

Cultivating Connection Through CBL *continued*

Email templates and suggestions provided to students:

It is essential that all communication with community partners is professional. Each group should select one student who will be responsible for all communications with the campus partner (but group members should help contribute to the content of the emails). Be sure your emails are free of typos and grammatical errors, include a salutation, and clear questions or answers to questions. Do your best to provide as much information as possible in your emails to avoid a series of “back and forth” emails.

Meeting 1

The purpose of the first meeting is to get to know your community partner, the project topic, and their goals for the project. It is important that the whole group attends this meeting and that you all take notes to ensure you don’t miss any details. If anything is unclear ASK QUESTIONS, because this is when you are getting all of the information about your project.

Here is a template for your first email to your community partner.

Dear (name),

My name is (name), and my group members, (names), and I are excited to work with you on our CBL project this semester. (Include a sentence about why you are interested in the project/topic). We are reaching out to schedule our first meeting, which our Professor would like to happen before (date), if possible. Below you will find our groups’ availability. We are happy to meet in your office or at another convenient location.

List times when your whole group is available to meet for about an hour (please be as flexible as possible). You should only include meeting times during the work week (M-F, 8:30am-5:00pm).

Thank you for your time!

Sincerely,

(name)

Goals for the first meeting with CBL community partner:

1. Schedule subsequent meeting(s). There should be at least one more meeting in early April to discuss your prototype(s). Some partners might request a meeting in March as well—please accommodate that request.
2. Discuss the project! LEARN about the topic and the needs of the office/program. Please ask questions to make sure you understand their goals and expectations.
3. Discuss opportunities for interviews and observations. Come with some ideas and ask if those ideas are permissible.

Cultivating Connection Through CBL *continued*

Meeting 2

Hopefully you are able to schedule your April meeting at your first meeting of the semester. You should meet with your community partner at least once by April 12 to discuss your progress on the assignment. You should share at least your first draft with the partner and be VERY open to their feedback.

Goals for the second meeting with CBL community partner:

1. Share your progress on the project, including your first draft and any plans for revisions.
2. First present the draft and listen to feedback (take notes).
3. After the community partner shares their ideas, ask questions (prepare questions ahead of time and ask questions in response to their feedback). Questions might be about feasibility, scope, intended “users,” other stakeholders that you have not considered, etc.
4. You should leave this meeting feeling confident about your group’s ability to create a final draft that addresses your initial question/topic and truly meets the needs of the office/program.

Cultivating Connection Through CBL *continued*

Appendix B

CBL Project Assignment and Timeline

CBL Project Description

[The structure of this assignment was inspired by the design thinking process. See Brown, T. (2008). Design thinking. *Harvard Business Review*, 86(6), 84.]

This semester we will partner with 3 departments on campus to engage in a community-based learning (CBL) project to address contemporary challenges on our campus.

The goals of the project are to:

- foster a sense of curiosity about contemporary challenges at our college.
- apply course concepts to help address these challenges.
- encourage creativity, problem-solving, and teamwork.
- develop written and oral communication skills.

We will use an iterative approach designed to enhance creativity, with the following assignments and due dates:

**Email community partner on January 26, meet with partner by February 16*

CBL reflection paper 1 is due February 7. This is an individual submission.

CBL project part 1 – Planning: Teams will submit their initial questions for the partner and data collection plans (e.g., interview questions, plans for observations etc.) on February 16.

CBL project part 2 – Observe: Teams will submit their observation notes, interview data, and other relevant materials on March 10.

CBL project part 3 – Brainstorm: Teams will brainstorm in class and submit brainstorm materials on March 12.

Peer evaluations are due on March 14. This is an individual submission.

CBL project part 4 – Draft 1: Teams will submit the first draft and present it to the class on March 21.

CBL project part 5 – Draft 2: Teams will submit the revised draft and supporting materials on April 16.

Poster presentations: Teams will present their projects in a poster session at the Academic Conference on April 23.

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Final presentations: Teams will present their final projects to our community partners during the final exam period (date TBD by the College). All team members must be in attendance (in person). We will practice presentations in class on May 5.

Peer evaluations are due at the time of our final exam period. This is an individual submission.

CBL reflection paper 2 (individual submissions) are also due at the time of the final exam period.

Cultivating Connection Through CBL *continued*

Appendix C

CBL Project Descriptions

AITask Force

This project will support the AITask Force by exploring students' perceptions of artificial intelligence (AI) in higher education, with a specific focus on its role at our institution. The team will conduct interviews with students and faculty, prioritizing student perspectives, to better understand their concerns about AI, the opportunities it presents, how students are currently using AI, and the questions they have about its applications. This research will provide valuable insights to guide the task force's efforts in addressing AI-related challenges and opportunities on campus.

Community and Government Relations

This project aims to raise awareness within our college community about a new building on campus (Building A) and promote increased utilization of its spaces. The team will prioritize engaging with students, as well as faculty and staff, to gather insights on potential uses for the space through interviews and surveys. Building on this feedback, the group will design and execute a dynamic event later in the semester to showcase Building A and encourage student participation.

Student Wellness

Two groups will explore various aspects of student well-being at our college. Teams will analyze key findings from the National College Health Assessment (NCHA), a survey administered to students last semester. They will then conduct interviews to gain deeper insights into students' experiences related to their topic. Potential focus areas include sexual health, physical health (nutrition and exercise), mental health, and substance use. Based on their analysis of the NCHA data and additional on-campus research, the team will propose programs to enhance student well-being, including the development of one detailed program tailored to campus needs.

Cultivating Connection Through CBL *continued*

Appendix D

Reflection Prompts

Reflection paper 1 prompt (due at the beginning of the semester)

For this reflection, please view this TedTalk, the [Danger of a Single Story](#).

In your paper, you will think about stories and how they relate to your CBL project. In 2-4 pages (double-spaced, Times New Roman font, 1in margins), please address the following prompts:

About 1 page: What “single story” might exist about our college, and/or your CBL campus partner (the office/department/program)? What is a “counter-story” (or counter-stories) that need(s) to be shared to combat the “single story” narrative?

About 1-2 pages: How does this impact your thinking about your CBL project and/or your campus partner? For example, what observations might help you better understand the counter-narratives relating to your CBL partner? Who should you interview to learn more about these counter-narratives? Is it possible there are narratives you are not aware of at this time? If so, how can you learn about them?

About 1 paragraph to 1 page: How are narratives related to design thinking? How can understanding the counter-narratives help you address your CBL partner’s problem/challenge?

Reflection paper 2 prompt (due at the end of the semester)

Please address the following prompts in 3-4 pages (double-spaced, Times New Roman font, 1in margins).

1. This semester we adopted a *human-centered* approach to problem solving. To what extent do you think your project (and your proposed prototype) was focused on the people you aimed to serve? What did your group do well to execute this project? What would you do differently? (~1 page)
2. Earlier this semester you reflected on the “single story” of your CBL campus partner. How does your proposed prototype help address this single story? (~1 page)
3. What did this project teach you about service and/or higher education? You may consider issues related to access, equity, shared governance, college student development, and other content from the course. (~1 page)

Cultivating Connection Through CBL *continued*

Appendix E

Survey Questions

Community partner survey questions:

1. In what specific ways did the student(s) contribute to your department's goals or mission during the project?
2. What unique perspectives, skills, or approaches did the student(s) bring to the project that were particularly valuable?
3. What professional or interpersonal skills did you observe the student(s) developing during the course of the project?

Student survey questions:

1. What were the most valuable skills you developed through your participation in this community-based learning project?
2. How did collaborating with an on-campus community partner differ from any previous experiential learning experiences?
3. Describe a moment during the project when you felt you were making a meaningful contribution. What made that moment stand out?

ARTICLE

Community-Engaged Learning for Student Success: Strategies for Implementation

—Julia Waity and Jennifer Vanderminden

Julia Waity, University of North Carolina Wilmington, waityj@uncw.edu

Jennifer Vanderminden, University at Albany, jvanderminden@albany.edu

Abstract

Community-engaged learning (CEL) with undergraduate students is a high-impact practice (HIP) which can lead to student success in a variety of dimensions, including in the labor force. CEL can enable students to confidently demonstrate the knowledge and skills that they learn in their majors. We describe three different models for incorporating research-based CEL into our work with students. Beyond providing opportunities to gain and apply skills and perspectives, we argue that helping students thoughtfully reflect on the skills and experiences they have from their training and from CEL projects increases their success in college and their readiness for the job market. CEL can be challenging to implement so we provide lessons learned for each of the models we describe.

Keywords:

high-impact practices, community-engaged research, career preparedness, undergraduate research, social science

Students, especially those in the social sciences, often struggle to articulate the key skills they learn in their majors and to find a clearly defined career pathway upon graduation. Community-engaged learning (CEL), especially in the form of research, can help students achieve success in school and after graduation. CEL is a pedagogical approach in which learning takes place both in and with the community with intentionality around the impact of the project. We begin by describing what CEL is, including its designation as a high-impact practice (HIP). Next, we describe the benefits of CEL specifically for students. Creating successful CEL experiences is challenging for instructors, but we argue that the benefits students gain from participating in these experiences outweigh the challenges. To prepare social science majors for success both in school and outside of school, CEL is an essential pedagogical practice. We provide details on three strategies for implementation, including: incorporating CEL into courses or individualized experiences, incorporating CEL into the curriculum, and creating a CEL lab. The implementation strategies include benefits and challenges of each model as well as ideas for assessing student success. We also discuss the impact on students, faculty, and the community. We argue that helping students thoughtfully reflect on the skills and experiences they have gained through their training in the social sciences, broadly, and their experiences in CEL projects, specifically, increases their understanding of key skills in their majors and their readiness for the job market.

Community-Engaged Learning

CEL focuses on intentionally designed educational opportunities that involve students

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working with community. CEL requires thoughtful reflection on the outcomes of the experience for both the student and the community and at its best it is co-designed with folks in the community. CEL can be considered a HIP, which refers to a set of pedagogical practices that have been shown to enhance students' engagement, understanding, and overall success (Kuh, 2008). Undergraduate research and community-based learning are two different types of HIPs that we have combined in this work (Association of American Colleges and Universities, n.d.). In 1998, the Boyer Commission called for an increase in research-based learning at the undergraduate level and since then universities have increased their undergraduate research programs (Crowe & Boe, 2019). Student participation in undergraduate research has been shown to promote learning outcomes such as critical thinking and communication (Abderhalden et al., 2016; Zilvinskis, 2019). HIPs are labeled as such because they include several key components: they are purposeful and require effort, involve interaction among faculty and peers, necessitate frequent feedback, enable students to apply what they are learning on and off campus, and involve public demonstration of competence (Kuh, 2008; Abderhalden et al., 2016). All these aspects require dedication from both students and faculty (Cotten & Thompson, 2017). We found that CEL through undergraduate research has been particularly useful in the field of sociology and in benefiting students. We will refer to our work throughout this paper as CEL while recognizing that there are many terms used for this type of work (e.g. community-engaged research, community-based research) and we have intentionally combined undergraduate research and CEL, both of which are considered HIPs for student success.

Benefits to Students

Incorporating CEL into student experiences is a pedagogical practice that can help students to succeed both in institutions of higher education and upon graduation. There are many benefits to students of CEL through research. In what follows, we identify some of those benefits, including: student engagement, access, and retention;

critical thinking, communication and other core skills essential to development as social scientists and recognition of the marketability of those skills; and application to the real world and getting to know their community.

Student engagement and retention are benefits of incorporating HIPs, as Bonet and Walters (2016) found that students enrolled in learning communities were more likely to complete a course with a passing grade and with fewer absences than those not enrolled in the learning communities' course. Research has shown inequalities exist in student participation and outcomes in HIPs in terms of race/ethnicity and parental education/first-generation status (Lee et al., 2024; Zilvinskis, 2019). Not all students can gain access to HIPs, including research opportunities. This is especially true of underrepresented students, who, for example, may have to work for pay during the summer instead of participating in unpaid research. Intentionally designing HIPs to address these disparities can help support equity.

CEL through undergraduate research supports students in both gaining and using essential skills as social scientists. CEL helps students gain critical thinking and communication skills through reflection and frequent feedback, while also promoting community engagement (Merenstein, 2015). The benefits of involving students in community-engaged undergraduate projects include the development of mentor relationships, critical thinking, and intellectual independence (Carbonaro & Suchland, 2021; Conover, 2015). Studies have shown that community-engaged projects lead to the increased development of research skills, professional skills, and relevant community engagement skills (Carbonaro & Suchland, 2021; Mayer et al., 2019). Two studies found that it was the community aspect of the project that students enjoyed most and obtained the largest personal development and growth from (Carbonaro & Suchland, 2021; Conover, 2015). Studies have found that undergraduate research projects, particularly community-based undergraduate research, also help deepen students' understanding of survey methods,

CEL for Student Success *continued*

statistical analysis, and social issues (Crowe & Boe, 2019; Mayer et al., 2019).

HIPs, specifically CEL, can help students understand how what they learn can be applied to the real world and build skills that are valuable within the workforce (Conefrey & Smyth, 2021). Studies have found that courses that incorporate HIPs have a positive impact on students' personal development and growth, as well as relating course material to the real world (Kuh, 2008; Abderhalden et al., 2016; Cotten & Thompson, 2017; Johnson & Snyder, 2020). Merenstein (2015) argues that this also helps students develop their sociological imagination by providing context for what they learn in the classroom and showing how sociological forces shape their community. Students may not be aware of the benefits of CEL, so faculty should outline the key skills that they are learning and how they can be applied to other courses, careers, or graduate school. It is not enough for a student to just participate in a CEL experience; students need to know how to tie this to real-world skills and how to articulate the benefits of their participation. Relatedly, reflection and feedback are essential components of CEL and enable students to reflect on what they are learning, how they are applying it, and their thoughts on their experiences. Feedback is important because it lets the students know where they stand in terms of the learning outcomes, which allows them to know what areas they need to focus on for improvement (Abderhalden et al., 2016). Students can apply their knowledge and sociological concepts to real world situations, and these courses give students the opportunity to think deeply about the material they learn within the classroom. Many students reported enjoying the opportunity to interact with community members and learn about community issues directly from them (Crowe & Boe, 2019; Merenstein, 2015).

Models for Community-Engaged Learning

CEL is beneficial to students for all the reasons that we described above. We have created three different models for implementing CEL into student experiences that we will

describe in detail: individual course model, curriculum model, and lab model. For each of these models, we describe the model, how we implemented it with an example, the advantages and disadvantages of the model, and how success could be assessed. All three of these models enable us to expose our students to CEL, which equips them with skills that can be applied beyond the classroom. For details on implementing CEL into a variety of courses, see Waity and Vanderminden (2023).

Before describing each model in detail, we first want to provide some information on assessment. Assessing student success outcomes is crucial for all three of the models that we utilize. We assessed the success of each of the three models using both qualitative and quantitative data, and formative and summative assessment. Formative assessment, an ongoing process that identifies how students are performing, where they require support, and where they are excelling, is most effective when conducted with students, allowing them to be actively engaged in the process of their own learning, consistent with a method known as Self-Regulated Learning (Nilson, 2013). When students are invited to consider what they are learning, how they are learning it, and where they need support, they are more engaged in the course and more likely to achieve outcomes they can articulate to others. Summative assessments measure the totality of what students have gained from the experience. For each of the three models, we describe how we assessed student learning and growth. Table 1 shows the different types of assessment across the three models. The methodology for assessment varies depending on the model, as shown in Table 1; however, for each course or method of student engagement, we applied for and received Institutional Review Board approval to use student data for assessment purposes beyond the course (IRB # H21-0067 and H22-0087). We include information in each of the sections below related to specific assessment methodology.

Individual Course Model

Incorporating CEL using an individual course model can be achieved with a CEL project as

CEL for Student Success *continued***Table 1***Example Assessment by Model*

Model	Individual Course	Curriculum	Lab
Assessment type			
Formative			
In-class lab	X	X	
Mid-Semester check-in	X	X	
In-class activity	X	X	
Knowledge survey (pre)	X	X	X
Quizzes	X	X	
Reflection assignments	X	X	X
Summative			
Final paper	X	X	
Presentation	X	X	X
Report	X	X	X
Ending reflection	X	X	X
Questionnaire or exit survey		X	
Exam	X	X	
Knowledge survey (post)	X	X	X

one assignment in a course or as the focus of the entire course. In this model, instructors incorporate a CEL research project into a single course, aligning the topic or skillset to the course. We began incorporating CEL into our classes using this approach, and we recommend starting here for new practitioners as well. Making CEL part of a pedagogical toolkit and incorporating projects (large and small) into courses allows for getting to know community partners, ironing out challenges specific to the department, university, and community, and providing pilot data for integrating CEL into the curriculum or creating a lab.

An example of the individual course model is a project undertaken by our capstone students in collaboration with a local town on affordable housing. Students worked with the town to design surveys asking about resident perceptions about housing affordability. Students also designed interview and focus group questions about residents' experiences with housing challenges and perceptions of housing affordability. While the COVID-19 pandemic disrupted data

collection for this project, students still gained skills working directly with community partners.

This approach allows students an opportunity to engage in CEL without seeking out specific opportunities like a Directed Independent Study or a research opportunity with a faculty member. Incorporating CEL into a single course is advantageous because it allows for shorter-term projects, less administrative work, and less buy-in from the department/school. This individual course model can serve as a space to get to know the community partner and work out the challenges of conducting a CEL project in the context of a smaller, lower-stakes collaboration. A single course model is challenging in that it limits the scope of the project, and student engagement with the project is likewise limited because in most cases the project will have already been established before they begin the course, and the project may continue after they are no longer in the course. Students may feel disconnected from the larger outcome or impact since the project is unlikely to be completed in a single semester, or it might be a smaller project

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with less impact. Furthermore, this approach requires that a community partner be established prior to the start of the course for maximum efficiency, and that the community partner can participate on the short timeline.

Several types of assessment can be used with this model, including in-class labs and activities, presentations, exams, and reflection activities. One example of a formative assessment that we have used is a mid-semester check-in where we ask students what has been challenging them so far, how they can enhance their learning, and how instructors can enhance their learning. Another form of assessment used in the individual course model, which enabled assessment of self-regulated learning, is a knowledge survey. We asked students before they participated in CEL to rate their confidence in knowing information about the topic including specific questions about course-related material. The knowledge survey was then administered at the end of the unit, allowing students to assess their own knowledge growth. This allowed us to see what students thought they were learning from the CEL experience, and to adjust accordingly.

An assessment strategy that we used in all three models was end-of-course reflections. This is a way to assess student experiences in the course by asking them to reflect on specific parts of their CEL engagement. The types of questions that are asked depends on topics of interest. To determine the effectiveness of CEL in the individual course model, we collected reflection data from students at the conclusion of the course (see Table 2). In an individual capstone course, one objective was translating CEL skills into career readiness, and we asked students to reflect on how they were able to do that. Some students really did not know what to do with their degree in sociology, and this course provided them with a good direction moving forward. One student from this course wrote:

I did not know much about...jobs for sociology majors, and where people tend "to go" after graduating with a B.A. in sociology.

I now realize that I did not know what a lot of sociologists do. The structure of the course was exactly what I was looking for (and needed) as someone who wanted a future in sociology but did not know how to go about it. This class, and my team of instructors/mentors, really solidified my desire to go to graduate school and pursue a career in the field of sociology.... I am leaving the class with confidence as an up-and-coming sociologist.

Other students indicated that they gained new skills that will help them as they continue to navigate their planned careers, including one student who wrote, "My career path hasn't changed, but I have acquired a new set of tools that will help me advance in my career. An example is creating a research project and finding ways to present the data to the community." Relatedly, another student wrote "Through it all, it was definitely an experience to remember by working on this project and how it helped me develop skills that are transferrable to the job market."

Finally, students really appreciated the specific career applications that they learned, such as how to put the information that they learned in their community-engaged research experience onto their resumes. One student wrote:

This experience will impact my future education and career goals because it has helped to show me where my strengths and interests are. It has shown me where I have difficulties, and what I need to improve upon. I also appreciate the focus on career preparation, like working on resumes and building a LinkedIn page. It has definitely helped me navigate the professional world a bit more.

These reflections helped us to understand more fully the impact that CEL had on our students, and what they gained from an individual course. Since students learned what we were hoping they would from the individual course, we

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consider that implementation a success.

Curriculum Model

Once we implemented the individual course model several times, the shortcomings of that model, particularly the short timeline, drew us to create a curriculum model that incorporates CEL throughout the sociology program curriculum. We intentionally designed the model to incorporate four courses, three of which are already required for sociology majors, so all students in the major could be exposed to CEL. The four courses were designed around the same projects to build off each other and could be taken in the order dictated by the department curriculum. The sequence began with a 200-level Introduction to Applied Social Research course, where students learned basic research methods and how to work with the community. The other three courses included Methods of Social Research and Data Analysis, both of which are at the 300-level, and a senior seminar capstone at the 400-level. In each of the four model affiliated courses, we embedded the community-engaged research project and worked to align the component of the project with the course materials. For example, for the data analysis course, students analyzed data from our community partner. They were able to apply the principles that they were learning in class to meaningful data about their community, not just a data set created for them to practice on.

We designed the curriculum model to be adaptable, given that it is community-engaged research, allowing students to contribute not only in terms of findings, but also in helping direct the next steps. For example, the results from the

data analysis course directly contributed to the design and focus of the senior capstone classes. The students enjoyed and took pride in having a role in the research process as researchers, in addition to being learners. We have further adapted the courses to reflect the needs of the community partner and the community at large, hoping to contribute to the community through this project in a meaningful way.

The advantages to the curriculum model are the length of time for the project and the scaffolded nature for students. Working with the same community partner over multiple semesters can help to develop lasting relationships for successful collaboration. It also provides enough time to work through bigger projects or projects with multiple parts. If students take the courses in the order that we designed in the model, each course builds on the previous one. Students can see how working with a community partner to write a research question will then allow the data collection and analysis process to be in line with the community partner's expectations. Despite all the advantages that this model provides, it is a heavy lift for instructors to implement. Instructors must do a significant amount of additional work to make these community-engaged experiences more effective. If there are insufficient numbers of instructors to teach all the courses in the curriculum model, that can also be a challenge. Students also do not necessarily select into the experience (a required course is part of the model, so they take it to fulfill the requirement, not for the CEL aspect), so they might not be as fully committed as they would be if they were taking the course purely because they were interested in it.

In the curriculum model, an example of a

Table 2

Summative Assessment Example: Ending Reflections

Students are required to write a beginning (intention) and ending reflection for all CEL experiences. We encourage students to reflect on their intention assignments when writing their end-of-term reflections. We use these as qualitative indicators of what they have gained and also how we might improve for the future.

The questions that were asked include: How did what you learned in class impact what you might want to do as a career? What did you learn from working with the [community partner] that is different from what you learned from academic sources?

CEL for Student Success *continued*

formative assessment that we use asks students to consider how what they are learning maps onto career competencies. One framework that we have utilized is from the National Association of Colleges and Employers (NACE) as a way of operationalizing career preparedness. NACE has designed a series of career readiness competencies to ensure students are prepared upon graduation to enter the workplace (National Association of Colleges and Employers, n.d.; see Table 3). When we complete community-engaged projects with students, we have them fill in the second column of Table 3 and an additional column that considers how they can showcase this experience, which prompts them to think about where this information will be used (e.g., resume, cover letter, LinkedIn, etc.). We have students complete the table once at halfway or three-quarters of the way through the semester and then again at the end. This allows students to really consider how their ongoing experience can help prepare them for what is next in their careers and which areas they might want to focus on as part of the CEL project.

As in the individual course model assessment, students' investment and active engagement in their own learning is crucial to be measured in a summative manner in the curriculum model as well. One type of summative assessment data that we collected from the curriculum model is exit survey data. We used this to determine what aspects of CEL were most beneficial to students (see Table 4 for exit survey questions). We also evaluated their final paper and presentations as a summative assessment.

In the exit survey, we were looking to determine the impact that participating in CEL through the curriculum model had on students. In order to compare students who participated in the model with those who did not, we distributed the exit survey to graduating seniors who were majoring in sociology and/or criminology over two years. We worked with our graduate research assistant to de-identify the data from the exit survey so the responses could not be identifiable to specific students.

The findings from the exit survey provided evidence to support our sense that the curriculum model was successful in exposing students to community-engaged research, a HIP. Students were able to experience CEL in the context of courses that they would be taking as part of their major. The students taking these courses were able to gain career preparation skills that they may not have otherwise acquired. The generally positive findings from the exit survey led us to conclude that the curriculum model was having the impact that we were hoping on student success. In casual conversations and debriefings with community partners, it was clear that they appreciated the extended timeline in the curriculum model, and that they were able to work with us over the course of several semesters.

Lab Model

Our third method to incorporate CEL is a lab model, which is an alternative or extension to the curriculum model above, but one that allows for larger-scale projects and consistency with a community partner without the need to implement within multiple courses. We created the Community-Engaged Research (CER) lab to sustain community-engaged research in the future, recognizing the value that students gain when engaging with CEL, and the importance of continuity with community partners. The lab model enables us, as faculty, to maintain partnerships with the community and long-term research projects and incorporating students into the project as opportunities arise. The infrastructure of the lab sets aside resources, tools, and software, and allows students to select into the CEL opportunity.

In our CER lab, we utilize a scaffolded mentoring approach. We, the co-authors of this paper who also direct the CER lab, mentor all students in our lab, but we also have graduate students mentor undergraduate students. Other ways we have incorporated graduate students include through partnered courses with mentoring, paid opportunities, opportunities to present at conferences, and opportunities to publish. We utilize the same process in our lab that we did with the curriculum model, teaching students

CEL for Student Success *continued*

specific career skills that map with desirable career attributes and competencies. The CER lab offers a sustainable solution that enables students to participate in this important CEL work with reduced faculty burnout. In the lab model, we worked with a community partner on

a data storytelling project where students took their data and designed effective ways to share that data to a wider audience. With funding, we were able to pay students to work on CEL projects extending the work beyond even the course models.

Table 3

NACE attributes that employers are seeking, mapped onto Community-Engaged Research Skills

NACE attributes that employers seek on a resume:	Community-engaged research experience
Problem-solving skills	How to conduct research, practice writing research questions, designing own research plan, and summarizing research implications. Students interact with data that is not in an easily usable form. The data may have been collected by a community partner, or it is administrative data that needs to be cleaned before it can be used. This mirrors what students may encounter in the workplace. They may not even be given data but have to go find it for themselves. They will need to ensure that this data can answer the questions that they are interested in.
Analytical/quantitative skills	Become familiar with handling real-world quantitative data and run own analyses using ArcGIS, Excel, or SPSS. Students may need to pull in data from different sources to answer their questions. Students are challenged to consider the source of the data. If it is data from a police department, for example, students need to consider the perspective of how and why that data was collected and consider obtaining data that might provide a counter-narrative.
Ability to work in a team	Work in partner and/or class groups, have regular class-wide discussions on what each group is doing and how everyone feels about the project.
Communication skills (written)	Regular email participation, written classroom 'check ins', written communication with community partner, have students reach out to others involved in the project when possible.
Initiative	Self-driven learning. Set schedule/classroom expectations/deadlines and work at own pace while knowing the consequences of not keeping up with project/course work.
Strong work ethic	Putting in regular effort on a semester-long (or longer) project with many different parts while working towards an end goal.
Flexibility/adaptability	Unexpected events (e.g. executive director fired) or unanticipated research outcomes—students must adapt when research does not go the way they expect it to. Unpredictability that comes along with working with community partners and other students in partners/groups.
Detail oriented	Self-driven learning, quantitative and qualitative research, formal write-ups, running data analyses, presentations, and research planning all require attention to detail. In addition, working on a project for an extended period of time and building towards a common goal requires attention to detail (e.g., writing different portions of a research paper throughout the semester and having to go back and edit as the project progresses).

CEL for Student Success *continued*

Leadership	Each student leads classroom discussion at least once a semester. Must 'pick up the slack' at times in group work. Demonstrate mastery of research materials for project that student took lead on through presentation to community.
Communication skills (verbal)	Require regular participation in classroom discussions and occasional presentations both with and without partners/groups.
Interpersonal skills (relates well to others)	Group work and regular collaboration with individuals both in and out of the classroom.
Computer skills	Use software like SPSS, ArcGIS, Excel, Word, and research databases throughout the research process.
Organizational ability	Course responsibilities require students to be organized and prepared for the next portion of the class/project.
Strategic planning skills	Students design their own research plan, think critically about how to execute research, and adapt to changes throughout the process. Students may need to pull in data from different sources to answer their questions.
Creativity	Students create/design posters, graphs, infographics, etc. to present their research findings. Students also allowed to pursue their own research interests and often need to get creative when identifying ways to measure social phenomenon.

Table 4
Summative Assessment Example: HIPs Exit Survey Measures

Likert scale responses (Strongly agree to strongly disagree) to:
This experience allowed me to practice my research skills.
Understand the challenges of working with secondary data as a result of this experience.
Working with a community partner agency (i.e., police department) enhanced this learning opportunity.
I am more confident in my research skills as a result of this experience.
You had opportunities to discover the relevance of learning through real-world applications.
Proficiency gained measured to Likert scale responses (a lot, somewhat, not sure, a little, not at all) in:
Critical thinking
Understanding social institutions and how they relate to social problems
Understanding basic theoretical models
Applying theories to a social problem
Understanding basic methodological approaches
Understanding community-based research
Applying methodologies to study a social problem
Interpreting quantitative data
Analyzing and understanding data with SPSS or other statistical software
Analyzing and interpreting qualitative data
Identifying ethical issues in sociological/criminological research
Ability to synthesize/discuss/write about a local social problem
Writing a report that can be understood by non-sociologists
Presenting research findings
Oral communication/presentation skills

CEL for Student Success *continued*

An advantage of the lab model is that students gain a closely mentored CEL experience that they might not gain in a larger class. However, not as many students can participate, and there may be more of a barrier to participation than simply taking a required class for the major. This can be particularly problematic for groups that already have challenges with accessing undergraduate research opportunities, such as minoritized and first-generation students. Table 5 below provides information about all three models, including key features and career connections.

The type of assessment in the lab context depends on the type of experience. If the students are in paid position(s), a final report or presentation could serve as assessment, while if the student is engaging with the lab for credit, perhaps a paper or formal assessment would be more fitting. One summative assessment strategy that we used with the lab model was evaluation of a final report which was ungraded but allowed assessment of the learning and skills the students gained as part of the experience. Ideally, summative assessments in the lab model can be used for and with the community as a tool. Another measure of success is that our community partners indicated that they found the report that we created helpful in their work. Creating a formal measure of assessment with the community partner would be ideal for the lab model.

Discussion

To create effective CEL experiences that prepare students for success, buy-in is needed from the students, departments, university, and community in which these experiences take place. For instructors looking to adopt CEL and help students make connections between that research and career confidence and preparedness, it is essential to clearly outline these connections for students. We learned during the COVID-19 pandemic about the importance of meeting students where they were. Part of the inspiration for this work was students stating that they did not feel prepared to succeed in the workplace due to their disrupted educational experience. Providing them with

clear connections between the skills that they are learning in CEL and the skills they will need in their careers can help alleviate their concerns.

Community-Engaged Learning Impacts on Students, Faculty, and Community Partners

We have identified several benefits to students of the three implementation models described above, including enhancing research skills early in their career, opportunity to work with a community partner, opportunity to work closely with a faculty member, increased comfort with their research skills and talking about research, and being a part of a cohort (getting to know a relatively small group of students well) that can benefit them post-graduation.

Regardless of the approach to CEL, these experiences can lead to student success both inside and outside the classroom. For students to be competitive on the job market, they need to be able to translate what they have learned in CEL courses to their cover letters and resumes. NACE provides information on career competencies and attributes that we use in our courses. Table 3 outlines the NACE attributes that employers seek on a resume, the associated community-engaged research experience, and how it can be effectively demonstrated on a resume. One example that is especially relevant for CEL is flexibility/adaptability. This can be seen in unexpected research outcomes: students must adapt when research does not go as expected. Additionally, there is unpredictability that comes with working with community partners and other students in partnerships or groups. This can be demonstrated by listing flexibility/adaptability under 'skills/competencies' on a resume. Explaining the unpredictability of research, working with other students, and working with a community partner can be conveyed in a cover letter by listing examples that students encountered, such as not being able to access data that they needed, being frustrated by a team member not completing their tasks, or adapting to unexpected research outcomes. Flexibility and adaptability are key skills necessary in careers since real life does not always go according to plan. Another NACE attribute that students learn is problem-solving skills. In community-engaged

CEL for Student Success *continued*

Table 5
Community-Engaged Research Implementation Models

	Individual Course Model	Curriculum Model	Lab Model
Nature of model	Project with limited scope	Sequence of classes from intro through capstone	Ongoing project
Advantages	A small project that can be easily worked into a class	The ability to work on multiple stages of a project over multiple courses	Can allow for longer-term collaborations
Disadvantages	Not enough time to complete larger projects	Time-intensive because it involves so many courses	Fewer students can participate
Skills	Students learn how to overcome challenges that may arise in completing community-engaged projects on a small scale (initiative)	Students complete a multi-faceted project over several semesters which is similar to large work projects (strategic planning skills)	Students focus on working closely with others in small groups which is similar to working with a team (ability to work in a team)
Throughout all	Collaboration with community partner to determine project focus and scope Gain skills in working in real work environments on problem solving, collaboration, and flexibility and adaptability		

research, students design their own research project from start to finish, which often includes adapting to roadblocks in the data collection process or addressing unexpected findings. This mirrors what students might encounter when working on projects in their own careers.

For instructors new to CEL, an individual course approach may be an ideal way to get to know a new community partner, set expectations, and establish a strong foundation for future success. This is also a good way to see if a long-term project with the organization is manageable or even desirable for everyone. If instructors already have strong community relationships, the curriculum model is a great way to expose more students to the benefits of CEL and the importance of career impacts. The curriculum model offers students increased opportunities to engage in HIPs and applied learning through early access to research opportunities in their academic careers. Furthermore, the individual course and lab models enable students to engage in CEL on a shorter-term basis, allowing non-majors to benefit. Through collaboration with faculty and community partners, these approaches prepare students for post-graduation success by fostering a

deeper understanding and application of skills. CEL encourages student engagement with the community and partnerships beyond the university. The lab approach can be especially successful for instructors who have several different community partners. Regardless of the approach, we have found engaging students in CEL has been beneficial to students, faculty, and the community. Providing students with opportunities to see how their work in the classroom connects beyond the academy is essential.

While the focus up to this point in our paper has been on students, we want to ensure that we are not forgetting about the impact on the community and reinforcing the importance of considering the community among students. The community and community partner are not simply here for the student to gain experience and emphasizing this to the students is crucial. This challenges students to think about the impact on others and how they see their role in future careers. Students learn interpersonal skills that will be helpful for them on the job market as they navigate relationships with community partners, such as ensuring that the work they are doing is benefiting the partner. Students

CEL for Student Success *continued*

learn how to navigate the tensions that exist between what they are interested in studying and what the community partner is interested in studying. There may also be tension between two different community partners working in the same space due to competition for resources and other factors. Students themselves may have conflicts depending on their perspectives of the organization with which we are working (such as a police department).

Assessment of the impact of CEL is essential yet challenging. We encountered several challenges in assessing student participation in CEL, given the expectation of long-term impact and that the impact will be different depending on students' history with other HIPs. Assessment of the effectiveness of the individual course model is important, but also limited, given that there is only one semester of data, and ideally, the impact on students goes beyond that semester. The curriculum model allows for assessment over time and across courses, allowing for a more nuanced understanding of the impact of the model. When looking at the overall impact of participating in CEL, it is ideal to be able to access institutional-level data. This would allow for a more holistic evaluation of the impact of the courses, curriculum model, or lab model on overall student success. We recommend using multiple methods for assessment to evaluate impact on the student, including quantitative (e.g., an exit survey) and qualitative (e.g., reflection assignment) to capture the full extent of students' experiences.

CEL, specifically through undergraduate research, allows students opportunities to gain and use skills essential to the social sciences, foster relationships with and receive a better understanding of their community, and realize the utility of their major beyond the course context. The three models of CEL presented here provide opportunities for students to engage in undergraduate research with and in the community. The least intensive model of individual courses allows faculty to begin this type of work or pilot larger projects. The curriculum model requires support and cooperation from the department (and beyond)

but allows for long-term engagement by the students and the benefits of long-term engagement with faculty and the community. The lab model creates a home for flexible CEL as opportunities arise and a space for long-term partnerships with the community. In all models, formative and summative assessment of student learning is essential, although challenging, to determine the efficacy of both the experience in general and for the specific student goals. CEL increases student success in the classroom and in careers and should be adopted in relevant classes where applicable.

CEL for Student Success *continued*

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